

Along the Delaware & Raritan Canal

A History & Resources Database

by Capt. Bill McKelvey

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Circa 1965 the author / editor began extensive and in-depth research on the D&R and its connecting canals along the Atlantic seaboard. Dozens of canal employees, boatmen, boat captains, and local historians were interviewed and corresponded with. They have unfortunately mostly all passed away. Thousands of pages of records were examined in detail and a multitude of newspapers were searched. A tremendous amount of help was provided by the late Edward T. Francis (my mentor), the late Robert Yuell, the late Warren Lee in his (*Bel Del Chronology* and *Down Along The Old Bel-Del*) books, the late Barker Gummere, Bob & Linda Barth and many, many others. Much information and hundreds of photographs and illustrations were published in the authors two books (*The Delaware & Raritan Canal: A Pictorial History* - 1975, and *Champlain to Chesapeake: A Canal Era Pictorial Cruise* - 1978) as well as books authored by Harry L. Rinker and published by McKelvey's Canal Captain's Press (CCP).

The definitive history of the D&R is currently being researched and written by Larry Lowenthal. The basis for this database can be found in the dozen loose-leaf scrap books, packed with newspaper clippings, in the author's collection. In these volumes resides the true history of the canal. In the contemporary periodicals the D & Rs day to day operations, people, finances, rules and events are well documented as are the accomplishments and tragedies that littered its way. Books, reference works and research papers are also cited, as are the important people, industries and places 'Along the D&R.' On these pages, in this condensed database, time and space will only permit a fraction of the story to be told. And, there is a lot that has yet to be discovered and learned...

Much residual research information survives on 3" x 5" cards in the dusty files of CCP. It now becomes the author's duty to pass some of this information and what knowledge the author can remember on for future generations. For him the easiest and best way of preserving this research work is to publish this serial article for the use and enjoyment of transportation historians and researchers everywhere. Since *NJ Transport Heritage* was published and distributed to over 500 of NJTHC members, placing this article in chapters in *NJTH* gives it an excellent chance of surviving well into the future... The beauty of this project is that an enduring electronic record is created at the same time, and this digital data base is easily searchable by computer. The author sincerely hopes that this item will prod some of you to continue to explore and interpret this D&R history so that others may know the glory and grit of this proud waterway in its heyday. There is much yet to be uncovered!

Included are the better-known and more frequent users of the Delaware & Raritan Canal as well as news, events, activities, and incidents involving the canal. Much information has been garnered from the CCP collection of freight bills and invoices which helps to tell the story - name of shipping firm, agents involved, name and captain of vessel, cargo carried, origin and destination, etc. Surely there were many other much smaller and independent operators and events for which there is no record. Unfortunately, the D&R toll registers and most of the paper

records of the canal were all stored in a facility in Trenton which burned many years ago.

Abel, Wilson & Co. of Easton, operated canalboats between Easton and New Brunswick in the 1840s. They operated under a special contract with the D&R Canal Co. requiring payment of only one half of the regular tolls and charges monthly. When the boats of this line passed the Princeton office, the collector entered the weight of the cargo, and charged himself with the full amount of the tolls and charges, according to the regular rates; and at the end of the month, when his account is settled with the treasurer of the canal company, he is credited with a deduction of one half the amount charges. The contract with the owners of this line ended in 1849; they subsequently paid the regular tolls. The arrangement was an incentive to stimulate traffic on the D&R. *Neilson Papers, & From Indian Trail to Iron Horse, by Wheaton J. Lane* Captain Able transported about 6,000 tons of coal per year from Mauch Chunk to Rahway, Elizabeth and Woodbridge by way of the D&R Canal. *Neilson Papers; Colonel James Neilson, by Robert T. Thompson.* Also see Drake, Wilson & Co., Lehigh Transportation Co., and Red Line Transportation Co.

Aboard the HONESTY in 1872 is a delightfully descriptive account of the experiences of George H. Weller (son of Hiram Weller) of Trenton and the week-long trip he took on an Erie Canalboat, the *HONESTY*. At the time Coalport in Trenton was the largest coal trans-shipping port in the east. It was here that they took on a 250-ton load for Troy, NY, and went in a tow of 43 boats up the Hudson. After they unloaded the coal they took on a load of corn for Brooklyn, and finally returned to Trenton. *Published in the "Trenton in Bygone Days" column of the Sunday Times Advertiser, May, 16, 1943.*

Captain Atherton: One year Captain Adnah G. Atherton hauled coal from Wilkes-Barre, PA to Havre de Grace, MD. At Baltimore he was loaded with soft coal destined for Cohoes Falls, NY (via the Chesapeake & Delaware and D&R Canals) He boated empty from the Falls to Port Henry at the head of Lake Champlain where he loaded with iron ore ~~from~~ for Albany. His next destination was Geneva on Lake Seneca, where he loaded with soft coal for Rome. He was light again to Buffalo on the Erie Canal. From Buffalo he returned to Rome with gas coal. He took a load of hard coal to Rochester where he loaded apples at Albion for Philadelphia by way of the Erie Canal, the Hudson River (and the D&R Canal). He left his boat at Paddy's Petty Island (north of Camden) for the winter. He had made \$600 profit on his voyage. In the spring he sold the boat for more than it cost him the previous spring. *Canal Notes of Christopher Wren. These undated and unnumbered notes were generally gathered by the former curator of the Wyoming Historical and Genealogical Society at the Canal Boatmen's Reunion on August 21, 1915. Wren's notes are available at the historical society's library in Wilkes-Barre, PA.*

Albany Line, a/k/a Albany Union Line, a boat line operating through the D&R Canal.

Albany Street Bridge, New Brunswick was the location of spectacular accident in 1915 involving an automobile which went off the open bridge and into the D&R Canal. The newspaper article called the incident "a thrilling accident." The new Overland car in which two men were riding at a high rate of speed passed a waiting line of autos; crashed with tremendous force through the closed iron bridge gates, which had red lanterns on them; went off the end of the bridge like a shot out of a cannon; and pitched headlong into the canal, 25 feet below. The steamboat *JAMES W. JOHNSON* was waiting to go through the bridge and their crew assisted in

the rescue of the men, who were both hospitalized with injuries. The sunken auto prevented the passage of boats in the canal. The *JOHNSON* was used to drag the auto from the narrow section of the canal beneath the bridge. The following day it was planned to remove the auto from the canal with the strong boom of sister ship *ROBERT W. JOHNSON*. *New Brunswick News, June 26, 1915*. The Albany Street Bridge was crossed by the following interurban and streetcar lines: the Newark-Trenton Fast Line; the Raritan Car Line, which connected at Bound Brook with the Union (or Main) Line and formed the connection for the first and meandering through route between Newark, New Brunswick and Trenton; the Highland Park Car Line; and the Middlesex Car Line (formerly the Perth Amboy Line). These trolley lines were abandoned before the D&R Canal closed, but a self-propelled trolley operation on the Newark-New Brunswick portion of the *Fast Line* survived until May 11, 1937. Three gasoline-electric hybrid trolley cars operated the final, infrequent schedule. *The Public Service Trolley Lines in New Jersey, Edward Hamm, Jr.* One of the gasoline-electric trolley cars was operated in the Newark City Subway as a test vehicle before electrification was completed. And, most of the body of one of the cars is incorporated in a dwelling owned by the Sjonell family near the Jersey shore.

Albany Union Line (a/k/a Albany Line) primarily transported coal from Philadelphia to Albany ca. 1838-1845 and was a division of Canal Freight Barge Lines. This firm was given a monopoly on the use of the D&R on coal shipped from Philadelphia to Albany in return for one-sixth of their entire charge, and later they received similar privileges on coal shipped to Bridgeport, CT, in return for one-fourth of their charges for the entire distance. More favorable terms, however, were necessary to encourage the coal trade with Albany, and in 1845 this company was superseded by the Iron Steam Packet Co., which received a monopoly of that trade at the rate of 10% of their entire charges on superior merchandise and 7½% on inferior merchandise. Even these rates did not appear to encourage the transportation of coal up the Hudson in large quantities and a still more favorable monopoly was granted 3 years later to the Commercial Transportation Co. This company was allowed shipments through the canal at the rate of 5% of the entire charge for coal and 15% for all other merchandise.

An **Altercation**: Monday morning about 8 o'clock an altercation took place between two boat captains on the canal near the Six-Mile turnout, within three miles of Princeton. Captain Keeler of the *J. BOWSMAN* of Schuylkill Haven, picked up a setting pole and struck the other man on the head cutting a severe gash and making considerable indentation in the skull. Keeler passed on and the injured man was taken to Clarksville. A warrant was issued for the arrest of Keeler. He was arrested and taken to the Mercer Jail. *Princeton Press (from State Gazette), September 22, 1854*.

American Bethel Society's missionary to the boatmen and men employed on the D&R canal, Mr. Van Cleef, reported that he visited about 250 to 275 boats and supplied them with tracts and small bibles and testaments were distributed. He focused on the promotion of the observance of the Sabbath and particularly to cause Sabbath navigation to cease. He circulated petitions on this issue and gained 400 names of nearly all the lock and bridge tenders together with captains and hands which he proposed to send to the Board of Directors of the canal. *Sentinel of Freedom, Newark, March 10, 1846*. The first Bethel Society was founded in 1824 at Albany, NY, just before the Erie Canal opened for business. The American Bethel Society was founded in 1836 at Buffalo to extend Bethel operations nationwide upon inland waters. The movement reached the port of NY(NJ) and Philadelphia in the mid-1840's. In 1848 a floating church was constructed

at Bordentown and later towed to its moorings at Dock Street Wharf, Philadelphia. The organization has evolved to the present Seamen's Church Institute of NY & NJ.

American Canal Society was incorporated in Maryland in 1972 as a non-profit scientific and educational organization. Its objectives are: to encourage the preservation, restoration, interpretation and usage of the navigation canals of the US, past and present; to cooperate with individual canal societies for action on threatened canals, or in the absence of local canal societies to act as a focal point for action; and to provide for the exchange of general canal information. It is not our intention to interfere with the autonomy of individual canal associations or societies in the conduct of their own affairs, but simply to fill a gap in providing a clearing house and distribution medium for canal information and activities. The ACS quarterly publication *American Canals* has published many articles on the D&R Canal over the years. The author was a director and contributing writer for many years. www.americancanals.org

American Railroad Journal of May 20, 1848, pgs. 324-6 gives much information on the improvements and status, revenues and cargoes transported of the D&R Canal at that time.

American Union Telegraph Company: 'The Telegraph War at New Brunswick' Yesterday morning a force of men in the employ of the American Union Telegraph Company assembled on the dock near the draw of the Albany Street bridge prepared to lay their cables across the bed of the canal, the water in which had been drawn off as far as possible. At the same time Mr. Samuel Barr, the foreman of the D&R Canal Co., appeared on the scene in a mud scow, and took up his position directly over the spot where it was proposed to lay the cables. He had at his command a force of men, and when the telegraph men intimated that they were there for the purpose of placing their wires across the canal, Mr. Barr quietly but firmly informed the representatives of the telegraph company that they could not proceed with the work as he had been given orders by the canal company to prevent such a thing being done. The telegraph men, after waiting about an hour, quietly retired to await orders. It was stated that there was too much water in the canal to do the work, the freshet making it impossible to draw it off, but there can be no doubt that the canal company mean to prevent any infringement upon their franchises. The Western Union Telegraph Company have a cable under the canal at this point, the draw there making an underground connection necessary. At the last meeting of the Board of Freeholders permission was given the new company to stretch their wires across the bridge. *Newark Daily Advertiser, July 29, 1879.*

James C. **Amon** was the first Executive Director of the Delaware & Raritan Canal Commission (D&RCC), from Sept., 1975 until Feb., 2005. The regulatory program of the D&RCC was the first regulatory program in the State of NJ to:

- Attempt to manage stormwater runoff for both quality and quantity. It took the the NJ DEP ten years to adopt stormwater management regulations that were, at the time very similar to those of the D&RCC.
- Establish visual impact standards on a regional basis (which were flexibly structured to accommodate urban, suburban and rural land use conditions) for historic structures.
- Establish Watershed-based protection for stream corridors. This was done by the D&RCC 12 years before the NJ DEP adopted somewhat similar regulations to protect the highest quality streams in the state.

When the D&RCC began there were about 8 miles of usable towpath and one parking lot for visitors. When Amon departed there were about 85 miles of trails and about 30 parking lots. The D&RCC was responsible for over \$25 million worth of improvements to the D&R canal park that were made at no cost to the taxpayers, mostly via concessions from developers and contractors. These improvements included building new trails (e.g. the trail between Kingston and Rocky Hill on the berm bank and the restoration of the towpath at Port Mercer); bridges and walkways (e.g. the bridge across the Millstone River on the east side of the canal at the Millstone Aqueduct; parking lots at access areas (in connection with the 1984-85 dredging of the canal, the D&RCC had the contractors build four parking lots along the Feeder); restoration of historic structures (along with Donald Jones and others, Amon led the Delaware River Mill Society in raising more than \$1 million to make improvements to the historic Prallsville Mill on the Feeder Canal); the pedestrian bridge over U.S. Rt. One; the restoration of Lock One; the creation of National Historic Districts at Lambertville, Titusville, Griggstown, Kingston, and several others; the establishment of "Wild and Scenic" status for the portion of the Delaware River that adjoins the Feeder; the establishment of Scenic Road Status for NJ Route 29; the scenic pull-offs on I-295 that give access to Lock One; the addition of almost 1,000 acres to the Canal Park; the extension of the Canal Park path to Frenchtown; permanent protection for 3,000 acres of riparian buffer land along streams that enter the Canal Park; and many more similar improvement items. These things were achieved because Amon and the D&RCC did them, got others to do them or worked with others to do them. Jim was the right man at the right time for the job. Over the years he has collected historic images and artifacts of the D&R and recorded hundreds of contemporary views. Amon has done presentations and talks on the D&R throughout our state including several times for the Canal Society of New Jersey and at the World Canal Conference in Bethlehem, PA in 2006. Jim also was instrumental in the saving and moving of the "Chicken House" switch from the Bel Del immediately west of the railroad bridge over the feeder, which was west of the site of the Warren Street passenger station. It and three old cast iron crossing gate bases and signal hardware were also saved for the NJ Transportation Heritage Center and moved in two tractor-trailer loads to Phillipsburg.

AMOY, a Chinese junk on a round the world cruise in the late 1920's came through the D&R Canal and tied up at the Johnson & Johnson plant in New Brunswick for several days.

Anthracite Coal or "hard coal" (also known as "stone coal") was the major cargo carried through the D&R Canal and has been termed the fuel which ignited an industrial revolution. Anthracite has an average fixed carbon content of 86%; volatile matter amounts to only 4.3%. It is therefore more difficult to ignite, but it burns longer and cleaner than the softer bituminous coal, making it more attractive for domestic use. It also is easy to store and is more resistant to deterioration. Anthracite was mined in northeastern Pennsylvania and transported to tidewater by canalboat. Short feeder railways were constructed to move the coal from the mines to the canals and as those railways expanded they began to compete directly with the canals and began to replace them. *The Kingdom of Coal, by Donald L. Miller and Richard E. Sharpless* Anthracite constituted well over half the total tonnage carried by the D&R Canal – in 1860 1,283,000 tons of coal were transported. *From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 265* Much coal was destined for delivery along the D&R Canal as well as to industries and distributors which were located on connected tidewaters. Huge volumes of anthracite were brought to Coalport in Trenton via the Belvidere Delaware Railroad and transloaded into canal vessels for final delivery. As much as

18% of the anthracite coal mined in the US was carried by the D&R Canal in 1871.

Antiquing Along the D&R: The Sunday Driver Directory of Dealers in Quality Antiques lists two dealers near the D&R Canal in the Lambertville area. They are 1. Golden Nugget Antique Market, open 6am to 4pm Wednesday, Saturday and Sunday at 1850 River Road (Rt. 29), south of Lambertville, 609-397-0811 www.gnmarket.com, and 2. The Peoples Store, "Lambertville's Largest Antique Center," 28 No. Union St., Lambertville (609) 397-9808. But there are many more smaller antique establishments in the Lambertville (known for its arts and antiquing) as well as the New Hope, PA area.

Arcadia Publishing, Images of America books which cover all or portions of the D&R Canal include: Bordentown; The Delaware & Raritan Canal; The Delaware & Raritan Canal at Work; Franklin Township; Lambertville & New Hope; Lawrenceville; New Brunswick; Prallsville Mills and Stockton; Princeton; Rocky Hill, Kingston & Griggstown; and Trenton.

Captains Henry & William **Ashmore** operated vessels between Trenton and Philadelphia on the Delaware River and began using the D&R as soon as it opened; eventually merged to become part of The Merchants Transportation Co. 1843: "The Schooner *JAS. MADISON*, Capt. Wm. Ashmore, will leave the Trenton Basin for New York, on Friday the 5th inst., and New York for Trenton on the Friday following. For freight apply to the Capt. on board, or to W.A. & A.B. GREEN." *New Jersey State Gazette, May 1, 1843*. Also see "Tucker, William."

George W. **Aspinwall** of Philadelphia had *ASHLAND* and *OCEAN*, two iron-hull, twin-screw steam vessels built with Grasshopper engines by Harlan & Hollingsworth in 1844. They were the first steam vessels used on the outside passage (around Cape May) between NY and Philadelphia. They were similar to the early iron-hull propellers *ANTHRACITE*, *BLACK DIAMOND*, *IRONSIDES*, and *VULCAN*, built for the D&R Canal. They made but a few trips by the outside route when an agreement was reached with the "monopoly" for them to use the canal. They ran through the D&R to Albany and Troy, NY and were subsequently purchased by the US Quartermaster Department during the Mexican war for service in the Gulf. *Dayton, Steamboat Days*. A contract was made between the Joint Companies and Aspinwall in 1845 for the establishment of a transportation line, primarily for coal, between Philadelphia and Albany/Troy called the Iron Steam Packet Line for seven years with reduced payments in lieu of tolls.

The **Assunpink Creek Navigation Company**, a private corporation, was formed in 1796 to construct a canal across New Jersey. The project was abandoned due to insufficient funds. *Borough of South Bound Brook, H. Kells Swan, Compiler*.

Assanpink Trail: See "Old Dutch Road."

The **Association for the Preservation & Improvement of the Delaware & Raritan Canal** published a pamphlet titled *The Delaware and Raritan Canal, Past, Present and Future*, by Morgan R. Seiffert and Eric Fleming in the 1930's. It included a map of New Jersey prominently showing the canal boldly proclaiming "Open the Water Trail Through the Garden State for Commerce and Pleasure. It was drawn by "Eric Fleming, Engr., & Archt." and was published after the canal was closed. It advocated 1. Keeping the canal open, 2. Preserving the

retained rights of the people if the D&R is abandoned, 3. Having the state take over the canal if abandoned, 4. Working for improvement and expansion of the canal as a free waterway under federal operation, 5. Preventing irreparable damage to owners of property adjacent to the canal, and 6. Preserving for the people of New Jersey one of its greatest potential assets.

Atlantic Deeper Waterways Association: At the ADWA meeting in Baltimore, attended by 300, it was reported that the Pennsylvania RR was willing to surrender its rights in the Delaware & Raritan Canal, connecting New York and Philadelphia, which would greatly facilitate the building of that link. *Deeper Waterways, NY Tribune, Nov. 18, 1908, pg. 3.* The question of an intra coastal canal across New Jersey, thus connecting Philadelphia and NY, will be discussed at the meeting of the ADWA in Providence on August 31, (1910). *New Brunswick Daily Times, August 20, 1910.* PRR not opposed to coast canal per President McCrea. The steamer *PURITAN* took delegates from the Central RR Jersey City pier to Providence in 12 hours. *New Brunswick Daily Times, September 1, 1910.* Business men unite to push state canal: Governor Fort calls meeting of shippers who will be invited to join in a demand on Congress. *New Brunswick Daily Times, September 9, 1910.* New Jersey will donate land for intercity canal: Announcement made at enthusiastic meeting held in Philadelphia. At the time Congressman J. Hampton Moore was the president of the ADWA. *New Brunswick Daily Times, September 15, 1910.* Ship Canal plans are given boost: Enthusiastic meeting for the cross-state waterway was held in Trenton. *New Brunswick Daily Times, September 28, 1910.* Trans-State canal bill introduced in upper house. *New Brunswick Daily Times, January 31, 1911.* Jersey Ship Canal resolution signed by the governor. *New Brunswick Daily Times, April 17, 1911.* Ship Canal to be 500 to 1,000 feet wide and 40 feet deep. *New Brunswick Daily Times, May 6, 1911.* Congressional party inspecting Ship Canal route will visit New Brunswick. *New Brunswick Daily Times, May 27, 1911.* Jersey Ship Canal would pay well. *New Brunswick Daily Times, June 23, 1911.* Sea-Level Canal across Jersey decided on by Ship Canal Commission. *New Brunswick Daily Times, September 1, 1911.* NJ Ship Canal Commission for state control of canals. *New Brunswick Daily Times, November 29, 1911.* Scully asks 20 millions for canal across NJ. . *New Brunswick Daily Times, December 3, 1913.* The cost of the project was estimated as follows: \$20 to 45 million in 1912; \$65 to 85 million in 1937; and \$187 million in 1942 for a deeper excavation. *The District: A History of the Philadelphia District, U.S. Army Corps of Engineers - 1866 - 1971.* Also see “Trans-Jersey Ship Canal - Proposal.”

Atlantic Refining Co. of Philadelphia vessels, including their *MOTOR BARGE NO. 30*, and *MOTOR BARGE NO. 31*, both built in 1919, operated north into the D&R to deliver fuel oil as it replaced coal usage. Atlantic was established in Philadelphia in 1865, six years after Drake’s first oil derrick in the world went into operation. Atlantic was the first refinery in the US. In 1874 Atlantic was swallowed up by the gigantic Standard Oil Trust, but in 1911 the trust was broken up and Atlantic became independent again. In 1966 Atlantic and Richfield Oil Corporation merged to form the Atlantic Richfield Co. (ARCO). ARCO is currently the seventh-largest US oil company.

Atlantic Terra Cotta Company: See “Excelsior Terra Cotta Company.”

Miss Elizabeth Alice **Austin**, a woman pioneer in American photography, took a journey through the D&R and Chesapeake & Delaware canals in 1892 with friends in her sailboat *WABUN*. The photographs of this adventure are in the collections of the Staten Island (NY)

Historical Society.

The **Aqueduct carrying the D&R Canal** over the Pennsylvania Railroad main line in Trenton had to be elevated three feet in the winter of 1929-30 to provide clearance for the catenary for the electrification of the line. This required the construction of a new concrete lock immediately south of the aqueduct and raising of the banks of the canal north to lock No. 7 at State St., Trenton. *Trenton Times, November 7, 1929.* The location of the aqueduct can still be seen from the railroad (which is now the Amtrak/NJ Transit Northeast Corridor) in the stone walls where the Rt. 129 and RiverLINE bridges cross the railroad south of the Trenton Station.

The **Assanpink Trail** was a route used by American Indians which became the Old Dutch Road. It began at Elizabethtown and went through Woodbridge, Piscataway, and Inian's Ferry (New Brunswick) and down to the Delaware where Trenton now is. The original Lincoln Highway followed this road. Today's Rt. 27 closely follows much of the route. The Assanpink Trail took a more direct route between New Brunswick and Trenton, crossing the future D&R Main Canal at New Brunswick and Kingston and the Feeder Canal at Trenton.

Baltimore & Ohio Railroad was the first common carrier chartered in the US (1827) and the first to construct tracks specifically for the purpose of transporting passengers and freight (1830). John W. Garrett was the president of the B&O from 1858 to 1884 and under his leadership the railroad was greatly expanded, reaching Chicago and other mid-western cities. In Baltimore harbor the B&O Marine Terminal developed an efficient complex of warehouses, grain elevators, special handling facilities, yards, slips, major piers, docks, and wharves, all connected with their rail lines. Garrett and the B&O played a key role in helping preserve the Union during the Civil War. Following the war the B&O established its own steamship line with three freighters to stimulate trade with Europe, but they replaced their ownership with agreements with independent shipping companies. In this time period the B&O used the New York & Baltimore Transportation Line as its freight connection to the north - via the C&D and D&R Canals. Several of the big steam canalboats of the NY & BTL were built in the Civil War Era. One of them was named after the reigning president of the B&O: *JOHN W. GARRETT*; the *MARTHA STEVENS* was named for the woman who exhibited dauntless courage on the field at the Battle of Fredricksburg between Lee and Burnside; and the *F.W. BRUNE* was named for a family of Baltimore merchants, shippers and importers. Before the B&O secured its own line and/or trackage rights into the New York/New Jersey market the big NY & BTL steam canalboats provided them with excellent 48 hour freight service between the two major ports. *Jacobs, The History of the Baltimore & Ohio; Herbert H. Harwood, Jr., Royal Blue Line.* It was popularly thought that the NY & BTL was the B&O Railroad and the following quote from the Bordentown Register of December 13, 1878 seems to confirm: "Now that the B&O Railroad has secured railroad facilities to New York, via Bound Brook, we suppose that some of their large steamers will disappear from the canal next season." In any event, we have not yet uncovered proof positive of the corporate connection between the two.

Baltimore Line - a/k/a NY & Baltimore Transportation Line - had a strong connection with the B&O RR.

From **Baltimore to Boston**, by Walter Burgess, is the story of a crew delivering in May,

1900, a new 39-foot yawl-rigged centerboard yacht, *COQUETTE*, built by Nilson Yacht Building Co., in Baltimore for the author. They are towed north through the C&D and D&R canals and sail the balance of the route. *The Rudder, Oct., 1900* .

Barnum humbug: “Barnum’s Museum was in Princeton on Saturday exhibiting their ‘wonderful curiosities’ - viz., Tom Thumb, elephants with their Asiatic drivers, camels, animals, the man without arms, etc. Above all these, however, he seemed to have imagined that his ‘car of Juggernaut’ would have excited most admiration, for it was introduced with great pomp, drawn by eight horses, carrying on its top the band. From the very name you doubtless feel an interest in the appearance of this prodigy. I expected to find a moving temple, with hideous images of heathen deities, horrid countenances, unearthly forms. At least I thought that it would bear some shadow of resemblance to its great prototype, the object of the supreme veneration of the Hindu. But how far from reality was such a supposition! Instead of this it consists merely in a large square box on wheels, with a few elephants painted upon its sides, and several attempts to represent a double headed god - and that in lead-colored paint. *A perfect Barnum humbug*. Well, this immense affair, in view of their not being able to deposit it in any enclosure, was left in the street just in front of Dr. Maclean’s house. About twelve midnight seventy or eighty of the boys went to it and examined whether any person was sleeping within or not. Seeing that all was quiet, and the townfolks slumbering in their beds, a large party laid hold of it, rolled it out of Princeton, down to the canal (a distance of about a mile), and there tumbled it in. An iron steamer ran against it in the night, injuring it seriously. So much for this spree. Everyone in town thought it the best frolic that the students ever had, and appeared truly rejoiced to see such a great humbug thus treated.” *Letter of Mr. Charles C. Jones, Jr. to his mother, Mrs. Mary Jones, Princeton, May 26, 1851.*

Linda **Barth:** is the author of *The Delaware & Raritan Canal, The Delaware & Raritan Canal at Work, , & ...* a longtime board member of the Canal Society of New Jersey, canal tour leader and a lecturer on the D&R Canal.

Robert **Barth:** is a past president of the Canal Society of New Jersey; director of the American Canal Society; a tour guide for the D&R and other canals, &...

Basins on the D&R: As originally built there were only two basins on the D&R Canal: Blackfan’s on the Feeder and one at State Street on the Main Canal in Trenton. As industry built up along the canal, many new basins were constructed. At the industrial traffic peak of the D&R, as many as 15 basins were in use. As use declined most were filled in. One of the two Princeton basins remains and remnants of others are visible.

Main Canal Basins:

East Millstone Basin was between the road bridge and the bridge of the Mercer & Somerset Railroad. It has been filled in and is now a small park behind the local first aid squad building.

Feeder Canal Basins:

Trenton---- 10 basins

Lambertville Basin is below the Lambertville Lock and provided the necessary room for canalboats to rotate 90° to enter and exit the outlet lock to the Delaware River.

Blackfans

Bathing in the canal: A complaint was made of boys and men going naked in the day time to swim, etc. in the canal basin, casting censure on the (Bordentown) “authorities” for not taking action. It was explained that the basin was located outside of the city of Bordentown as well as the county of Burlington and that Bordentown had an ordinance which prohibited nude bathing in the limits of the city between the hours of five in the morning and eight in the evening and it was strictly enforced. *Bordentown Register, June 23, 1871* The secretary was directed to inform the President of the College (Princeton) of the indecent manner in which the Students of the Institution are in the Habit of expressing themselves when bathing in the canal, near the Depot, whilst the cars on the Rail Road were passing them &c. *D&R CC Board of Directors Meeting of June 12, 1845 @ the office of the company in Princeton.* Complaint is made in the Trenton *Sheet Anchor* of the conduct of some who bathe in the canal near Princeton Depot. The canal is a pleasant place to bathe and it will be a pity if all should be debarred the privilege because some have not sense of decency enough to behave themselves when they bathe. *Princeton Whig, June 13, 1845.*

Belvidere Delaware Railroad/PRR Bel-Del Division : intended to make arrangements for transporting coal on the recently constructed bridge between Phillipsburg and Easton in 1855. “The first train of cars direct from Mauch Chunk to Trenton arrived in Trenton on Thursday with a cargo of Sugar Loaf coal from Judge Packer’s mines consigned to Col. J. Cook. The trains, loaded at the mines, can come direct to Trenton in six hours, about 120 miles. The Amboy Company are building a vast basin in Trenton (to be named Coalport) for the receiving and shipping of coal. Workmen have been engaged upon it for the whole year and it is expected to be completed in the spring.” *Daily True American, January, 1856.* The first transshipment of coal from cars to canalboats took place yesterday for the New York market. The shutes and other appendages are not quite ready, but will be in full operation in a few weeks. *Daily True American, 19 April 1856.* The new coal basin (Coalport) is now in full operation just east of the junction of the D&R and the Feeder Canals. *Daily State Gazette, 6 May 1856.* (Coal in great volumes began to be transported south to Coalport at Trenton where it was loaded into canalboats and schooners for shipment to New York & beyond and Philadelphia) A northbound train, headed by the (locomotive) *Pennsylvania* with M.T. Eyck in the cab, passed through Lambertville with 225 empty cars. This was the largest train up to that date to have passed over the road. *Lambertville Beacon, October 11, 1872.* “The Bel-Del carried 965,553 tons of coal in 1660 trains containing a total of 163,648 loaded cars in 1872. This was a 53% increase between Phillipsburg and Coalport, on the D&R, over the prior year.” *Hunterdon Republican, January 23, 1873* Over thirty mechanics were discharged from the shops of the Pennsylvania Railroad at Lambertville, on the 23rd of January. Most, if not all of them, are men with families. *Hunterdon Republican, February 11, 1875.* The Bel-Del had the honor of having the fastest scheduled train in the state of New Jersey. The *Water Gap Express* was faster than the PRR *Limited Express* that took seven minutes longer to cover the same mileage within the state. Engineer Felty of Lambertville covered the distance from Manunka Chunk to Trenton, including three station stops, in one hour and fifty minutes. Felty of Lambertville is a careful and reliable engineer, who runs her on scientific principles, and the passengers ride with the same ease that they would on a train going at the rate of 20 miles per hour. *Warren Journal, August 20, 1875; Hunterdon Republican, August 26, 1875.* A number of hands who were recently discharged from the Pennsylvania Railroad shops in Lambertville, have again been given employment by the company. A great amount of repairing is now on hand to be done. *Hunterdon Republican, August 1, 1878.* The 30' x 60' brown sandstone Warren Street, Trenton, Station

of the Bel Del was completed and opened to the public. It replaced a rough wooden structure known locally as the barracks because it had been used as living quarters for railroaders. The original station stood on the north side of the track on the bank of the Feeder Canal, across the track from the new station. *Daily State Gazette, January 1, 1881*. The last Bel-Del passenger train, a single self-powered diesel car, No. 4658 (Train No. 2372), due at Phillipsburg at 6:58 pm, operated northbound from Trenton along the D&R Canal. It arrived at Union Square around 8pm, ending 109 years of passenger service - 106 of which were to Phillipsburg. *Easton Daily Express, October 26, 1960*. The symbol freight train BL-6, operating from Trenton to Phillipsburg, was the last through train to run over the Bel-Del main line. This movement ended 122 years of train service. The Bel-Del's Delaware Valley route was abandoned on April 1, 1976, upon the activation of the Consolidated Railroad Corporation (Conrail), the government-sponsored railroad. *Letter to Warren & Catherine Lee from Stewart T. Reed, President, Conrail, September 12, 1980*. Notes: a 3.5-mile segment of the Bel-Del in the Lambertville area was taken over by the Black River and Western RR; the line from Milford north to Phillipsburg was retained by Conrail; and a portion of the former Bel-Del trackage, three miles from Coalport to Cadwalader Park, remained in service long enough to enable the American Freedom train to occupy a display site near the park.

Belvidere Delaware Railroad Derailments: Around 11pm on this Wednesday night, a northbound freight train, headed by locomotive 565 passing the quarries at Greensburg (Wilburtha), struck two cows that had wandered on to the track. In an instant the engine and five cars were turned upside down and smashed into a perfect wreck... Cars of perishable freight were crushed in like eggshells and the freight scattered around in conglomerate heaps. The crew escaped probable death or serious injury by jumping from the train. One brakeman sprained his ankle when he jumped and landed on the canal bank. Another crewman who had been standing on the top of a car that was thrown around at almost right angles with the track, was hurled half way across the canal; he swam out uninjured on the opposite side. *Daily State Gazette, July 2, 1879*. The coal cars that went into the Feeder near Blackfan's siding (named for the nearby Blackfan's Basin on the Feeder Canal) Tuesday, were drawn out early yesterday morning. Most of the coal had remained in the cars. *Daily True American, November 13, 1884*.

Belvidere Delaware Express Passenger and Mail Trains operated over the years along the D&R Feeder Canal included: *Colonial Flyer, Boston Express, Buffalo Express, Buffalo Mail, Delaware Valley Express, DL&W Express, Easton Express, Federal Express, Hudson Flyer, Niagara Express, Oswego Express, Philadelphia Express, Pocono Limited, Pocono Mountain Express, Stroudsburg Express, Tobyhanna Sunday Express, Trenton Express, and Water Gap Express* (the latter was the fastest train in the state of New Jersey in August 1875).

Belvidere Delaware Railroad Fast Freights: In the late 1950's and the early 1960's, a daily fast freight ran in each direction via the Bel-Del between Boston and Chicago. Both trains ran in close proximity to the D&R Feeder Canal for its entire length. These trains, NE-1 and NE-2, or Jet-1 and Jet-2, were removed shortly after the head-on collision at Holland Township, NJ on 19 August 1964. The last train to run through on the Bel-Del main line was BL-6. On 28 March 1976, this train operated from Wilmington, DE, via Trenton to Phillipsburg. When it arrived at the northern terminal, 122 years of through freight service came to an end. The Bel-Del route from Trenton to Milford was abandoned (except for the portion in Lambertville acquired by the BR&W) and track was removed. *Down Along the Old Bel-Del. By Warren F. Lee*.

Belvidere Delaware Railroad Head-on collisions: The first accident of two Bel-Del freight trains, a head-on collision, occurred south of Lambertville, opposite the Mount Hope Mills. The engineer of the locomotive that was badly damaged escaped injury by jumping into the Feeder Canal. *Daily State Gazette, April 3, 1854.* A serious head-on collision between two Bel-Del trains occurred yesterday near Washington Crossing around 6:30 am. An extra down train collided with the regular up freight train "A." Considerable damage was done to the locomotives, "slivering them to fragments. The cars on the freight train were completely smashed and fragments of them were scattered in every direction on the ground and in the canal and river." Two members of the crew of the freight train were seriously injured. They were Henry S. Kreemer, conductor, and Houston Thornton, fireman, both of Phillipsburg. Unfortunately, both men had to have leg amputations at the scene of the wreck. *Daily State Gazette, July 7, 1858.* A head-on collision took place on October 29th, 1872 one and ½ miles south of Lambertville between loaded and empty coal trains badly damaging the engines. A large number of loaded and empty cars were thrown into both the canal and the river. The southbound engineer failed to stop at the passing siding switch. *Hunterdon Republican, October 29, 1872.*

Belvidere (Delaware) Railroad: This article described the route of the proposed railroad to follow the Feeder Canal from the Junction of the Main Canal to Bulls Island. *State Gazette, July 7, 1849.* Bel Del rails were laid in Trenton from Willow Street to the Junction of the D&R and the Feeder Canals. A number of hands were hired to prepare the roadbed for the rails in the vicinity of Taylor's (Washington Crossing). *Daily State Gazette, December 14, 1850.* The first accident of two Bel Del freight trains, a head-on collision, occurred south of Lambertville, opposite the Mount Hope Mills. The engineer of the locomotive that was badly damaged escaped injury by jumping into the Feeder Canal. *Daily State Gazette, April 3, 1854.* A locomotive leaped into the canal two miles south of Lambertville. Fortunately, the engineer and fireman swam safely to shore. *Daily State Gazette, January 16, 1856.* A Belvidere-Atlantic City excursion train, with engineer Thomas Madden in the cab and crowded with passengers, struck an open switch at Wilburtha and ran out onto a coal trestle. The engine demolished an empty hopper car standing on the structure and plopped off the end of the elevated sidetrack. The coaches, however, were not derailed or damaged and no one was injured. Therefore, after a delay of about one hour, the train, headed by a replacement locomotive, proceeded on to the seaside resort. *Lambertville Beacon, July 29, 1923.*

Bennett's Garage was located on Amwell Road in East Millstone, just east of the D&R Canal. It was one of the earliest auto service stations in the area. The local Millstone Bus Company was based there until the mid 1960's. (A photo of one of their early, jitney type, buses crossing the D&R Canal on the East Millstone bridge in 1924 appears on page 24 of McKelvey's *The Delaware & Raritan Canal: A Pictorial History.*) Later the site was taken over by Onka's Charter (bus) Service, which went out of business in the early 1990's. Chet Furmanek's Central Jersey Bus Company (which utilized a Statue of Liberty logo) leased space there before it was sold to Stout's Bus Co. of Trenton in October, 2002. At the end of operations Furmanek donated Public Service J-411 plus a large quantity of spare parts and five transmissions to the New Jersey Transportation Heritage Center. J-411 was driven from East Millstone to Lakewood by the late Bob Wasche. *New Jersey Transport Heritage Vol. 12, No. 1, February 2003*

Bethlehem Steel Corporation president, Charles M. Schwab and Prince Tsai Hsun, an

uncle of the last Chinese emperor, traveled down the Bel-Del from Phillipsburg in a special train. The Chinese dignitary was said to have been seeking an agreement from the steel company for the construction of warships. *Lambertville Beacon, September 25, 1910.*

Bicycle Rentals: Greenway Bike Rentals at Washington Crossing offer rentals as well as guided tours from Washington Crossing to Prallsville Mill. 908-581-5780

Bird and Weld Foundry at Trenton received a cargo of cannon balls in the schooner *EMMA*, at the Trenton Basin. They were condemned stock to be used in their foundry. *Daily True American, August 3, 1853.*

Nathaniel Holmes **Bishop** journeyed 2,500 miles via the D&R and other canals and inland waterways from Quebec to the Gulf of Mexico in his *PAPER CANOE* in 1874. *Voyage of the Paper Canoe, Boston: Lee & Shepard: 1878.*

Bituminous Coal: The D&R Canal is doing a very fair business, principally in bituminous coal. *Bordentown Register, March 24, 1871.*

Black River and Western Railroad Company (BR&W): On 1 September 1964, a group of steam railroad enthusiasts leased the Pennsylvania Railroad's Flemington Branch from Ringoes to Flemington to operate steam powered train excursions. On 1 February 1970, these people, now incorporated as the BR&W, bought the entire branch from Lambertville to Flemington to provide freight service and seasonal tourist passenger service. On 1 April 1976, the date that Conrail assumed control of the properties of the Penn Central Railroad, the BR&W augmented its line through the purchase of two segments of track located on each end of its route. On the southern end it purchased a 3.5-mile portion of the former Bel-Del main line and industrial trackage in and about Lambertville. On the northern end, it purchased a 4.0-mile portion of the former South Branch Railroad (CNJ) that ran from Flemington to near the former Lehigh Valley main line (now Conrail) at Three Bridges. During December 1976 a new interchange connection was constructed between the BR&W and Conrail by L.E. Vernon, former Bel-Del track expert. It was placed in service during March of the following year. *Down Along the Old Bel-Del, by Warren F. Lee.* The 3.5-mile section of former Bel-Del track in the Lambertville area was along the original towpath of the D&R Feeder Canal. On one of its field trips the Canal Society of New Jersey chartered a BR&W train and made a trip up to the Stockton Quarry and back on this track. All BR&W track south of Ringoes is currently out of service.

Blackwells Mills Canal House Association is located on the canal at 598 Canal Road, at the junction of Blackwells Mills Road, Somerset, (Franklin Township), NJ. The house was built for the bridge tender when the canal opened. After the canal closed the house came under the ownership of the state of New Jersey, but continued to be occupied by the last bridge tender, Sandor Fekete. After he died at age 90 in 1970 the house became available. In 1971 the Blackwells Mills Canal House Association was formed and they leased the house from the state and began to restore it as a community center, museum, and library. The house is currently maintained by the Blackwells Mills Canal House Association. It is open to the public and plays host to several events such as craft and antique shows, art exhibits, flea markets, plant and garden sales, holiday events, children's programs, nature walks, community clinics on canoeing,

fishing, cooking, furniture repair, and much more. It also serves as a museum and library of canal history. On D&R Canal Day, October 2, 1976, the Canal Society of NJ and Blackwells Mills Canal House Association sponsored a reunion of canal workers organized by the author. Present were: Jack Collins, a marine steam engineer; John Dargay, a laborer who was still employed on the canal at the time; Herbert E. Wager, a boat hand aboard the family tugboat, *TENA WAGER*; and Charles Wilson, Sr., a retired D&R labor crew foreman. For calendar of events check: www.dandrcanal.com/friends.html

The **Boat House** is a very small two-story pub at 8½ Coryell Street (rear), Lambertville established in 1979 a few feet east of the D&R Feeder Canal. It is loaded with maritime and nautical maps, artifacts, brass, lithos, photos, ship models, etc. Open for cocktails in late afternoon all year except major holidays. Unfortunately there is not a single canal-related item in the place... They have obviously missed the boat! 609-397-2244.

Boating Today: See “Canoeing Today”

Boatman insulted: Men on the canal boats are right good customers to some of our stores, and should not be insulted when they make any inquiry of our citizens. Last Saturday an old canal chap asked one of our boys where he could find a barber shop, and the boy replied that, “our barbers do not shave hogs.” That boy ought to be strapped. Bordentown Register, September 8, 1871.

Boatman Killed: William L. Curry, one of the crew of the canal boat *HUDSON*, was caught between the boat and the side of Prison Lock yesterday afternoon and sustained severe injuries about the hips and side. Dr. Mackenzie was called and had him removed to the St. Francis Hospital. Curry gave his residence as 2110 No. Thirteenth St., Phila. The accident happened while he was jumping from the boat to the tow path (lock) to adjust a rope. Last evening Curry, who was 30 years old, died at the hospital. *Daily True American, June 10, 1885.*

Boats and machines owned by the canal company in 1840 included: one iron steam tow-boat, used in constructions and repairs; one steam dredging machine, with four scows and tools; six boats for conveying materials - on each is a place for cooking for a gang of men, and berths, etc. for their accommodation, plus six horses and tools for sixty men; chains, screws, irons and materials on hand. *Report of the Joint Board of Directors, to the Stockholders of the D&R C and C&A RR and TC, 12.29.1840.*

Boiler Accident: The accident at Lock No. 10, on the D&R Canal was fortunately not as serious as anticipated. The engineer was doing something to the boiler of the engine at the lock, which is a tubular one, and for that purpose had plugged (one?) of the tubes, and while he was driving the plugs in tighter a side blow striking one of them made it fly out, causing a considerable rush of steam, which scalded him badly about the breast and other portions of the body. We are informed that the injuries, although painful, are not so severe but that he will be able to be about again in a few days. *Daily State Gazette, June 25, 1872.*

Bordentown City: In 1682 Thomas Farnsworth, an English Quaker, moved up the Delaware River from Burlington to make a new home for his family on a wind-swept bluff

overlooking a broad bend in the river at Crosswicks Creek. The area became known as Farnsworth's Landing and became the center of trade for the region. Joseph Borden, for whom the town is named, arrived in 1717. By 1724 he had acquired nearly all of the land that now comprises Bordentown City. He established a ferry service to cross the river and by 1740 had a line of stage coaches and boats traveling between New York and Philadelphia. By the 1770's with Francis Hopkinson (a signer of the Declaration of Independence), Col. Kirkbride, Col. Hoagland, and Thomas Paine (author of Common Sense, America's most important political pamphlet), the area became a hotbed of revolutionary fervor. The town was occupied by Hessians in 1776 and pillaged and partly burned by the British in May and June of 1778. Other famous Bordentown residents included Joseph Bonaparte, ex-king of Spain and Naples and brother of Napoleon, (whose estate, Point Breeze, was located on the bluff above Crosswicks Creek) and Clara Barton, who in 1853 started the first free public school in NJ in the original one-room schoolhouse which still stands near the center of town. She later formed the American Red Cross. www.downtownbordentown.com The first stage of construction of the Camden and Amboy Railroad was from South Amboy to Bordentown where passengers took the steamboat for Philadelphia which had been established much earlier for stagecoach passengers. Shops for the Camden & Amboy Railroad were established here and their first locomotive, the *JOHN BULL* was assembled here. Modifications to the D&R Canal Company's first steam tugboat, the *ROBERT F. STOCKTON*, later renamed the *NEW JERSEY* were made at Bordentown. Bordentown area industry continues to be served by Conrail Shared Assets Organization and passenger service is provided to Camden and Trenton by NJ Transit's RiverLine.

Bordentown Register: Sixteen thousand-four hundred boats passed through the outlet locks of the D&R Canal during 1879. **16 Jan., 1880:** Elevated on the marine railway of Clinton and Son is the steam propeller *MARY* of Trenton being encased in a new hull. **21 May, 1880:** A splendid passenger boat, of the tug pattern, named the *GYPSY*, passed through the canal on Wednesday en-route to Portland, ME. It was built in Philadelphia. **11 Oct., 1895:** On Friday morning last, the barge *POTOMAC* of the Clyde Line, while on the way from Philadelphia to New York, struck a sunken sand boat near the entrance to the canal lock in Crosswicks Creek, puncturing a hole below the water line in the *POTOMAC*. The vessel was beached and on Saturday a force of stevedores from Philadelphia arrived and transferred the cargo to another vessel. **18 Oct., 1895:** The sunken Chunker *RESOLUTE* now obstructing the entrance to the D&R Canal has been marked with a buoy by the U.S. Government. By an official notice from the War Department, printed in another column, it will be seen that the Government will, after four weeks, declare the Chunker a derelict and remove it unless it shall be taken away by its owners. **22 Nov., 1895:** Phil Daly's steam yacht *CHARLOTTE* passed out of the canal here Tuesday en-route from Long Branch to Florida. The Daly family and a few friends were on board. **13 Dec., 1895:** The sunken sand boat *RESOLUTE* near the mouth of Crosswicks Creek, a menace to navigation for weeks, was broken up by a party of Government workers on Saturday, and the debris removed. **23 May, 1902:** The 75-foot pleasure yacht *ALMA* passed through the canal Monday en-route from Palm Beach, FL to NY. **9 Sept., 1902:** Tuesday a 47-foot gasoline yacht passed out of the canal lock en-route to Dover, DE, from the Thousand Islands. **14 Nov., 1902:** The Tug *ROSE HAGAN* brought to Bordentown two canalboats of 150 tons capacity each. They were sent through the D&R to New York, at which port they will be hoisted onto a large steamship and taken to Cuba for service as lighters. Two steam yachts went through on Friday: *THETIS* of Boston, and *MYSTERY* of NY. In the past two weeks other yachts have passed down

the river: *ALICE* - NY to Cuba; *HYDROGRAPHER* and *STRANGER* both - NY to Washington; *MAY* (a steam yacht built in Bordentown) and *LANTANA* both - NY to Norfolk; (Note: The *LANTANA*, a gasoline powered motor yacht was owned by Mr. Horne, a meat packer from Stapelton, Staten Island. Ca. 1930 Captain Dougherty was taking the *LANTANA* through the canal and arrived at the Bordentown Outlet Lock where upon he had an ulcer attack and was taken to St. Francis Hospital in Trenton. Bordentown local, Bill Lynch, then only a teenager, but later a Delaware River boat captain, was employed to live on and watch the yacht in the absence of its captain. The owner's wife paid Bill \$10.00 for his three weeks "work" and deducted that amount from poor Captain Dougherty's salary. *Interview with Capt. Wm. Lynch, November 24, 1972.*) *WIZZARD* - NY to FL; and *LONONDIA* - NY to GA. **12 Mar., 1908:** The D&R Canal opened for the season on Monday night (March 8). The gasoline yacht *KATHERINE* bound from FL to Fort William Henry, NY, was the first boat to enter the locks at this end.

Bordentown's Railroaders: There are in Bordentown, seven conductors, thirteen engineers, ten clerks, three train baggage masters, two station baggage agents, fifteen brakemen, four switchmen, three watchmen, two engine repairers, three section bosses, twenty-five section hands and laborers, ten carpenters and twelve Meadows shop men. The D&R Canal Co. employs a force of twenty-five men, making a grand total of 175 railroad men - quite a formidable array for Bordentown. (Note: cannallers were counted as railroad men! No firemen were included - did the locomotives have automatic stokers?) *Weekly True American, April 15, 1887.*

Bordentown Yacht Club was founded in 1937 as a social club with members having a common interest in boating. The club is a member of the Delaware River Yachtsmen's League and the Chesapeake Bay Yacht Clubs Association. Bordentown Yacht Club and dockage for members is located at the foot of Farnsworth Avenue in historic Bordentown, NJ, just across Crosswicks Creek from the Outlet Lock of the D&R Canal. www.bordentownyachtclub.com

(So.) **Bound Brook Boat Builders & Yards** (there were several, especially in the 1850's and 1860's) built the following steam canalboats: *D.H. MOUNT* (D.H. Mount had a storehouse at the Rocky Hill basin and lived nearby; the vessel foundered between Cape Hatteras, NC & Jacksonville, FL, with 24 lives lost in 1865, only two years after launching...), *EUREKA* (a 161 ton canalboat converted to steam power in 1856, two years after launching; her home port in 1870 was Sing Sing, NY - perhaps being used in the cut stone trade...), *FRANKLIN* (U.S. Reg. #37166, a steam side wheeler), *FRANKLIN* (U.S. Reg. #9566, 130.5' long, first operated by Jacob Shurts of Bound Brook; later purchased by the Merchant's Line), *J.B. MOLLISON*, and the yachts: *SKIPPER* (a 43-foot fishing party boat built along the D&R at So. Bound Brook and brought by a house mover to New Brunswick basin for launching; was still at Belmar, NJ as late as 1978), *BUD*, *ELIZABETH*, *LYDIA R.*, *KAREN II* (became the *SE TREK*), plus others.

The Boy, Me and the Cat, by Henry M. Plummer is a father's log of his cruise with his son and a kitten aboard their 24-foot catboat, *MASCOT*, from New Bedford to Miami and return in 1912-1913. *Henry M. Plummer, The Boy, Me and the Cat, Rye, NH: Cyrus Chandler Co.: 1961.*

Boyd Park, New Brunswick is the downtown riverfront park which serves as a gateway to the city and simultaneously extends its urban fabric to and across the adjacent canal and river. It was built on land mostly filled in after the canal was closed. When the canal was active this

was a large and thriving “harbor” area which had at least four boat building and repair yards. A system of functional, architectural, and landscape elements act as new landmarks within the mile-long, 14-acre open space and complement the restoration of the twin outlet locks and canal edge. This work, completed in 1998 at a cost of \$10 million, included the installation of new lock gates and a swing bridge spanning both chambers. Unfortunately much damage was done to the new work by Hurricane Floyd on September 16, 1999. Also see “New Brunswick Boatyards and Boat Builders.”

A. L. **Brennan, Jr.** was the author of “Following the Winter Sun: Suggestions as to How to Reach the Picturesque Lagoons and Other Attractive Places in Florida by Following the Canals and Nature’s Inland Water Ways; Motor Boat Routes to Florida: The ‘Inside’ and ‘Outside’ Courses and How to Follow Them from New York to Key West” which was published in the October, 1913 issue of Motor Boating magazine. It included photos of two D&R locks, one with a sailboat and the other with a motorboat.

Bridge Accident: The Southern train of cars from Philadelphia was detained some hours last evening by a sad occurrence on the bridge at New Brunswick, about 5pm. Three lumberyard men, not connected with the R.R. Company, ran a single empty wood car on the draw which had just been opened to allow a boat to pass before it was quite closed, and were precipitated into the canal with the car, and being instantly killed. Another has since died. Both of them were men of family, one having nine children and the other six. The third it is thought will recover... *Newark Daily Advertiser, November 9, 1849.*

Bridge Fell In: The bridge across the canal at Baker’s Basin fell in yesterday as it was being turned. It became necessary to establish a ferry and transport the traveling public across the raging canal. *Daily True American, August 23, 1860.*

Bridge Fire: Shortly after 5:30am on March 9th, 1878 fire was discovered in the timbers of the original 1837 wooden bridge across the Raritan River and the D&R Canal at New Brunswick. The engineer of train No. 6 claims that he looked back after his train had safely crossed and saw the whole structure in flames and three of the spans fall into the river. Two hours later the last burning pieces of the over 1,800-foot long bridge fell into the river. Coincidentally, the railroad had already decided that due to the cost of keeping the bridge in repair they should replace it with an iron structure. Several weeks prior to the fire they had contracted with Keystone Bridge Company of Philadelphia for the work. In fact at the very time of the fire a force of men was engaged in demolishing half of the structure (one of two tracks) and half (one track) of the iron structure had already been erected and was ready to be rolled into place. The supposition was that the fire was started by incendiaries, but investigation failed to substantiate those charges. Another thought was that sparks from the stack of the steam crane on a barge in the river under the bridge may have been the cause. In any event the fire started from the canal bank and advanced rapidly the length of the structure. The railroad summoned their 600 bridge carpenters from all points and bridge timbers were forwarded rapidly to the site. They thought that a temporary wood bridge would be ready for service in four days. Arrangements were made with the Central Railroad of NJ to transport through passengers between New York and Philadelphia over their (and the Reading Railroad) line. Local passengers were driven in wagons over the Albany Street bridge between trains waiting east and

west of the bridge and this transfer would take about 30 minutes. *The New York Times, March 10, 1878.*

Bridge Moved: The six-span steel truss bridge of the Pennsylvania Railroad Company, 900 feet in length, over the D&R Canal and the Raritan River at New Brunswick, was moved from its original position and placed in a new one fourteen and one-half feet south of the old bridge in one minute and forty-five seconds on Sunday, May 25, 1902. It was exactly ten and one-half minutes from the time the bridge was cut loose until the work had been completed and the structure was again ready for trains. *Chronicles of New Brunswick, New Jersey, Pg. 96-97.*

Bridges & Bridgetenders; (Note: the numbers indicate the original bridges over the canal; mileage is from Bordentown; only canal era bridges which existed during the operating years are listed. Many more bridges have been subsequently constructed, including a prominent pedestrian crossing of US Route 1 at Port Mercer. THIS IS A WORK IN PROGRESS)

Main Canal;

Bridge for mules across Lock 1 at Bordentown - 0.00 miles

Bridge below Lock 4 to allow Pennsylvania Railroad access to freight customers on west side of canal north of Lalor Street, Trenton, built ca. 1930

Bridge 1, Laylor St., Trenton - 4.31 miles

Bridge 2, Cass St., Trenton - used by Public Service trolley cars from Newark and Camden to the central business district of Trenton.

Bridge 3, South Broad St., Trenton - 5.17 miles, used by Trenton & Mercer County Traction/Trenton Transit Co. streetcars.

Bridge 4, Hamilton Ave., Trenton - 5.35 miles

(Aqueduct over Pennsylvania Railroad)

Bridge for Greenwood Avenue, Trenton - 5.60 miles

Bridge 5, Freight railroad bridge for branch to Trenton City Docks on Delaware River. Note: This was the bridge which allowed Philadelphia & Trenton Railroad trains access to the Camden & Amboy Railroad "Steam Depot" ca. June 1844 to 1846 or early 1847.

Bridge for pedestrians between State Street Lock and State Street bridge allowed passage over the canal when all but high masted vessel were transiting and the adjacent parallel railroad.

Bridge 6, East State St., Trenton, - 5.87 miles, used by Trenton & Mercer County Traction Co./Trenton Transit Co. streetcars.

Bridge 7, Perry St., Trenton, - 6.14 miles, used by Trenton & Mercer County Traction Co./Trenton Transit Co. Streetcars

Bel Del branch of the Pennsylvania Railroad crossed the main canal at the Feeder Canal Junction to Coalport, Trenton - 6.27 miles. After the canal closed and the US Route 1 Bypass was constructed a new two track Bel Del bridge was installed over the depressed highway. Today that bridge has a large painted sign proclaiming "Delaware and Raritan Canal State Park."

Bridge 8, Southard St., Trenton, - 7.03 miles

Bridge 9, Olden Ave., Trenton - 7.13 miles

Bridge 10, Mullberry St., Trenton - 7.51 miles

Bridge 11, Cherry Tree Bridge - 8.41 miles

Bridge 12, Whitehead Road - 10.20

Bridge for US Rt. 1 - 11.30 miles

Bridge 13, Port Mercer or Clarksville, - 12.23 miles, John H. Arrowsmith was a tender and his son Ray Arrowsmith was the last bridgetender; house survives, leased to Lawrence Historical Society

Bridge 14, Alexander St., Princeton - 15.76, Mr. Sassman was the last bridgetender

Camden & Amboy, later Pennsylvania Railroad, Princeton Branch railroad bridge - 15.91 miles

Bridge 15, Washington St., Princeton - 16.31 miles

Harrison Street Bridge, Princeton

Aqueduct over Millstone River - 17.29 miles

Bridge 16, Kingston - 19.66 miles, was used by the original route of the Lincoln Highway; bridge was tended by locktender, Dominic "Tommy" Riccardone

Bridge 17, Rocky Hill - 21.57 miles, Jack French, bridgetender and canal muskrat trapper; when the bridge tender's house burned in 1925, the Bordentown bunkhouse was jacked up, jockeyed onto a canal scow and moved to Rocky Hill where it was off loaded and put to use as a bridgetender's house.

Bridge, pontoon type, floated by barrels, for Atlantic Terra Cotta Co. workers, provided a shortcut for workers walking to and from their homes. It was left in the open position when not being used.

Bridge 18, Griggstown - 23.96 miles, farmers bridge over lock

Bridge 19, Griggstown - 24.60 miles, north of lock, bridgetender: Happy Slover; house survives, to become Scenic Byway headquarters

(Griggstown Muletender's Barracks; survives, but vacant

Bridge 20, Blackwells Mills - 28.23 miles, Sandor Fekete, bridgetender; house survives, leased to Blackwells Mills Canal House Association (Meadows Foundation?)

(Mercer & Somerset Railroad - Pennsylvania Railroad bridge - only existed a short time)

Bridge 21, East Millstone - 30.28 miles, J. Bergen Culver, bridgetender; bridgetender's house survives, unoccupied

Bridge 22, Weston - 32.47, tended by John Carmen; house survives, but is not habitable

Bridge 23, Zarephath - 33.04, tended by John Carmen; bridgetender's house survives, presently vacant

Bridge 24, Farmers bridge over Lock #10, Zarephath

Bridge 25, South Bound Brook, led to Queens Bridge across the Raritan River, Reading Railroad bridge to Standard Paint Works (Ruberoid Co.), South Bound Brook - 36.12

Bridge 26, Landing Lane, New Brunswick - 41.36 miles

Bridge for New Jersey Railroad and Camden & Amboy, later Pennsylvania Railroad at New Brunswick - 42.00 miles, bridge was over canal & Raritan River, originally included a lower level roadway

Albany St. Bridge, New Brunswick, - 42.95 miles, was used by several Public Service trolley lines, including the Newark - Trenton *FAST LINE*.

Bridge over both outlet locks for mules to and from the towpath at New Brunswick - 43.96 miles

Feeder Canal Bridges;

Raven Rock - road bridge to Delaware River pedestrian bridge
(Prallsville Mill Complex is leased to the Delaware River Mill Society)
Stockton - road bridge to Delaware River bridge
(Bel Del/Pennsylvania Railroad bridge crossing from east to west side of Feeder

Canal)

(Alexauken Creek Aqueduct)
Bel Del/Pennsylvania Railroad Flemington branch: survives but is out of service
Lambertville, Bridge St. - bridge to Delaware River bridge
(Marshall House, 60 Bridge Street, Lambertville is administered by the D&R
Canal State Park and leased to the Lambertville Historical Society)

(Swan Creek Aqueduct)
Bridge below Lambertville Lock for mules leading boats to and from the outlet
lock.

(Bel Del/Pennsylvania Railroad bridge to access quarries) removed
(Bel Del/Pennsylvania Railroad bridge to access quarries) remains are visible
Titusville North (River Drive)
Titusville, Church Street
Titusville, Grant Street
Washington Crossing - bridge to Delaware River bridge
Mercer & Somerset/Pennsylvania Railroad bridge at Jacobs Creek: removed
Scudders Falls; house survives, moved east to Bernard Street, but what was it's
original use????????????

Wilburtha, West Upper Ferry Road,
Wilburtha, Wilburtha Road; survives but vacant
Reading Railroad, now CSX / SEPTA main line bridge: in daily use
West Trenton, Lower Ferry Road
Trenton, Mill Drive
Trenton, Aqueduct over Sullivan Way with Trenton & Mercer County Traction
Co./Trenton Transit Co. Line to Trenton Junction alongside road.

Trenton, Aqueduct over Parkside Ave.
Trenton, Hermitage Ave.
Bel Del/Pennsylvania Railroad bridge: abandoned but in place
Trenton, Prospect Street with Trenton & Mercer County Traction Co./Trenton
Transit Co. trolley line to NJ State Hospital; building survives, leased to City of Trenton
Trenton, Calhoun Street with PA & NJ Railway trolley; house survives, formerly
D&R Canal Commission office, presently vacant????????

Trenton, West Hanover Street with PA & NJ Railway trolley; house survives but
is vacant

Trenton, Passaic Street
Trenton, Spring Street
Trenton, N. Willow Avenue with Trenton - Princeton Traction Co. trolley
Trenton, Bel Del/Pennsylvania Railroad bridge: abandoned but in place
Trenton, Warren Street with Trenton & Mercer County Traction Co./Trenton
Transit Co. trolley

Trenton, N. Broad Street
Trenton, Montgomery Street

Trenton, Carnegie Road bridgetender's house leased to NJ Treasury Department occupied - per Patricia Kalleser????????????

Trenton, Pennsylvania Railroad, Enterprise Branch; abandoned but in place

Trenton, Bridge alongside Enterprise Branch, for mules on main canal.

Trenton, Bel Del/Pennsylvania Railroad where Feeder joins Main Canal

immediately east of above; original bridge over canal removed during construction of depressed Rt. 1 Bypass and replaced with new steel bridge over Rt. 1; abandoned but in place and now used by D&R Canal State Park Path.

Bridges Raised: The drawbridge over the canal at Princeton is being raised, and in consequence passengers to the Junction are taken on one dummy, and another takes them to their destination. (Passengers were probably advised to walk down to the Alexander Road bridge, cross the canal, and walk back up to the railroad. However, they may have provided a rowboat "ferry.") *Daily True American, July, 1868.* The Bel-Del (Railroad) was in the process of raising the level of the bridge and tracks across the Feeder Canal at Flemington Junction (north side of Lambertville) so that boats on the waterway could pass under the bridge, which in the future would no longer need to be turned. (This also applied to Princeton, but that bridge would still have had to be opened for steam canalboats, tugboats, schooners, etc.) *Hunterdon Republican, December 23, 1891.*

Bridge Trouble: More trouble was experienced with the Albany Street bridge draw (New Brunswick) and the passage of trolley cars over it on Saturday night and yesterday. On Saturday night at 11 o'clock a car ran off the track on the bridge and some time was consumed in putting it back again. Last night at 6 o'clock the draw was opened to allow a boat to pass through. When an effort was made to close it, it refused to catch, as the intense heat had greatly expanded the metal parts. As no cars could pass over the draw it was necessary for several hours to bring Bound Brook and Metuchen cars to either side of the draw only, and then have passengers transferred. Today Freeholder Jacques and other members of the Bridge Committee were supervising the cutting of new rails to replace those that were warped and unfit for use. *New Brunswick Times, July 1, 1901.*

Brooklyn Navy Yard purchased a load of ship's knees from Mr. Lugar who took them there in a Durham boat in 1863. He had cut them in the Blue Mountains and along the Delaware River as far North as Columbia. Lugar's boat floated down the river and at Lambertville he entered the Delaware & Raritan Canal Feeder and was towed by mules to Trenton and New Brunswick. From there he was towed down the Raritan River, through Arthur Kill & Kill Van Kull, across NY Harbor and up the East River to the Navy Yard by steam tug. *Lambertville Beacon, February 13, 1941; Navigation of the Upper Delaware.*

William Jennings **Bryan**, the Democratic nominee for the office of the president of the US, delivered speeches from the observation car of his special train at stations along the Bel-Del. Stops were made at Warren Street, Trenton, Lambertville and other towns adjacent to the D&R Feeder Canal. *Easton Daily Express, October 23, 1908.* During August, 1913, Secretary of State William Jennings Bryan traveled over the Bel-Del between Trenton and Lambertville to deliver an address on Christian morality, entitled "The Making of a Man," before a large Chautauqua

gathering at New Hope. *Lambertville Beacon, July 30, 1925.*

James C. **Buckalew** who was engaged in towing boats on the canal for 26 years sold out to the D&R for something over \$90,000. The contract has been awarded to Mr. (Captain) Richard Conover, a nephew of Edwin A. Stevens, Esq. *N.J. Courier, Toms River, 10 January 1867.*

Morris Buckman developed a "Plan and Proposition, with Arguments in its Favor, for Securing, A Million of Tons Increase to the Lehigh, Delaware Division and Delaware and Raritan Canals. The Plan is Simple and Self-Producing. Philad'a, November 4th, 1861." His preceding letters of June 20th, and July 4th, 1859 as well as his followup letters of November 18th, December 3rd, 10th, 16th, and 17th, 1861 are all directed to the D&R Canal executives and contain much information about operations.

Bulls Island Recreation Area: The main intake of the water found in the D&R Canal is captured from the Delaware River at the northern section of Bull's Island. This area is comprised of a day use area, campgrounds, the Bull's Island Natural Area, and provides boat launches into the canal and the Delaware River. A Roebling design pedestrian bridge over the Delaware River allows access to the Delaware Canal administered by the Pennsylvania State Park. *D&R Canal State Park brochure* This bridge and the Lambertville - New Hope bridge permits interesting loop trips along the towpath canals on both sides of the river. Canoe and kayak canal ride rentals are available at Bulls Island. *Phone: 908-996-5386 or www.delawarerivertubing.com*

Captain John **Burns** had the tug *TRENTON* and four canalboats on the D&R in the 1920's. *New Brunswick Sunday Times, March 11, 1923.*

Capt. Frank **Butcher**, in 1880 made three round trips with his canalboat *MARY McCONKEY* from Steelton, near Harrisburg, PA to Rouse's Point, NY on the northern shore of Lake Champlain with 100 tons of steel rails for the Ogdensburg Railroad. The return trips were made with 100 tons of iron ore dug near the shore of Lake Champlain. The trip took 20 days and the route included the Main Line of the PA Canal; Susquehanna & Tidewater Canal; Chesapeake Bay; Chesapeake & Delaware Canal; Delaware River, D&R Canal; Raritan River; Arthur Kill; Kill Van Kull, Upper NY Bay; Hudson River; Champlain Canal and Lake Champlain. *The York, PA Dispatch, Vol. 55, No. 39, City Edition, July 13, 1903.*

Frank Taylor **Cable**, *The Birth and Development of the American Submarine*, New York, Harper & Bros., 1924. Chapter 11 describes the 500-mile trip the *HOLLAND*, the first submarine to be accepted in the US Navy, took from New Suffolk, LI, NY to Washington, DC in 1899, including the trip across the waist of New Jersey on the D&R Canal. "At Princeton the onlookers began to assemble at noon, and waited patiently until dark, when word came that we were berthed for the night six miles distant. At midnight our watchman turned us out to report that so great a crowd had assembled that he was getting nervous. Apparently half the inhabitants of New Jersey had gathered on the banks, armed with all manner of lights, in their eagerness to see the boat... Our largest crowd awaited us at Trenton. Most of the shopkeepers had closed for half a day to give their employees a chance to see the boat, and the docks and canal banks for three miles were black with people. At Bordentown, where we locked out in the Delaware River, we found the public schools closed in honor of our arrival and most of the children

assembled on the docks...” The 52-foot, 10-foot-diameter *USS HOLLAND* (SS1) had been built in Elizabethport, NJ for John P. Holland. One of his earlier experimental submarines rests in the Paterson Museum.

Cadwalader Park, Trenton; 96 acres; along the Feeder Canal; was designed ca. 1900 by Frederick Law Olmsted, and is an excellent example of his leading landscape architect’s style. It includes a children’s playground and contains the Trenton City Museum at Ellarslie Mansion, an Italianate villa built in 1848. In 1908 a memorial to John A. Roebling was dedicated in the park. In past years locals swam in the Canal along the west side of the park.

Richard **Cadwalader, Jr.**, was the owner of 104-foot yacht *SEQUOIA*, built by Mathis Yacht Building Co. in Camden in 1925. She passed through the D&R Canal ca. 1928 with Herbert Hoover aboard. Fame came in 1933 when the Navy commissioned her the *U.S.S. SEQUOIA* and she became the presidential yacht - eight Chief Commanders slept aboard. Franklin Roosevelt conferred with Winston Churchill in her main salon, where later Harry Truman installed a piano and played poker. John F. Kennedy celebrated his 46th birthday aboard; Lyndon Johnson received African Ambassadors on deck; and Richard Nixon met with Leonid Brezhnev aboard. It was former Navy man President Jimmy Carter who de-commissioned her in 1977. In 1980 the Presidential Yacht Trust acquired *SEQUOIA* and began restoration to her former elegance. Much original furniture was put back on board and the Burmese teak wheelhouse was restored. However, the restoration effort went bankrupt.

Calhoun Street Bridgetenders House on the Feeder Canal in Trenton was for many years occupied by the D&R Canal Commission before they moved to the Prallsville Mill complex at Stockton.

Camden and Amboy Safety Record: The C&A could boast only of a middling safety record... ..(it) began to maim and exterminate patrons from the beginning of steam operations... ..the C&A had enough mishaps to aggravate and frighten the traveling public. Yet the line, despite its huge traffic and profits, refused to take any substantial measures, such as double tracking, until the 1860's... ..It was too stingy. ...Nor would it upgrade the twisting tracks that followed the D&R Canal between Kingston and Trenton. Passengers who were jostled from side to side in their seats as the train snaked its way through an endless series of curves had daily cause to curse the monopoly... *The John Bull: 150 Years a Locomotive, by John H. White, Jr.*

Camden and Amboy track along the D&R Canal between Trenton and Kingston was completed in 1839 and connected with the New Jersey Railroad at New Brunswick. This formed the first all-rail route from Philadelphia to the Hudson opposite New York City. The new straight trackage between Trenton and New Brunswick was opened on November 23, 1863. “The removal of all the trains but one, running south, from the old to the new track between Trenton and New Brunswick, is a source of great inconvenience to the people of Princeton and other places along the route. The new depot (Princeton Junction) is over 3 miles from Princeton and Princeton and Kingston are the only stations between Trenton and Dean’s Pond. The only down train running on the old road is the accommodation train, reaching Trenton at 8:40 pm.” *Trenton State Gazette, September 27, 1864.* A freight train was thrown off the track at Port Mercer by a misplaced switch. *Trenton State Gazette, December 7, 1864.* The first train ran over the Princeton

Branch between Princeton and Princeton Junction on May 29, 1865. *Princeton Standard* "The Camden and Amboy track along the D&R Canal between the old depot at Princeton and Trenton has been taken up." *Daily True American*, July 22, 1865.

C.F. King & Co. built and operated canalboats on the D&R in the very early years.

Camping:: Bulls Island Recreation Area has tent and trailer sites with fire rings, picnic tables, flush toilets, and showers. Campsites are open April 1st through October 31st. *D&R Canal State Park brochure*

Canal Animals found along the Canal are a sample of the animals common to the state including: cottontail rabbit, muskrats, Norway rats (in Trenton area), opossums, racoons, squirrels, skunks, white-tailed deer, and woodchucks. Evidence suggests that beavers have lived in the area above Stockton, NJ, along the Feeder Canal. Also see "Muskrats" by *Paul Stern & Dorna Cooper, NJ Outdoors.*

Canal Barge: was a term which saw widespread use in official reports as well as the media in at least the 1800's in reference to the D&R Canal vessels. Irregardless, canal historians and enthusiasts are hell bent to change this because they believe the correct name for these vessels should be "Canalboat." Their thinking is that if a vessel has a rudder it should be a boat. One author, Bill "C.P." Yoder, who wrote *Delaware Canal Journal* in 1972 was so concerned with the misuse of the term barge that he included a one page appendix to clarify that at least on the Delaware and Lehigh canals the vessels were referred to as "boats." This was definitely not true for the D&R Canal, at least in the 1800's. It all may be a moot point because the public, by and large refers to canal vessels as barges and we will never be able to change the thinking of the masses...

Canal Birds: A recent bird survey conducted in the Canal Park revealed 160 species of birds, almost 90 of which nested in the park. Common Canal birds include the: cardinals, crows, cuckoos, blue jays, mallard ducks, orioles, pheasants, sparrows, swallows, thrushes, turkey vultures, and yellow-billed cuckoos. The bald eagle was last seen in the canal area in 1969, but beginning about 2000 a pair of bald eagles have nested and had fledglings near the D&R Canal aqueduct in West Windsor Township as reported by "Friends" member Robert Yuell, who has seen them.

Canal Blockade: Traffic on the D&R Canal in the vicinity of New Brunswick was suspended last week by reason of a peculiar accident which happened at one of the locks at that place. Early last Wednesday morning the new barge *KEYSTONE*, 1,000 tons, bound from Philadelphia to New York and loaded with lumber, attempted to enter the lock. The *KEYSTONE* is 185 ft. in length and measures 23 feet 7 inches in width. The lock is barely 24 feet. The boat, which approached at half speed, became wedged in the lock despite efforts of the crew and the lock tender, could not be moved. There was a great variety of craft blocked. The *KEYSTONE* will be taken back to Philadelphia for repairs. As she now heads she will have to be towed stern forward to Rocky Hill basin where she can be turned. *Nautical Gazette*, November 1, 1900 & *New Brunswick Times*, October 28, 1900.

Canal Boat Building and Repair: In New Jersey traffic in coal is large on both the

Delaware & Raritan and Morris canals and they are thronged with boats in the warmer months of the year. Formerly they were supplied with (wooden) boats by local builders, but the oak and pine have been entirely cut off in the counties traversed by the canals and little is left for local yards to do except repair the old boats. The building is done entirely in Pennsylvania, in the upper Schuylkill region, where pine and oak still abound among the hills. The New Jersey yards are located as follows: Bordentown, 2; New Brunswick, 4; Perth Amboy, 2; Trenton, 1; and Washington, 1. *Report on the Ship Building Industry of the US - US Bureau of the Census, Washington, DC, 1882, by Henry Hall*

Canal Boat Life: is well documented in the journals of Theodore D. Bartley from 1861 to 1889, edited by Russell P. Bellico, published as *Life on a Canalboat*. Bartley's trips through the D&R Canal on his canalboats *REUBEN BARTON* and *DAVID GODDARD*, in November, 1881; April, 1882; December, 1883; August, 1888; and December, 1889 are unfortunately not well documented.

Canal Boatmen's Reunion: On June 24th, 1984 an "Old Canallers Reunion" was held for the boatmen and employees of the D&R Canal Co. at Princeton, NJ. It was one of a series of events commemorating the 150th Anniversary of the opening of the canal. Capt. Bill McKelvey was the organizer and master of ceremonies. The event was held in and around "Morven," the home of Robert F. Stockton, the first President of the D&R Canal Co. A plaque was presented to Robert F. Stockton, Esq., a direct descendant of the above, in connection with the first canal steam tug of the same name. It was the last such gathering of canal workers. *The Best from American Canals. No. III*

Canalboats collided: Yesterday morning a collision of canalboats took place at Lock No. 4, below the State Prison. A hand employed on the boat *JANE LENDITH*, named John Duncan, was holding a fender on the boat, to prevent the collision (*or at least to mitigate the damage* - Ed.). The force of the collision threw him in such a position, that both ankles were broken, and both knees badly bruised. He was taken care of by the city authorities, and removed to the Alms House. Drs. Sheperd and Schafer were called, and found the limbs in a condition to be set. Mr. Duncan is from Bridgeport, Gloucester County, and made himself know as an Odd Fellow, and is doing well. We have since heard that he has a wife and child. We are pleased to learn that the Odd Fellows have taken charge of the injured man. *Daily State Gazette, April 19, 1872* (The poor chap later had his leg amputated.) The *BERGETTA*, one of Excise Commissioner Charles H. Gallagher's canalboats ran into another canalboat at the Terra Cotta basin near the Maddocks' pottery last evening about 9 o'clock and a big hole was stove in the bow of the empty *BERGETTA*, from which she shortly afterwards sank and was submerged to her deck. Captain Frankenheld of the *BERGETTA* stated that the boat with which they collided carried no lights, but his was carrying the usual green on the bow and white in the stern. He and deck-hand James Dillon of Trenton left Philadelphia yesterday morning at 7 o'clock en-route to Coalport. *Weekly State Gazette, May 14, 1903.*

Canalboats Sunk: A large Baltimore steamer laden with valuable merchandise was sunk in the canal above Bordentown by the ice on Tuesday afternoon. *Bordentown Register, 18 December 1868.* On this Saturday night, a canalboat struck a rock and sank in the Feeder Canal near the Belmont curve at the Goat Hill quarries. The next day the pumping boat, *RELIEF*, came up from Trenton, pumped out the water, and raised the boat. *Lambertville Beacon, May 31, 1873.* The

TWILIGHT went down in the D&R Canal about 5 o'clock yesterday morning and tied up traffic until after 6 o'clock last night. The boat which was not a valuable one was loaded with stone at Greensburg, NJ and was on its way to Cass Street basin in Trenton. While passing through the lock just below the Broad Street bridge the fender of the boat struck the lock gates and was knocked off. One of the hinges took with it a piece of the boat's side near the stern about 2½ feet below the water line. The hole was about the size of a man's hand and the boat rapidly filled with water and sank. The two men aboard made their way to the shore over planks stretched out from the boat. The officials of the D&R "Navigation Company" were notified and orders were sent to Bordentown and to points above the juncture of the canal and feeder north of Perry Street to hold all vessels until further notice. In less than two hours nearly all the water in the canal below the Broad Street lock had been drawn off, leaving a depth of less than three feet in that level... ..During this time the stone had been transferred to one of the company's boats. When the scow rested on the bottom and the water was low enough the work of stopping the leak was accomplished. This done the locks above Cass Street were opened at frequent intervals and water was drawn from the feeder to fill up the prison level, as that stretch of the canal below Broad Street is called. Within half an hour from the time the boat was repaired this level had been filled and the sunken scow floated. It was towed to the shore and tied up for the night, having been reloaded in the meantime. Several boats were delayed at Bordentown and several more above Trenton by reason of the accident, most of them tying up for the night when it was found that the canal through Trenton would not be open for navigation until dark. The work of raising the boat was conducted under the personal supervision of T.B. Stockham of the canal company. The *TWILIGHT* is said to be "unseaworthy" as a canaller and probably will not be allowed to enter the canal in the future. *Trenton Sunday Advertiser, August 10, 1902.*

Canalboats Grounded: Traffic was somewhat delayed on the D&R Canal last week, owing to the grounding of several boats above Mulberry Street at Trenton. Tuesday and Wednesday there were three boats stuck, and it required the pulling and pushing services of all pullers and pushers known to modern hauling. The climax was reached Saturday when a canalboat, heavily laden, ran aground at 1 o'clock in the morning. Before she was afloat it was 3:30 pm. It required the services of a locomotive, two teams of canal horses, and the tugging ability of 15 men before the boat was afloat. The cause of the trouble at Mulberry Street is a sand bar of large proportions, extending half way across the canal, and making it impossible for heavily laden boats to pass without trouble. A sewer at this point is the cause of the bar, and sand being washed into the canal through it. Unless the obstruction is removed, and soon, something more serious than the mere grounding of boats will happen. *New Brunswick Times, July 2, 1900.*

Canal Breaks: Some time about midnight on Friday night, the water in the D&R Canal forced its way through the bank about three miles this (Trenton) side of Millstone, and made a breach of 80 feet in the level. Only about two feet of water remained in the level. *State Gazette, November 15, 1852.* In consequence of a break in the Feeder at Prallsville, the navigation on the D&R Canal was suspended yesterday. It is reputed that the damage will soon be repaired and business resumed. *Daily True American, August 1, 1857.* Last Wednesday night the water in the D&R Canal at Bakers Basin broke through the banks and the railroad track was washed away for a considerable distance and it stopped the trains from passing on the road. It has already been repaired. *Daily True American, October 9, 1858.* The heavy rains during the past two days have so

swollen the small streams as to completely inundate the farms along the streams and canal between Trenton and Princeton. Stony Brook, Shabbyconk, Wiry Stream, Eight-Mile Run, and Assanpink all contributed to try the banks of the canal and Railroad. There was a chasm in the canal bank 100 feet wide; then a break in the railroad; another small break in the canal; a mile further up there was a break in the railroad 300 feet long... Over a hundred men were already at work... In a short time the train arrived with Mr. J.C. Stevens, Mr. Van Rennsalaer, and Mr. Benjamin Fish, and several bosses with about 200 men. Carpenter boats, rafts of heavy timber, gravel boats, trains loaded with wheelbarrows and working implements all were on the move to the scene of action - some from Trenton, Bordentown, and Lambertville. The railroad near Baker's Basin had sunk down, and was soon raised up by filling with gravel and underlaying it with sleepers. At Clarksville the chasm was 300 feet wide and eight to ten feet deep. Trains from New York came this far and returned to Princeton or New Brunswick. Mr. Stephen A. Douglas was on his way to Philadelphia. At Princeton he took a private carriage to Hightstown. The workmen were busy at Clarksville building a temporary (rail) road around the chasm which they succeeded in doing so as to permit the 6 o'clock train from New York to pass on safely. The officers of the company were all of the time on the ground inspecting and hurrying on the work. There were several breaks in the canal above Baker's Basin. The amount of water was incredible on either side of the railroad and canal for miles in extent. There was considerable damage done at Princeton Basin. A large quantity of lumber was afloat around the neighborhood, and a considerable quantity of lime was destroyed. *Daily True American, August 24, 1860.* Just after navigation was resumed, at Lambertville the water broke out of the canal at the same place again leaving the same amount of work to be performed. One canalboat was carried through the break and lies in an uncomfortable position on the river bank. Mr. James Gregg, foreman on the canal, was considerably injured while endeavoring to stop the boat from passing out. He was tying (tying) or "snubbing" the boat when the line broke and recoiled, knocked him over the mouth of the culvert, breaking one arm and three ribs. *Daily True American, November 7, 1860.* There is a break for a hundred feet in the D&R Canal a few miles this (Trenton) side of New Brunswick, caused by Sunday's rain. Navigation will be delayed several days in consequence. *Daily True American, June 30, 1885.* More than a hundred boats were tied up during the busiest season of the year due to a break in the canal at Clarksville caused by muskrats. Miles of farming country surrounding Port Mercer and toward Princeton were under water and 30 miles of canal were effected. *'Rats Did It All,' New York Herald, December 12, 1899.* Between October 9 & 10, 1903 one of the most destructive floods of the Delaware Valley washed away or seriously damaged ten bridges between Belvidere and Trenton. Called the "Great Flood," it also did extensive damage to the D&R Feeder as well as the Main canal. At Stockton, the bank caved in for a distance of 100 feet, doing a great amount of damage to railroad property. At Titusville a big break of sixty feet and a depth of about ten feet occurred, taking the railroad track for ninety feet with it. At Brookville a serious break of 160 feet long and about three feet deep occurred. Between Trenton and Kingston there was a break sixty feet in length and about four feet in depth. At Bound Brook there was a cave in of about fifty feet in length and five feet deep. Three canal bridges were swept away. The remaining water was being let out of the feeder and the main canal to facilitate repairs. *Trenton Gazette, October 12, 1903.* The recent storm did such serious damage to the banks of the canal that it will be impossible to complete repairs much before December. The most serious break occurred at the dam at Raven Rock (Bulls Island). The 20-foot-high dam was torn out for a distance of 300 feet, preventing the canal from being filled up. All along the canal other smaller breaks have been discovered. *New Brunswick Times October 17, 1903.*

Canal Bridge Accident: The ponderous sheers that were being replaced on the Bel-Del bridge at the junction of the Feeder and the D&R Canals gave way when the guy ropes broke. The superstructure demolished the upper portions of two cars of a coal train that was crossing the bridge at the time. Three men, including yardmaster James Gordon, who were on top of the sheers miraculously escaped with only slight injuries. A nearby bridge house, however, was obliterated. *Daily State Gazette, February 5, 1877.*

Canal Bridge Disabled: Yesterday morning a canal boat came into collision with the Perry Street canal bridge as it was being turned off, and was so badly damaged that it occupied several hours to make the necessary repairs. Travel was interfered with, and the cars of the City Railway had to run from each side of the bridge to the opposite terminus of the road. *Daily True American, November 28, 1883.*

Canal Bridge Turned by Motors: A Bel-Del train was delayed 3½ hours at the D&R Canal crossing in Trenton (at the Feeder Junction) because the mechanism that operated the bridge (by man-power) at that point would not turn. *Daily State Gazette, December, 6, 1860.* Supplanting the work of eight men, two big 220 volt, 23 hp, electric motors now operate the big new bridge of the Pennsylvania Railroad at Coalport, turning the huge steel structure much quicker than could the men and at much less expense to the company. The motors were installed by the General Electric Company; power is supplied by Public Service; and the bridge is operated by Frank Terradell. The bridge carries the two tracks of the Belvidere division over the D&R Canal, and was erected last winter. It is 136 feet long and weighs over 400 tons. It is of plate girder type of construction and is operated by a cog gearing placed in the center. After the bridge was completed it was found that it required four men to operate it, and as boats run night and day a crew of eight men was necessary. *Daily True American, October 22, 1904.* On this Monday night, while a train loaded with heavy stone was approaching Coalport Yard, the wheel of a flat car broke on the Feeder Canal swing bridge. Even though no one was injured, the bridge and a nearby wooden shanty were badly damaged. *Belvidere Apollo, 23 July 1906*

Canal Business - 1866: An immense business is being done by the D&R Canal this present season. The receipts at the collectors office at New Brunswick during the month of June are nearly double those of the same month of any previous years, and nearly equal to the total receipts of the office for an entire year previous to 1850. *Newark Evening Courier, 13 July 1866.* The D&R Canal Company did more business during the past season than ever before. About 13,000 vessels passed through going eastward, and 17,000 or more going westward. *Princeton Standard, 4 January 1867.*

Canal Busy - 1872: The navigation on the canal is about as lively as we ever saw it. Vessels of all classes are passing and re-passing constantly, and the tonnage north and south appears to be very heavy. The arrangements on the canal are very complete. Vessels are locked through with a great deal less difficulty than in former years, and we think there is quite a change in the treatment of the mules and horses used on the canal. The worthless and brutal drivers are not so numerous. This is a decided change for the better, of the good effects of which not a few have taken special notice. *Daily State Gazette, April 24, 1872.* The canal people are as busy as they can possibly be. One of the lock tenders informed us that a boat is locked through every ten minutes.

Some travel night and day while others lay up at night. The transportation business through New Jersey, in amount, is almost incredible. Forty-five large trains of cars and one hundred canal boats a day is no small matter. *Daily State Gazette, May 6, 1872.* The business on the D&R Canal is said to be fully one-fourth greater than the year before. The business of transportation has been less interrupted than is usual. They are having a grand running season. *Daily State Gazette, July 25, 1872.*

Canal Busy - 1873: There is a tremendous rush of boats on the canal. It is no uncommon experience to see half a dozen propellers and other boats waiting their turn to pass through the State Street Lock. We don't know what we should do if all the various machinery at that lock was now operated by the slow hand process. But in spite of the improvement made by steam (powered locks), increase of business, both in the canal and on the street, seems to have brought us to as bad a pass as ever. This problem of obstruction to travel will have to be solved in some effectual way before long. Let the canal be tunneled. *Daily State Gazette, April 24, 1873.*

Canal Collector Report for Bordentown: R.S. Murphy reported the following for the month of July, 1876:

		Steamers	Boats	Schooners	Total
Eastward	106	422	32	560	
Westward	110	454	19	583	
Total	216	876	51	1,143	

Daily average drivers: 50; Daily average mules: 200 *Bordentown Register*

Canal Company Must Keep Lower Basin Open: Just as old King Winter issued his writ closing the D&R Canal to traffic, along comes the State Board of Public Utility Commissioners with orders to the D&R Canal Co. and the Pennsylvania Railroad Co., lessee, to keep the lower basin of the canal open except from January 15 to February 15. This big victory for the city of New Brunswick was announced right on the heels of the introduction of Assemblyman Quinn's bill in the House of Assembly yesterday for the freeing of the canal from tolls. It has long been the practice of the Pennsylvania Railroad to keep the canal closed to all navigation from December 20 to about the middle of March, each year, even though the ice may not have prevented the operation of boats... *New Brunswick Daily Press, January 14, 1914.*

Canal Enlargement: A D&R Canal Co. stockholders meeting was called to provide the means of doubling the locks, and to deepen the water and improve navigation so as to enable vessels carrying 500 tons to pass through with safety and facility. They were also to consider the feasibility and expediency of constructing a branch to the canal in a direct line from Kingston to the Raritan River with the depth of the canal to be 10 feet throughout; the width to be 110 feet; locks to be 220 feet in length and 30 feet in width. *State Gazette, December 4, 1852.* Work on the D&R Canal is progressing with commendable industry. The enlargement has been so completed as to admit water on the 31st inst. The canal will be opened on the 4th of April for vessels drawing 5 feet, 9 inches. The depth will be increased to 7 feet by the 15th of April. *The Fredonian, March 20, 1853.* The new Trenton lock on the canal has been entirely completed, and two boats are locked through at a time. *Trenton State Gazette, April 13, 1853.* Note: During the winter of 1852-3, the locks of the main canal were lengthened from 110 feet to 220 feet, permitting the passage of two vessels at one time or one much larger vessel. At the same time the vulnerable banks of the canal were rip-rapped with stone to a depth of 3½ feet below the water line. Bridge-ways on the

main canal were widened to 48 feet to make possible the simultaneous passage of two vessels. Also see “4,000 Men Wanted.”

Canal Excursion: Tuesday four Trenton ladies excursioned on a canalboat to this city, returning by Bordentown’s unsurpassed trolley car. The captain of the canal battleship was a friend of the ladies, and fixed up the large new craft for the novel event. *Bordentown Register, June 15, 1900.*

Canal Fire: occurred in January, 1986 on the D&R Canal between Princeton and West Windsor. A gasoline pipeline, belonging to Sun Pipe Line Co. of Oklahoma, split open and released thousands of gallons of fuel into the canal which subsequently ignited with an explosion five hours later. The resulting fire burned for nearly 24 hours along a half a mile of the canal and killed 1,200 to 1,500 trees. *The Sunday Star-Ledger, February 2, 1986; The Princeton Packet, May 5, 1987.*

Canal Fish: Strange fish were noted in the D&R Canal at Trenton in early September, 1873. They were about 15 inches long but only had the thickness of a man’s small finger, with a beak or sword of some 3½ or 4 inches long. They probably entered the canal at Bordentown. *Daily State Gazette, September 2, 1873.* The D&R Canal will be net-fished during the suspension of navigation this winter, as soon as conditions are favorable, in order to procure the black bass, pickerel and yellow perch, with which lakes and streams in other parts of the state can be restocked. *The Stanhope Eagle, February 25, 1920.* Rainbow trout are stocked annually, but by August water temperature and oxygen levels of the canal can’t support the trout. Muskellunge are stocked in the eastern part of the canal near South Bound Brook. Year-round fish found in the canal include large-mouth bass, pumpkinseed, bluegill, catfish, perch and pickerel. Most fish common the Delaware River can and do enter the canal at Bulls Island. Delaware River fish can also enter the isolated lower end of the D&R at Bordentown as the canal and river communicate at high tide.

Canal Freight Barge Lines was part of the Napoleon Co. enterprises operating primarily between New York & Philadelphia. Also see: “Albany Union Line,” “Merchants Transportation Co.” (1830’s - 40’s); and “Swiftsure Transportation Co.”

Canal Interlocking was a control point and interlocking tower railroad west or south of New Brunswick station which controlled switches and approach signals for the D&R Canal bridge which the Pennsylvania Railroad eliminated in 1903 when the present four-track stone and concrete viaduct over the canal and Raritan River was built.

Canal Opening: A lengthy and flowery editorial applauded the new canal which was getting ready to open, ending with the following: “...in its magnificent proportions and admirable construction - it is a work of which New Jersey may well be proud, and the individuals who have labored to accomplish it, need never be ashamed...” *New Jersey State Gazette, March 29, 1834.* “Those who are partial to this (canal) mode of traveling cannot fail to be pleased with this route. The scenery from Lambertville to Trenton is striking and beautiful with a fine view of the Delaware River, and passing through a fertile and well-improved region of the country. The appearance of the whole country through which the Feeder runs is truly imposing, and a great part of it romantic and beautiful. The whole of this magnificent work will soon be completed; its

enterprising and liberal advocates will be remembered with pride by Jerseymen, especially those who were mainly instrumental in its accomplishments will stand conspicuous, and will be ever regarded as benefactors in their country.” *Hunterdon Democrat, April, 1834*. The D&R Canal resumed business on the 15th inst. Captain Chance of the propellor *MARTHA STEVENS* of the NY and Baltimore Line had the honor of passing the first vessel into the locks for the season of 1872 as well as being the first to receive the new papers which have been introduced by the owners of the canal - the Pennsylvania R.R. It was all by chance. *Bordentown Register, March 22, 1872*. The appearance of the Delaware and Raritan Canal does not indicate a very bright prospect for the opening of navigation. The ice in the canal is about six inches thick. Our merchants are very anxious to have it opened for the purpose of preparing for the spring trade. *Daily Fredonian, March 23, 1875*. The first boat to pass through the D&R Canal was the *OCTORARA* of the Baltimore & N.Y. Transportation Line, Captain Reynold. The *OCTORARA* had an ice cutter on her bow, and had to break the ice the whole distance to New Brunswick. She entered the canal on the 24th at 2pm, and reached New Brunswick at 5:45pm on the 27th - a very tedious trip... ..The first steamer to pass out of the canal, south, was the *ELIZABETH*. Thanks to the good service done by the *OCTORARA*, she got through in about 20 hours. Business on the Delaware River and in the canal may now be considered fairly open. *Bordentown Register, April 2, 1875*.

“**Canal Packet Boat**” was advertised shortly after the D&R opened as operating between Bordentown, Trenton and Princeton. (July 5th, 1834)

Canal Packet Line was advertised as operating between New Brunswick and Philadelphia utilizing the canal packets *UNITED* and *NEW JERSEY* on a nine hour running time. “...Packets are upon a new construction, and are splendidly fitted up. This line will furnish to the public a convenient, cheap, speedy and pleasant mode of traveling. The Canal passes through some of the best lands in the State, the scenery of which is diversified and picturesque.” *Princeton Whig, October 9, 1835*.

Canal Pay-boat was used by company officials to pay wages to canal workers monthly as the vessel traveled the length of the canal. The vessel used was the D&R Canal steam “yacht” *RELIEF*. Also see “*RELIEF*.”

Canal Poems of the D&R was published to commemorate the 25th Anniversary of the Delaware and Raritan Canal State Park in 1999. It was edited by Penelope Scambly Schott with contributions from 32 other poets.

Canal Society of New Jersey: was an advocate of any measures that would preserve the D&R Canal and its intrinsic beauty. The society is a nonprofit, public benefit corporation founded by Clayton F. Smith, its first president, and chartered in 1969 to;

- Foster the study of the history of New Jersey’s two towpath canals
- Educate members and the public in this history
- Preserve and restore canal history, remains and artifacts
- Provide enjoyment to its members by visiting canals and other historic sites
- The society has a museum at Waterloo Village and publishes a newsletter: *On*

the Level

- Website: www.CanalSocietyNJ.org Phone: (908) 722-0737

Its’ periodicals and publications have provided much coverage of the D&R Canal over the years.

Canal Society of New Jersey 25th Anniversary Celebration, was held on Sunday, May 29th, 1994 at Colonial Park, East Millstone, and featured "Boating on the D&R Canal for the first time in Sixty-Two Years." The co-sponsors of the event were the D&R Canal Commission, the D&R Canal State Park, and the Somerset County Park Commission. Special one day dispensation/permission was gained for operation of steam and motor powered craft from the NJ Water Supply Authority. Participating boats included: A 16' home made rowed skiff; Nahant Dory - 16' home made, rowed; a 17' Woodson, outboard powered from La Belle, FL; a 16' steam launch with "wineglass" transom; a 44" radio-controlled, model steam launch; a ca. 1910 outboard powered wooden rowboat; a 36" radio controlled, electric powered steamboat model; a 16' Hankins-built, Sea Bright Skiff; a 17' 1953 Chris Craft runabout; a 14' replica Rangely Rowboat, wood fired, steam powered; a 50" model steam powered radio controlled, Victorian launch; a 16' electric powered Guide Canoe; a 16' steam launch; a 30" radio controlled, steam powered model of the "African Queen"; a 28' double ended, rowed Whale Boat from Mystic Seaport Museum, Mystic, CT; a 36" electric powered, radio controlled model of an Erie RR Harbor tug; a 30" electric powered, radio controlled, model of "PT 109"; and a 12' sailboat converted to steam power. Over 100 trips were made by the passenger-carrying vessels, giving over 400 people rides on the canal. A crane was hired to get the vessels in and out of the canal. Over 40 organizations were represented with promotional tables; proclamations were read; a Wurlitzer Band Organ and a Barrel Organ were playing; there was a Wedding of the Waters Ceremony with water from the Morris, Delaware, Lehigh, Chesapeake & Delaware, Schuylkill, Delaware & Hudson, Erie, and Champlain Canals plus the Connecticut River; Hudson River and even the Florida Intercoastal Waterway. On display was a ca. 1910 wooden rowboat "Penny" built by Heister's boatyard in Reading PA on the Schuylkill Canal. It was a beautiful, picture-perfect sunny day and a wonderful time was had by all! PS Capt. Bill McKelvey was the chief organizer, but with a lot of help from hundreds of others.

Canal Stockholder: State of New Jersey: The State of New Jersey decided to continue to hold 3,242 shares of stock of the United New Jersey Railroad & Canal Company, valued at \$326,000. The securities represented original stock of the Camden & Amboy Railroad and the Delaware & Raritan Canal Company, some of which was turned over to the State in 1832 in payment for rights-of-way in New Jersey. The original stock was converted into United New Jersey Railroad and Canal Company stock in 1933. The stock at the time was held in the State and School funds and paid a yearly dividend of \$10 a share of \$100. *New York Times, June 11, 1943.*

Canal to be Dredged?: Something is going to happen to the D&R Canal in the very near future, judging by the signs of the present. Those who have had occasion to observe them are discussing the ways and wherefores. During the past week representatives of the railroad legislation and the State Chamber of Commerce have been inspecting the towpath, docks, wharf canal front and finding out from the various manufacturers the amount of shipping each plant sends by water. The delegates commandeered the motor boat of William Matthews and took a trip from New Brunswick to Kingston and back, giving close inspection to all canal matters and stopping in every village to ask the same questions they had asked here. It is known that the government took over all the waterways of the US and it is supposed that there will be a great deal of dredging done here in order that big boats may pass through this water highway in Uncle Sam's service. *New Brunswick Home News, September 13, 1917.* Silting in the Feeder and Main Canal

over the years since it was closed as a navigable waterway raised the bottom of the waterway closer to sunlight which fostered excessive growth of water weeds. This so restricted the flow of water for users that measures were taken to attempt to cut and harvest the growth as a way to speed up the flow of water. This was very costly and did not help sufficiently. Finally, in 1984 and 85 sections of the canal were alternately closed to permit dredging by contractors using heavy machinery from Bulls Island or Prallsville to Kingston. The Water Supply Authority spent \$20 million to remove 650,000 cubic yards of sediment accumulated in the canal. One section of the feeder was re-mediated by utilizing a floating dredge and pumping the silt to an impoundment along the Delaware River south to the Rt. 202 bridge. A most interesting part of this process was that the canal had to be operated in reverse to maintain supply to water users. River water was pumped into the D&R below the Zarephath lock (#10) and pumps were installed at several locks to raise the water to the next highest level. *Jean Brandes in Newark Star-Ledger, Dec., 8, 1985 and Jan., 12, 1986.*

Canal Traffic: For the year 1859: 1,155,261 tons of coal; 11,886,488 feet of lumber; 1,606,558 cubic feet of timber; 657,736 bushels of grain; 164,216 barrels of flour; 31,825 tons of iron; 209,481 tons of through merchandise; Canal receipts: \$492,193; expenses: 157,068; Revenue: \$140,286. *Daily True American, February 7, 1860.* Anthracite constituted well over half the total tonnage carried by the D&R Canal, but the volume of other “inferior” commodities steadily increased. In 1860 there were transported 1,283,000 tons of coal, 40,000 tons of iron, nearly 12,000,000 board feet of lumber, and 2,315,000 cubic feet of timber. In addition there were large quantities of grain, feed, and flour, and 227,000 tons of merchandise, much of which was “superior,” bearing a higher toll rate. A large proportion of these goods was handled by the freight lines and not directly by the canal company. *From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 265* A boatload of old cannon from Forts Henry and Carroll near Baltimore passed into the canal here on Monday, en-route to Brooklyn, to be disposed of as old junk. The big guns did service during the Civil War. *Bordentown Register, November 9, 1900.*

An Old Canaller Dead: “One by one the experts in piloting the D&R Canal are making their last voyages.” A article of about 350 words lamenting the loss of the old canallers, many due to exposure and alcoholism... *Bordentown Register, December 25, 1896.*

Canoeing Today: The D&R main canal and the feeder offer endless opportunities for quiet cruising and has been called one of the finest recreational waterways in the country. A highly recommended segment is from Washington Crossing north to Bulls Island or Raven Rock. This will require portages around the Lambertville lift lock and the Prallsville guard lock. At Bulls Island the canoeist has a choice of returning via the canal or via the Delaware River. It is recommended that no attempt be made to run Wells Falls, below Lambertville. It is easy to carry your canoe around the falls on the Jersey side. A variety of unsurpassed canoeing journeys and opportunities can be had from the Port Mercer to Princeton to New Brunswick area: the main canal; adjoining Lake Carnegie; the parallel section of the Millstone River; the Upper Millstone River east of Route 1; nearby Stony Brook at the south end of Lake Carnegie; and the Raritan River. Canoes must be carried around the Kingston, Griggstown, Ten Mile, South Bound Brook and 5 Mile locks as well as the river dams at the north end of Lake Carnegie, and near Zarephath. *Exploring the Little Rivers of New Jersey by James and Margaret Cawley, Revised by The Little Rivers Club Canoes,* kayaks and small boats may be launched at several access points along the canal. Boaters must

portage at the locks and at some bridges. Coast Guard approved personal floatation devices must be available for each boater. Canoe rentals are available in Princeton and Griggstown. Only electric motors may be used on the canal. Access to the Delaware River is available at five launching sites (adjacent to the D&R Canal State Park): Byram, Kingwood, Lambertville, Bull's Island, and Fireman's Eddy. For boats launched on the Delaware River there are no motor restrictions, however, all New Jersey boating regulations apply. *D&R Canal State Park brochure.*

Capital to the Coast Trail concept was conceived ca. 2000 by Fred Lockenmeyer and Dr. Rudy Buser to join all local, county and state parks and college campuses between Manasquan and Trenton, NJ. As of 2009, \$1.9 million in State and Federal grants have been received for construction of this trail which will be about 55 miles in length. When the connection to the D&R Canal State Park Trail is made at Mulberry Street in Trenton it will provide the first route across New Jersey from the Atlantic Ocean not only to the State Capital, but to the Delaware River as well. Utilizing the D&R Canal State Park Trail, it will then end in Frenchtown and be about 90 miles in length. It will be the only trail that goes completely across the state of New Jersey, passing through 12 communities, 3 state parks, 3 community parks, and one college campus. Upon completion of the projects underway in 2009 the trail will be about 25% complete. *Fred Lockenmeyer, Facilitator, 732.500.5591 or fredlocken@aol.com*

The **CAR of COMMERCE**, a steam vessel constructed specially for canal navigation, and to ply between New York and Philadelphia, with paddle wheels under her counter, passed through the D&R in spring of 1837. The wash against the bank was scarcely perceptible and did not exceed that made by a small barge. *Newark Daily Advertiser, May 3, 1837.* Also see "Parker, Captain Peter."

Andrew **Carnegie** was photographed on board the D&R Co's tugboat/yacht **RELIEF** on December 6, 1906 at Lake Carnegie. The lake was a gift of Carnegie to Princeton University and he was invited to the dedication ceremonies by university president Woodrow Wilson.

Lake **Carnegie** is a reservoir that is formed by a dam on the Millstone River, in the far northeastern corner of Princeton Township, NJ. The D&R Canal and its associated tow path are situated along the eastern shore of the lake. Noted steel magnate and philanthropist Andrew Carnegie donated the money for the construction of the lake in 1906. Construction materials for the dam structure were delivered to the site by canalboat. The dam is near Lock 8 at Kingston. As Lake Carnegie filled, the Millstone River Aqueduct which formerly carried the canal over the river became nearly submerged. The completed lake was donated by Carnegie to Princeton University for use by the university's rowing teams. In prior years Princeton's varsity crew had rowed on the D&R Canal. In 1990, the lake was listed on the National Register of Historic Places. Fish species in the lake include Largemouth Bass, Carp, Pickerel, Crappie, Channel Catfish and a few Brown and Rainbow Trout. www.en.wikipedia.org

Carol Towing Co. of Amboy towed D&R vessels between New Brunswick and New York ca. the 1920's.

Carpenter crew on the D&R in 1932 included Charles Wilson, Sr, (foreman), Andrew Warwick (cook), George Molnar (assistant cook), John Dargay, Edward Grey, John Kovacs,

John Morgan, Michael Savko, Boleslaw Sobolewski, Fred Steinfeldt, and George Valega. *Charles Wilson, Sr. to William McKelvey*

Cattle in the Canal: as a drove of cattle were passing over the Canal bridge at Port Mercer, the bridge gave way and seventeen of the cattle were dropped into the water from a height of about eight feet. With considerable difficulty they were all gotten out. *Daily State Gazette, November 20, 1865 .*

Canal Workers Monument: Located at the front of the Bulls Island Recreation Area office, the cut stone has the following inscription: “May they rest in peace forever” “In memory of those who lost their lives during the construction of the DELAWARE AND RARITAN CANAL From 1830 to 1834 an army of ditch diggers, carpenters and masons - many of whom were Irish immigrants - built the canal. Large numbers perished during the cholera epidemics. It is believed that they were buried along the route of the canal.” “This stone is from Lock 13 at New Brunswick. Dedicated in 2001.”

Centre Bridge is adjacent to the D&R Feeder Canal at Stockton and its history is recorded on a nearby placque: “The Centre Bridge Company was incorporated to construct a toll bridge across the Delaware River here in 1812. The first Centre Bridge was completed in 1814, completely reconstructed in 1830, and substantially repaired in 1841 after a damaging flood. The bridge, a covered timber structure was destroyed in a fire caused by a lightning strike in 1923. The remains of the bridge were sold to New Jersey and Pennsylvania in 1925, and the present bridge, a six-span riveted steel Warren truss, was completed utilizing the existing abutments and piers in 1927 - it is now owned by the Delaware River Joint Toll Bridge Commission.”

Century Magazine artists cruised the Champlain and D&R Canals in 1886 in their elaborately outfitted chartered canalboat, *WM. DENNY*, which they nick-named the *SETH G. COWLES*. Their work was published the following year under the title “Snubbin’ Thro’ Jersey.”

Chapin & Baird Line operated between Hartford, CT and Philadelphia, PA ca. 1847 to 1854 with steam canalboats *NEVADA* and *SUSAN*, etc. - was succeeded by the CT, NY & PA Transportation Co.

William Edwin **Charles** was a Pennsylvania mule driver who kept a diary of his first trip from the vicinity of Port Trevorton on the Susquehanna Division of the Pennsylvania Canal, south to the Eastern Division, across the Susquehanna at Columbia, down the Susquehanna and Tidewater Canal to Havre de Grace, MD, across upper Chesapeake Bay, through the Chesapeake and Delaware Canal up the Delaware River, and across central New Jersey via the Delaware and Raritan Canal, the Raritan River, Arthur Kill, Kill van Kull, and Upper New York Bay to New York City. Excerpts of the trip were published as *A Canallers Diary - 1888* in *American Canals* No. 75, November 1990 by the American Canal Society.

Cheap Freight: “The Merchants Transportation Line of steam boats have commenced running their trips between New York and Philadelphia, stopping at Princeton Basin each way. W. Morris, Agent.” *Princeton Standard, March 25, 1870.*

Chesapeake & Delaware Canal boats were borrowed and brought to NJ for use in the grand opening celebration of the D&R in 1834. There were other examples of cooperation and use of similar technologies at both canals, including: In 1853 D&R Canal locks were lengthened to 220 feet - one year later the same was done for C&D Canal locks, and theirs were widened to 24 feet to match those of the D&R; Upper drop gates were used on the locks of both canals; The same type of "A" frame swing bridges were used on both canals. Here's another example: Resolved that the Superintendent of the (D&R) Canal be authorized to join with the Delaware and Chesapeake and other canal companies in trying the experiment of towing boats by means of steam and wire rope. (The editor believes they were referring to the mechanical mule system which expedited boats in and out of locks and which was later implemented by the D&R Canal.) *Minutes of the Executive Committee, Camden & Amboy Railroad, August 12, 1867.*

Cholera: In the Princeton area, four Irish D&R Canal laborers were found dead in their shack, the latest victims of cholera. *New-York Evening News, August 15, 1832.* In 1832 a disastrous epidemic of cholera broke out among the Irish canal workers living in the shanty town, located just south of Lambertville. The disease carried off hundreds of people in the area before it ran its course. Additional outbreaks of cholera, although much less severe, occurred in Lambertville during 1849 and 1854. *Sara Gallagher, An Early History of Lambertville, McCrellish & Quigley, Trenton, 1903; Lambertville Beacon November 20, 1941.* Two of the drivers on the canal from New Brunswick were taken down with the cholera at Kingston yesterday. We hear this morning that they are both dead, and a third is lying near the point of death. (There was an outbreak of cholera in NYC at the time.) *Princeton Whig, June 13, 1849.* In Bordentown on Friday last a lock tender on the D&R Canal, with his assistant, were taken with the cholera and both were reported to have died the same afternoon. *Newark Daily Advertiser, July 30, 1849* It is said a stranger died with the cholera on a boat passing through New Brunswick, and which had halted on Sunday, on the D&R Canal. *New Brunswick Weekly Fredonian, August 23, 1866.*

CHRISTIAN THAURMAN sinking and drowning of crew: On 21 August 1871, the steam tug *BORDENTOWN* departed New Brunswick for New York towing fourteen canalboats, including the *CHRISTIAN THAURMAN* from the Delaware & Raritan Canal. At about 1am on the Tuesday the 22nd as the tow was at a place in the Raritan River called Point-no-Point, Middle Ground, some distance below New Brunswick, a collision occurred. The steam canal propeller *ANNIE*, Captain Steen, of the Wilmington and New York Freight Line, heading south, collided with one of the canalboats, *CHRISTIAN THAURMAN*, sinking her almost instantly. Aboard, and apparently sleeping, were Captain Thaurman, his sons, George and Henry, and his daughter Annie, who were all drowned. After the disaster, the steam canal *ANNIE*, apparently unaware, kept on her course, passing New Brunswick without giving notice of the calamity. She came back from Wilmington on Friday, passing through New Brunswick at 10pm. She started back from NYC on a second trip and reached New Brunswick on Tuesday morning. An inquest over the four dead bodies took place before Coroner Paradin of New Brunswick and following testimony a verdict was reached. The verdict judged the collision to be accidental and no negligence was involved. *NY Herald, NY, NY, 31 August 1871*

CIRCLE LINE VI was built as *LANDING CRAFT INFANTRY #646* by the New Jersey Shipbuilding Company at Barber, NJ, and sent to Europe for use in the Invasion of Normandy on June 6, 1944. Converted after the war for use in New York excursion service, it was retired in 1967, towed into the New Brunswick Outlet Sloop Lock, and served briefly as a floating

recreation center for New Brunswick's senior citizens. *Champlain to Chesapeake, by McKelvey.*

Circus Trains frequently traveled along the D&R Feeder Canal as the Bel-Del Railroad was a favorite route and many such memorable trains used this route to visit local towns and cities as well as to bypass New York City. On 18 June 1853, not long after the Bel-Del reached Milford, two sections of the Herr Diesbach & Co. Menagerie and the Rivers, Derious & Co. Circus group visited Milford while another section of that aggregation visited Lambertville. During the decade of the 1850s the following circus groups included Welch's Grand National Circus, Spaulding & Rogers Railroad Circus, Dan Rice's Circus, Levi J. North's Circus, Meyers & Madegans Circus, and Joe Pentland's Circus. In 1906 the Ringling Brothers organization moved their circus on 85, 75-foot cars and in 1912 they used 1,280 people and 40 elephants just to load and unload their trains. The rapid and proficient handling of the two sections of the Gentry Brothers circus trains in August 1926 provides an excellent insight into this activity. The first section arrived in Lambertville just before dawn. It carried "the stake and chain wagons, the canvas wagons, the side pole wagons, the water tank wagons, wagons containing the commissary and the dining departments, light plant wagons, all dressing room paraphernalia except the trunks, 200 draft horses, the elephants and camels and cars in which the workmen slept." About the time the lead section was unloaded, the second section arrived, carrying "ring and baggage horses, cages of wild animals, the seats and all appliances for the performers and their baggage, tabloid wagons and floats for the parade, and the sleeping cars conveying the performers." The first tent was erected to provide breakfast for the 600 circus folk. The railroad transported their 600 people, 500 animals, including two herds of elephants, 5 acres of tents, 5,000 seats, 5 bands, including two calliopes, and 300 performers. Circus trains of all varieties were welcomed on the line on any day except Sunday, until after 11 May 1890 when the Sabbath rules were relaxed. In fact, on a Sabbath during 1883 the Bel-Del officials refused to permit the Barnum Circus train to travel over their line. The last circus trains to operate over the Bel-Del were the two sections of the Ringling Brothers and Barnum & Bailey Circus train from Washington, DC to Boston on 13 June 1948. *Down Along the Old Bel-Del, by Warren F. Lee.*

The **City Railway Co.** of Trenton was chartered in 1875 and construction was authorized on February 1, 1876. The line was completed by the end of July with turntables at each end and eight horse cars, built by the Brill Co. of Philadelphia arrived on August 2nd and regular service began the following day. The line crossed the D&R Canal on the Perry Street bridge, but it was not until December 6, 1877 that their cars also crossed the D&R Canal on the South Broad Street bridge to serve the Chambersburg section of Trenton where a third turntable was placed at the end of that line. In an undercover deal, the Perrine family purchased the City Railway in 1891 and shortly thereafter all Trenton horsecar lines were merged to form the Trenton Passenger Railway Co. and the lines were all converted to electric operation by 1894. In 1898 the Trenton Passenger Railway was merged with other local companies to become the Trenton Street Railway. In 1910 the Trenton Street Railway Co. and its various subsidiaries were leased by the Trenton and Mercer County Traction Co and that became their new name. *Street Railways of Trenton, by Barker Gummere.*

President Grover **Cleveland** traveled along the Feeder Canal on the Bel-Del aboard the palatial car *Minerva* en-route to Buffalo, his home town, to vote. The Chief Executive returned to Washington via the same route two days later. *Easton Daily Express, November 3, 1885.* The

presidential special of Grover Cleveland passed up the Bel-Del en-route from Washington, D.C. to Buffalo, N.Y., stopping briefly at Lambertville to address crowds which had gathered. He spoke from a luxurious parlor car that had been built for President Poche of the Lehigh Valley Railroad. *Hunterdon County Democrat, November 10, 1887*. “In the 1890's President Grover Cleveland came up the (Bel-Del) line to spend summers and fish near Tumble Falls and have a nip at Frenchtown.” *Hunterdon Independent, February 18, 1969*. President Cleveland again came up the Bel-Del to Phillipsburg where he took the Lehigh Valley to Buffalo to vote in early November, 1893. *Reference Not Available*. Ex-president Grover Cleveland passed through Lambertville at 7pm, on southbound train No. 577. Quite a number of people gathered at the station to see the “distinguished personality.” He had spent several days fishing in the Delaware near Frenchtown. *Lambertville Beacon, October 4, 1901*.

Clyde Line a/k/a Clyde Steamship Co. a/k/a Wm. P. Clyde & Co.

Clyde Steamship Co. mainly transported through freight NY to Phila. ca. 1876 - 1899 and was affiliated with the Phila. & NY Steam Navigation Co. Clyde Line vessels included the *ANN ELIZA*, *PHILADELPHIA*, *ELKO*, *MAYFLOWER*, and *YUMA*. The firm was later and also known as William Clyde & Co.

Coal Barge Line built and operated 16 canalboats on the D&R 1835 - 1846 to stimulate anthracite coal traffic between Phila. & NY, etc. - it was an unprofitable part of the Napoleon Co. enterprises.

Coalport @ Trenton: The Coalport basin and wharves, one-mile (north) from the State Street Depot, were under construction. *Daily State Gazette, January 18, 1856*. The first transshipment of coal from cars to canal boats took place yesterday for the New York market. The shutes (chutes) and other appendages are not quite ready, but will be in full operation in a few weeks. *Daily True American, April 19, 1856*. The new coal basin (Coalport) is now in full operation just east of the junction of the D&R and the Feeder Canals. *Daily State Gazette, May 6, 1856*. A detailed description of the newly completed coal-loading wharf at Coalport in Trenton appeared in the *Gazette*. The basin, located on the bank of the D&R Canal, was 1,200 feet long. It was wide enough for a light schooner to turn around. The landing that received the loaded coal cars consisted of a heavy and well-braced trestle that paralleled the canal. The deck of the landing, elevated 17 feet above the water line, carried three tracks. Barges for Amboy and New York City were loaded at these wharves with 300 tons of coal; schooners for Providence and Boston were loaded with 200 tons of coal. *Daily State Gazette, September 4, 1856*. Coalport developed from the concept that maximized the efficiency of the movement of a bulk commodity, such as coal, and minimized the cost of shipment by combining advantages of both rail and canal transportation. Coal could be moved rapidly from the mines by rail to Coalport to bypass the long, unpredictable water route of the Lehigh and Delaware Navigation and River system. At Coalport coal could be placed into large canalboats for the journey to tidewater and consumers to scale down the shipping costs of the commodity. In addition it could be loaded aboard sloops and schooners that sailed directly to the various New England ports. *Warren F. Lee, Down Along the old Bel-Del: The History of the Belvidere Delaware Railroad Company, A Pennsylvania Railroad Company*. In 1871, 1,085 trains of loaded coal cars and 1,089 trains of empty coal cars passed over the Bel-Del between Phillipsburg and Coalport. The loaded trains averaged 104 cars. The total coal tonnage carried

for the year was 632,480 - 69,334 tons were way coal (for local delivery), and 563,146 tons were through coal. *Looking Backward, September 17, 1908.* In 1872 Coalport in Trenton was the largest coal trans-shipping port in the east. During the week of 30 March, wildcat strikes of trainmen took place along the line of the Bel-Del when the company required coal train crews to run through from Phillipsburg to (South) Amboy instead of terminating at Coalport. While the crews did receive some extra compensation for the extended trip - an additional third of their wages - a round trip consumed 30 straight hours, and the crews felt overworked. Even so, the strike collapsed in about a week when replacement conductors were brought in from Jersey City. Some of the replacements who did not like what they saw left soon after they arrived. A group that left at 7:20 am on the 3rd departed from town singing "the Mullegan Guard." *Hunterdon County Democrat, April 2, 1874; Daily State Gazette, April 6, 1874; Hunterdon Republican, April 9, 1874.* An accident occurred at Coalport yesterday by which a goat lost his leg. This affair was rather trifling but to the goat and its owner it was of some importance. *Daily State Gazette, May 2, 1874.* An up coal train (from Coalport to Phillipsburg), headed by engine No. 1072 with James Martin in the cab and Patrick Carmody as conductor, was comprised of 252 empty cars. Later that same day another up coal train, headed by engine No. 1071 with Peter Skillman in the cab and Joseph Lythgoe as conductor, was comprised of 250 empty cars. *Lambertville Beacon, June 9, 1884.* Around 6:30 pm a fire destroyed 200 feet of trestle work at the Coalport docks and a nearby two-story frame building that was used as an office and a lumber and supply storage area. In fact, the fire was thought to have been started by an overheated stove in the Gallagher Shipping Co. office that was located on the second floor of the frame building. Firefighters used three Bel-Del locomotives to pump water through the hoses that were laid across 16 tracks. *Daily State Gazette, November 10, 1905.* As late as 1934 the combined capacity of the yard tracks in Trenton was approximately 1,500-44-foot cars. The largest concentration was the 16-track Coalport Yard, which had a capacity of 882 cars. There were other nearby groups of tracks that were, in reality, extensions of Coalport Yard. *Warren F. Lee, Down Along the old Bel-Del: The History of the Belvidere Delaware Railroad Company, A Pennsylvania Railroad Company.* Note: In April of 2009 the author inspected the former Coalport area for possible remnants. The construction of the Rt. 1 bypass around Trenton significantly disturbed the area and almost nothing was found.

Coal seam found: The annual report of the state geologist in the Geological Survey of New Jersey for the year 1888 stated that a seam of coal 15 feet long was found along the bank of the Feeder Canal about a mile and a half north of the Warren Street Station.

Coal Trade Increase: In 1839 the canal company advanced \$117,000 for the construction of suitable hatched barges, so that anthracite coal might be sent directly from the mines to Manhattan without transshipment. Late in the year these craft, carrying sixty tons each, came down to Philadelphia, were towed thence by steam in flotillas of fifteen or twenty to Bordentown. There they were towed through the D&R singly to New Brunswick. At that end of the canal they were again assembled into flotillas for steam towing to New York City. *The Delaware & Raritan Canal A History, by Crawford Clark Madeira, Jr.* A.J. Cassatt, F.W. Jackson, A. Welsh and Col. Buckalew, of the railroad, and Mr. Wister, of the canal, arrived here (Trenton) on Saturday, after a visit to Amboy, where the company want greater facilities for their freight business, especially coal. It is thought that the coal will be deposited on the hill, as it is called, and then carried to the wharves by a gravity railroad. The company are making every facility to accommodate the increasing trade which has sprung up. It is at least one-half greater than when

they leased the road, and it is constantly on the increase. Where this trade or the road itself will be in 999 years, is a problem which no man can solve. *Daily State Gazette, November 4, 1872.*

Coal Traffic: As expected, coal proved to be the greatest source of revenue and shipments so increased that it overshadowed all other traffic. Placed between the anthracite fields of eastern Pennsylvania and the markets of New York and New England, the D&R Canal bore a steady procession of barges (canalboats) sloops, and schooners. Eastbound tonnage eventually became ten times as great as westbound. *From Indian Trail to Iron Horse, by Wheaton J. Lane* In 1866 the total D&R Canal tonnage was 2,857,233, 83% of which was coal. Beginning about 1850 coal even came from the Cumberland bituminous field in western Maryland, via the Chesapeake & Ohio Canal, although volume was never very large. *Report of the State Directors, 1851.*

COAL WANTED: Sealed proposals will be received until the first of August for the delivery of 200 Tons of broken and Skreened egg Coal of the best quality on the wharf or at the College, Princeton, before the 15th of October. JAMES CARNAHAN. July 20th, 1849. (In this year it was College of New Jersey, later Princeton College, now Princeton University.)

Cobblestones: Another product that was brought down the feeder canal was cobblestones, which were used for paving streets. These stones were procured from the bed of the Delaware River, and for many years their collecting, known as stone hacking, was a profitable enterprise. Durham boats were used for this purpose and they were locked into the feeder at either Bulls Island or Lambertville.

Howard Earle **Coffin** owned a 124-foot wood yacht built by Luders Marine Construction of Stamford, CT in 1927. She was named *ZAPALA*; was powered by two eight cylinder Winton gasoline engines; and went through the D&R Canal in the late 1920's. Coffin's resume included: M.E., Dr. Engineering, LL.D., ScD.; U.S. Civil Service; Olds Motor Works; chief engineer, E.R. Thomas Detroit Co.; consulting engineer for Chalmers Detroit Motor Co. & Hudson Motor Car Co.; president, National Air Transport, Inc.; chairman of the board of Sea Island Co. (GA where he lived) and Southeastern Cottons, Inc.; member Naval consulting Board and Advisory Commission of Council of National Defense; chairman, Aircraft Board of U.S.; to name a few...

COL. JOHN STEVENS: The steam propellor *COL. JOHN STEVENS* arrived at Philadelphia on Sunday from New York by way of the Delaware and Raritan Canal. She is furnished with the Loper propellor and by working the boat stern foremost, the propellor crushed the ice that sheeted the canal to the depth of seven inches, a distance of 36 miles. The cargo being a valuable one, it was of some moment that it should be brought through, and the success of the recent attempt on the Chesapeake and Delaware Canal induced the successful effort.

Evening Sentinel, Jersey City, January 21, 1846.

Christopher **Colles** devised a plan for the construction of a unique all-timber canal across New Jersey from Bordentown on the Delaware River to Middletown Point on Raritan Bay in 1808.

Collision and Sinking: Friday about midnight, the steamer *SHARK* ran into a Lehigh Coal and Navigation Co. canalboat at the junction of the D&R and Feeder Canals and sank (it)

within minutes. Canalboat traffic was interrupted there for some time. The railroad bridge across the canal was unable to swing over and connect with the other side, until the submerged boat was removed around 9pm on the next evening. *Daily State Gazette, July 14, 1851.* The canalboat *W.M. MORRIS*, having been run into by another boat and sunk, was raised yesterday by the pumping powers of the Hand-in-Hand (Fire Co.) Engine. *Daily State Gazette, August 15, 1872.*

Collision and Warrant: The captain of the canalboat *B.F. CARPENTER*, hailing from Buffalo, ran into another boat while the latter was anchored between the canal station and the Perry Street bridge. A warrant was issued by Justice Dignan for his arrest. The damages are laid at \$100. *Daily State Gazette, August 21, 1872.*

Collision of Boats: At half past six o'clock on Wednesday a chunker, No. 1120, New York Line, while passing through the Willow Street bridge collided with a another canalboat laden with wood. Both boats stuck fast. The bridge was turned, and the travel was impeded about four hours. Both boats were laden with wood, and did not show lights properly. A loaded boat always has the right-of-way. The difficulty will terminate in a law suit. *Daily State Gazette, August 16, 1872.*

Collision on Railroad, Passengers Ferried on Canal: Yesterday for-noon two freight trains came into collision on the Belvidere Division of the Pennsylvania Railroad near Scudders Falls, blocked up the road, wrecked a number of cars and demolished one of the engines so badly, that it will be of no further use. Yesterday afternoon passengers were obliged to be ferried round the obstruction in boats on the Feeder Canal. *Daily True American, May 30, 1883.*

Collision With Bridge: Yesterday the steamer *VINELAND*, which was passing through the D&R Canal, collided with the high (pedestrian) swing bridge at the State Street lock and had one of its masts broken. The bridge was badly shaken but not damaged. The captain of the boat says the bridge was not turned quickly enough, and as far as he was concerned he was not to blame. *Daily True American, May 20, 1884.* Late on Saturday night a propellor, which was steaming through the D&R Canal, collided with the Laylor Street bridge, and threw it off from its pivot. Yesterday a gang of men were engaged in repairing the damages. *Daily True American, June 21, 1884.*

Colonial Park is a part of the Somerset County Park Commission and is mostly located on the east side of the D&R Canal at East Millstone. It was the location of the Canal Society of New Jersey's 25th Anniversary Celebration in 1994. The 685.5-acre park includes scenic frontage on both the historic D&R Canal and the Millstone River. It includes recreation facilities, prize winning horticultural displays, a golf course, picnic areas, a playground, a fitness course, three stocked ponds, a softball field, a nature trail, and more.

www.somersetcountyparks.org

Columbia Yacht Club, of NY, Commodore W.T. Colbron and a party of friends passed through the D&R Canal in 1902 returning home from a visit to Washington, D.C.

Commercial Transportation Co. (Steam Propeller Line) of Trenton was incorporated in NJ early in 1848 to run a line of canalboats through the D&R between Phila., Albany, & Troy - successor to the Iron Steam Packet Line). A contract with the Joint Companies allowed CTC.

to pay the Canal Co. 25% of their total freight charge for most goods in lieu of regular tolls. In 1849 their rate was reduced to 15%. By 1851 the new firm was operating two steamers and nine barges and planned to add another steamer. In August, 1852 they placed a new steamer, *COMMERCE*, on their line between Philadelphia and Albany. She was said to be the strongest and most powerful propeller of the kind in the country. She is calculated to tow two barges on the Delaware and Hudson Rivers. The rules of the D&R Canal did not allow steamers to tow more than one barge on the canal. "This line, the owners of which are mostly Trentonians, has now four propellers and nine barges, and will be able to carry all the freight between Philadelphia and Albany, with promptitude and despatch." In 1862 CTC had the *NEW JERSEY*, a wood hull screw propelled steamboat built for them in Baltimore. She appears in a Brady Civil War photo. The *NEW JERSEY* was purchased by the Baltimore Steam Packet Co. in 1867. She burned on March 26, 1870 at Sharps Island on Chesapeake Bay. Also see "*NEW JERSEY*."

Confederate Blockade Runner (copper clad) *IKE* sprang a leak at Warren Street on November 29, 1864. She was taken in tow by her consort, the *TRUE AMERICAN* to a dry-dock to repair damages. *Daily State Gazette, November 30, 1864.*

Connecticut, New York & Pennsylvania Transportation Co. operated between Hartford, Middletown, NYC, Phila., & Baltimore - successor to the Chapin & Baird Line after Apr. 27, 1854 - operated steam canalboats *JOSEPHINE*, *ROUGH & READY*, and *M.W. CHAPIN*.

Connecticut River: was extensively used by steam canalboats from the D&R Canal to reach Hartford. The steam freight propeller business started on the Connecticut River in July of 1842 when the iron steam schooner *IRONSIDES* - Marshman, master arrived at Hartford from Philadelphia on July 24th. She was a vessel built in New York in the spring of 1842 and was the first of all the steam schooners that followed on the river. On August 10, 1842 the *ANTHRACITE* - Anthony, master arrived at Hartford from Philadelphia - she being the second steam schooner freighter to arrive at Hartford. She was also a new iron steamer having been built at New York in the spring of 1842 as a sister ship to *IRONSIDES*. Both vessels registered 137 tons and were home ported at Perth Amboy. The following is a list of the known steam propellers which operated between Hartford and Philadelphia via the D&R Canal and the years they served: 1843-80: *ANTHRACITE*; 1843-44: *EAGLE*, *IRONSIDES*, & *LION*; 1846-47: *COL. J. STEVENS & RICHARD STOCKTON*; 1847-49: *GOV. GRAHAM*; 1848-49: *E. J. DUPONT*; 1848-51: *OSCEOLA*; 1848-55: *ROUGH AND READY*; 1852-57: *A. CLARK*; 1853: *SHREWSBURY*; 1858: *SALVOR*; 1858-60: *MADGIE*; 1859-62: *THOMAS SPARKS*; 1861-62: *SOPHIA*; 1863-65: *MARS*; 1863-67: *SARAH*; 1866-72: *NEVADA*; 1866-80: *SUSAN* (the former *IRONSIDES*, renamed following service in the Civil War); 1869: *TRANSIT*; 1870: *W. R. CARTER*; 1870-72: *GEO. A. CHAFEE*; 1870-74: *MAYFLOWER*; 1870-75: *CHAS. W. LORD*; 1873-77: *VULCAN*; 1875-84: *RIVER BELLE*; 1877-83: *TUNXIS*; and 1878-79: *CONCORD*. *Thomas A. Stevens 9Deep River, CT, letter to the author, November 3, 1974; The Connecticut River Steamboat Story, Melancthon W. Jacobus (1956), and Steamboat Days, Fred E. Dayton.*

R. S. **Conover** had 600 mules used in towing on the D&R Canal in 1872.

Construction of the D&R Canal: Workers dug the entire canal trench using pick axes, shovels, wheelbarrows and horse-drawn scrapers. Laborers were paid \$1.00 a day – those who

dug tree stumps received an additional 25¢ per stump. They worked six days a week from sunrise to sunset. *D&R Canal State Park Interpretive Signage at Bulls Island and Alexander Road, Princeton.*

Peter **Cooper** built a rolling-and-wire mill in 1845 in South Trenton, NJ, conveniently situated on the Delaware & Raritan Canal, Camden & Amboy RR, and the Delaware River. The Trenton mills immediately went to work on a contract to produce 2,000 tons of rail for the Camden & Amboy RR, employing nearly 500 men and consuming 87 tons of coal and 62 tons of pig iron daily in the production of 50 tons of rails. [Wright, Kevin W., *The Morris Canal and the Age of Ingenuity*]

N. D. Cortright & Co. Was a coal merchant with offices in Trenton, Elizabethport and Jersey City. In 1860 they shipped 131 tons of various sized Hazelton coal from the Port of New Brunswick to New Haven, CT in the schooner *JUDGE*. It had traveled by canalboat down Pennsylvania's Susquehanna River Valley utilizing sections of the Pennsylvania Main Line Canal, the Susquehanna and Tidewater Canal, across Chesapeake Bay, through the C&D Canal, up Delaware Bay and River, through the D&R Canal, and was about to continue its voyage via the Raritan River, Arthur Kill, Kill von Kull, NY Harbor, the East River, Long Island Sound, and Quinnipiac River.

Cost of the D&R Canal: By 1840 (construction) expenditures upon the canal and equipment totaled \$2,829,797, far more than the original estimates. *Report of the Joint Board of Directors (Princeton, 1840), p. 14-17 & From Indian Trail to Iron Horse, by Wheaton J. Lane.*

Cranberry Festival is held annually, Saturday & Sunday, on Farnsworth Avenue in Bordentown each October. All manner of cranberry edibles are available along with other fun foods. A wide range of crafts are for sale and many children's activities are available. Admission is free. 609-298-9066 or www.downtownbordentown.com

John M. **Crosland** of Pottsville, PA, the first projector of the boats to run to New York from the mines, has recently built at this city new experimental Iron Canal Boats, which cleared from Pottsville last week laden with coal. (Although the iron boats could carry slightly more tonnage than wood boats, the "great disparity between the cost of the two materials will prevent the iron boats from coming into general use in this country.") *Niles National Register, December 9, 1843*

Crosswicks Creek is a tributary of the Delaware River with a watershed of 146 square miles encompassing parts of Burlington, Mercer, Monmouth and Ocean Counties. Its headwaters flow from the Fort Dix and McGuire Air Force Base Military Reserves in a northwesterly direction and then turn sharply south where it meets the Delaware River at the City of Bordentown. It is the body of water which communicates with the south end of the D&R Canal. At that point it is tidewater and at high tide the creek and Delaware River water flow back through the lock raising the water above the Outlet Lock drop gate to permit shallow draft boats to maneuver into the lower end of the canal.

The **Cruise of the *DIABLESSE***, by F.A. Fenger, (published in 1926) in Chapter III, *Ditch Crawling*, describes his trip through the D&R in 1912.

A Cruise Through the Delaware and Raritan Canal, by A. Homer Skinner, Part I

(South - Fall 1896), in his 32-foot sloop, *RAMALLAH*, published in *The Rudder*, May 1897; Part II (North - Fall, 1896) - Conclusion was published in June, 1897. Story includes several canal views.

The **Cruising Club**, after two weeks has returned to Trenton via the D&R Canal. Their yacht, the *MARY S. EWING* is a handsome craft, 78-feet long, 23 feet at beam and of 100 tons burthen. The yacht is owned and commanded by Captain Ewing of Cape May and the 21 member club is commanded by Captain Irving W. Kelly. During their cruise they visited Cape May (where they caught a shark eight feet long), Delaware Breakwater, Atlantic City, Ocean Grove, Coney Island, and took a trip up the Hudson River. They also visited the Trolling Banks where they caught 300 black fish. *Daily True American, 23 July 1883.*

Cultivated Tastes of boatmen may often be seen by watching at the State Street bridge as the barges pass. We saw, yesterday, boats on which whole families were living. On one, washing day was in full blast, the daughters attending to the work under the direction of their mother. And it was pleasant to see, on the part of those on board some boats, a love for flowers. Carefully kept and well trained flower-boxes, with leaves and blossoms, looking fresh and pretty, adorned some cabins, giving an idea that comfort and happiness exist in no small degree amongst married boatmen. *Weekly True American (Trenton), May 13, 1870.*

Edward B. **Cummerford**, a Marine Surveyor and Vessel Broker obtained enrollment papers, bill of sale, title, inspection, etc. and handled the transfer of ownership and arranged for the towing of the tank barge *PIONEER* from Philadelphia area to NYC. This vessel was towed through the D&R Canal in mid-October, 1930 by the gasoline tugboat *START*; its Captain, Royal Tilford was paid \$75 for his service. The vessel later worked in New England and was more recently extensively rebuilt and sails were installed for day-sail trips at South Street Seaport, where it remains to this day. Cummerford's logs/diaries are in the South Street Seaport Library, NYC.

Cutting Ice: The depot (at State Street, Trenton) presented a busy scene yesterday. The canal was pretty well filled for some distance with men engaged in cutting ice, and (on) the banks teams (were) hauling it away. *Daily State Gazette, January 3, 1851.*

Charles G. **Davis:** wrote an account of his sailboat *DRAGOON* traveling from NY to Savannah via the D&R and other inland waterways in 1900. *Outing Magazine, Vol. XXXV, No. 5, February, 1900.*

Decadence of the D&R Canal: The rapid decadence of the D&R Canal, through the disinclination of the Pennsylvania Railroad Company, which owns the waterway, to make the necessary improvements to maintain its usefulness as a shipping channel, has seriously hampered the industrial growth of the towns along its line between Bordentown and New Brunswick, some forty-five miles. In fact, the condition of affairs has become so bad that the officials of several of the larger towns feel disposed to bring the matter before Congress or the War Department direct, in an effort to obtain relief. While several years ago thousands of tons of coal and merchandise were shipped along the waterway during the open season, to-day, with the exception of a few coal barges, and a small fleet of Philadelphia and Trenton propellers, the canal has been

practically abandoned... *New Brunswick Daily Press, December 18, 1906.* Secretary Woodworth Clum, Trenton Chamber of Commerce stated: "It appears that there could be no more conclusive argument in favor of an investigation of the conditions surrounding the D&R Canal than the fact that in 1870 it carried approximately 4,500,000 tons of freight and that in 1871 it passed into the hands of the Pennsylvania Railroad; that in 1872 its operating expenses were increased \$1,000,444, and that from 1872 until the present time the traffic has been restricted, aye, practically discouraged until we have in the last report of the railroad the delightful information that the total tonnage was 462,000." Governor Stokes stated: "In 1871 the traffic on the D&R Canal exceeded that on the Erie Canal, and yet today the D&R Canal is permitted to waste away in utter uselessness, while the far seeing public of New York State is expending \$100,000,000 in order to make the Erie Canal more useful. Comparisons are odious, gentlemen." *New Brunswick Times, February 19, 1908.* W. Holt Apgar, counsel for the Pennsylvania Railroad stated: "The Pennsylvania had not in any way throttled canal traffic, but that the falling off has been due to the fact that the Lehigh Valley, Philadelphia and Reading and other coal (rail)roads extended their lines to tidewater, and this took away much of the traffic that formerly went to the canal. Deep sea vessels of large capacity were a reason for the Philadelphia and New York boat lines discontinuing their canal service, and local manufacturers preferred rail shipments to the canal, and several of them had supplanted their water basins with railroad sidings." *New Brunswick Times, March 4, 1908.* Four more witnesses were called yesterday afternoon by the senate canal committee on the causes which led to the decline of the D&R Canal. Those examined were Captain James Hughes, Captain John Smith, Industrial Solicitor W.K. Lyons, and James Dougherty, former supervisor of the canal... The result of the day's inquiry was the production of sufficient evidence to warrant the belief that were the canal to be kept in good shape and the minimum freight rate cut in half the waterway would not be able to accommodate the traffic thereon... *Daily State Gazette, February 18, 1910.*

Delaware & Hudson Canal: In 1849 the first 125 ton experimental boat was built on the Delaware & Hudson Canal at Honesdale, PA, but that canal enlargement had not progressed enough to move it by their canal to tidewater. The risky decision was therefore made to take advantage of the spring freshet and float it down the Lackawaxen and Delaware Rivers to Bulls Island where it entered the D&R Canal and was delivered to NY Harbor. *Wayne County Herald, Feb. 5, 1880.*

Delaware & Lehigh National Heritage Corridor is a 165-mile pathway along the Delaware and Lehigh Canals in Pennsylvania that played an integral role in the history of both the region. The route was used to move anthracite coal in canalboats from the Wyoming Valley and Carbon County to the prosperous iron and steel industries of the Lehigh Valley and on to Philadelphia via the Delaware River and New York via the D&R Canal. Today visitors can explore the corridor on foot, bike, boat or by car. www.delawareandlehigh.org Convenient linkages across the Delaware River at Calhoun Street, Trenton, Washington's Crossing, Lambertville - New Hope, Bull's Island and Frenchtown facilitate loop hikes and trips utilizing the D&R Feeder Canal and the Delaware Canal.

Delaware & Raritan Canal Archives are included within the archives of the Canal Society of New Jersey, the major portion of which is stored in leased space in the Phillipsburg Union Station, owned by the Friends of the New Jersey Transportation Heritage Center.

The Delaware & Raritan Canal: A Retrospective View, an exhibition at the New Jersey State Museum opened with a Symposium on June 16, 1984. The symposium, "The D&R Canal: A 150th Anniversary," included the following presenters: Christopher T. Baer, Lance E. Metz, William J. McKelvey, Jr., Howard L. Green, Ellen Paul Denker, and Samuel M. Hamill, Jr. The Canal Society of New Jersey and McKelvey assisted in the display of D&R photos, broadsides, artifacts and models for the exhibition.

Delaware & Raritan Canal Abandonment: The Pennsylvania Railroad is desirous of abandoning the D&R Canal in order to get rid of the dangerous Perry Street crossing in Trenton by laying their tracks in the bed of the canal after it shall have secured the right from the legislature to abandon the water way. *New Brunswick Daily Times & New Brunswick Home News, February 25, 1903* The rumor that the D&R Canal which ends at New Brunswick, is to be permanently closed in a few months and abandoned is viewed in New Brunswick as being true. The real object of the Pennsylvania Railroad in desiring the abandonment of the canal is to cut off competition... ..The only interest that the railroad company now has in the canal is confined to a few D&R barges, canalboats, and schooners, owned or controlled by the company. These coal vehicles are now nearly wrecks, and the owners have no desire to repair or replace them, because all their tonnage can readily be carried by rail. Recently the profits (or rather the receipts) of the canal have been derived from the carrying of the Reading and Lehigh Valley Coal and Navigation Company's barges and the steamers carrying Baltimore and Ohio freight. The Reading and the Lehigh Valley Companies have both found railroad routes to New York and tide water and now the Pennsylvania Company is not desirous of keeping up at a loss, a means of transit which allows its most formidable rival, the Baltimore and Ohio to reach New York with its freight... *New York Times, December, 16, 1888.* The Pennsylvania Railroad has agreed to the abandonment of navigation in the (D&R) Canal feeder. *Trenton Times, February 16, 1915.* Abandonment of the D&R was made official by a certificate under the corporate seal of the Pennsylvania Railroad Co. dated April 29, 1933. This action was preceded by a preamble and resolutions adopted by a majority of the board of directors of the Pennsylvania Railroad Company on June 22, 1932; authorized and directed by the United New Jersey Railroad and Canal Company (successor to the D&R Canal Co.) on December 6, 1932 and the stockholders of that company on January 10, 1933. P.R.R. President W.W. Atterbury offered to relinquish to the state of New Jersey all of the property rights that the company had in the Feeder Canal. Nevertheless, he reserved the prerogative for the railroad to cross the waterway and to run on any part of the canal property not required for canal purposes. *Lambertville Beacon, July 13, 1933.* On May 3, 1934, with 936 years left on the Pennsylvania Railroad lease, the state took possession of the D&R Canal property and began to study ways to reuse the waterway. Two major uses emerged: a water source for industry and recreation. *Princeton History, No. 17, 2002.*

Delaware & Raritan Canal almost completed: An excellent, descriptive article on the status of the canal getting ready to open: *New Jersey State Gazette, March 29, 1834.* The water, let into the Feeder week before last, continues to flow and gradually increases in the main canal. *NJ State Gazette, April 12, 1834.*

D&R Canal & New Jersey: A Ribbon of Life: The D&R Canal and the Canal Park are vitally important to central New Jersey. It is a link to our 19th century heritage, revealing a time

when craftsmen created public works that survive and are worthy of being treasured for hundreds of years as works of art. Further it reveals a time when connections from central New Jersey to the rest of the world were tenuous at best and often non-existent. The canal is important as a vital part of our state's water supply system. Approximately a million New Jerseyans have some amount of canal water in their daily drinking water supply. As a State Park, the D&R may well be the most visited park in New Jersey; there are too many places for people to get on and get off to ever make an accurate count of the visitors. The Canal Park is a ribbon that traverses city and suburb, rural areas and natural areas. It is a park that is in everyone's back yard, making it a place that people visit daily or on the spur of the moment - not a distant preserve available only for special vacations. The Canal Park is also a haven from 21st-century America; it is a place where the beauty of the natural world is blended with the craftsmanship of the 19th century, a place of serenity and of that most difficult to find quality - aloneness. *Jim Amon 2009*

Delaware & Raritan Canal Boat Models are on display in the Canal Society of New Jersey Museum at Waterloo Village. Included are ¼" = 1' models of boats from the Delaware Canal; the Erie Canal; the Pennsylvania Main Line Canal; the Schuylkill Navigation system; and the Morris Canal, all of which were known to have traveled through the D&R. The models were made by the late N.F. Beecham of Lahaska, PA for Bill McKelvey and are on loan from his collection.

Delaware & Raritan Canal Business Anticipated: The water, let into the Feeder week before last, continues to flow and gradually increases the main canal; the level will soon be sufficient, if no breach occurs, for boating to Princeton. The Main Canal is of sufficient capacity for eight feet in depth and sixty feet wide on the ~~surface~~ bottom. The canal will make a grand show, when filled to the contemplated water line, and afford a sufficient depth for coasting vessels to pass from the Delaware to the Raritan. *NJ State Gazette, April 12, 1834.* Note: The Feeder Canal was 6 feet deep and 50 feet wide at the bottom.

Delaware & Raritan Canal Business Commenced: Business has commenced upon the western end of this splendid public improvement - two boat loads of coal from the Lehigh mines arrived at Trenton a week ago, entering the canal at Bordentown, and lumber has been transported to Kingston and Princeton. *Camden Mail, May 7, 1834* The D&R Canal is now well supplied with water. Several sloop loads of bricks from White Hill have been received at the Eastern Basin in this city. *NJ State Gazette, June 14, 1834.* An elegant and spacious barge passed through the canal from the Raritan to the Delaware this week. We are informed that it is expected to run next week with passengers from Princeton and Trenton for the steamboat at Bordentown. *NJ State Gazette, June 21, 1834.* Vessels of four to five feet draft are now daily passing through the Canal from Philadelphia to New York, and New York to Philadelphia. Eighty-three boats passed this lock last week of which six were schooners, nine sloops, 21 coal boats and six other boats went the whole length of the canal. *NJ State Gazette, October 11, 1834.*

Delaware & Raritan Canal Centennial Edition of The Daily Home News - The Sunday Times of October 11, 1934 included two pages of historic views of the Canal and Raritan River at New Brunswick and illustrations of the key individuals involved. Two pages were devoted to the Program of the Raritan River Regatta on Friday, October 12, 1934 which was sponsored by the New Brunswick Boat Club to Commemorate the D&R Canal Centennial and

the Stevens Centennial of Transportation Progress in New Jersey. The morning was devoted to a series of races for various configurations of canoes, sculls, shells, gigs, rowboats, etc. under the direction of Rutgers University Director of Athletics, George E. Little and Edward Ten Eyck, Rowing Coach. The evening program began at 8:30pm with a group of 200 colored singers, then a Venetian Night Water Pageant - a parade of 21 floats, and culminated with a “gorgeous fireworks display. Nineteen of the floats were entered by members of the New Brunswick Boat Club and two by the Plainfield Sea Scouts. Russell H. Garretson, Deep Lock locktender entered a float and was starter of the morning events.

Delaware & Raritan Canal Closing: Forty boats were in the canal at the hour of closing Saturday night (Dec. 22). They were all locked out by Christmas, and the water was drawn off at the New Brunswick end on Monday. The water was allowed to remain some time longer at this end in order to permit the egress of a boat which was receiving a valuable cargo at Trenton.

Bordentown Register, December 28, 1877. The canal ending here is advertised to close on the 19th inst. The time was when this announcement meant much more than at present. In former years the traffic on the Delaware and Raritan was great and hundreds of boatmen and drivers saw a winter of comparative idleness ahead of them, The notice of closing was then regarded as reason for general hustling to get in one more trip, or to hurry through and get the boats into special quarters for the winter. Frequently boats loaded with coal, apples, bricks, etc. were caught and the cargo was sold to the best advantage to some enterprising Bordentown or Trenton merchant. Nowadays such windfalls are as scarce as Cape May Diamonds. *Bordentown Register, December 11, 1896.* A movement was initiated by the Junior Chamber of Commerce of New Brunswick to keep the D&R Canal open for pleasure craft. *New York Times, August 7, 1932.* Commercial shippers, New Jersey municipal authorities and civic groups and Eastern yachtsmen joined forces in an attempt to prevent the closing of the D&R Canal. *New York Tribune, February 26, 1933.* The canal closed in 1932, and was taken over by the State of New Jersey in 1934, with the Trenton portion deeded to the city in 1936. Their portion was filled in by the Works Project Administration using much manual labor. In 1950 a portion of the filled in former canal right-of-way was re-excavated to an even greater depth for the Trenton Freeway (US Rt. 1), a project that had been talked about for about 75 years. The 1929/30 concrete lock and filled in canal right-of-way between the former aqueduct and Laylor Street remained vacant until the present Rt. 129 highway was built.

Delaware & Raritan Canal Coalition, Inc. was an organization of 183 historic, civic, environmental, and youth groups in 17 boroughs and townships bordering the canal. It was formed in 1971 and incorporated in 1973 under the laws of New Jersey as a non-profit body to assist in the preservation and development of the D&R Canal as an historic, recreational, and environmental resource. The two key individuals responsible for the establishment of the Coalition were Lee Bullitt, who became its first president and Margen Penick, who became its chairman of the board. Other important individuals connected with this effort were: Charlotte Pierce, Ronald Bond, Philip and Ursula Buchannan, and Mary Capouya. The Coalition can be credited with gaining Historic Site status for the canal and seeing that it became a State Park. *The Delaware and Raritan Canal: A User's Guide for Hikers, Canoeists, Fisherfolk, History Buffs, Bird Watchers, and Lovers of the Great Outdoors*, by Betty Davison was published by the Coalition in 1976.

Delaware & Raritan Canal Commission: was established in October, 1974, when

Governor Brendan Byrne signed the D&R Canal State Park Law. The D&R Canal Coalition was instrumental in getting Senators Bateman and Schluter to initiate the enabling legislation. Benjamin Kirkland, a Hunterdon County Freeholder, was appointed chairman and the Commission held their first meeting on March 14, 1975. The Commission was created to accomplish three main tasks: 1. To review and approve, reject or modify any action by the State is the Canal Park, or any permit for action in the park; 2. To undertake planning for the development of the Canal Park; and 3. To prepare and administer a land use regulatory program that will protect the Canal Park's 400-square-mile watershed from the harmful impacts of new development in central New Jersey. Their early office was in the Calhoun Street bridgetender's house in Trenton, but they outgrew that location and have been in a building, renovated for them by the late Donald Jones, adjacent to the Prallsville Mill at Stockton ever since. Their office is a mini-museum containing artifacts, photos and postcard views of the D&R Canal. www.dandrcanal.com/drcc Also see "James C. Amon."

Delaware & Raritan Canal Commission Proposed Reopening the D&R at a public hearing in Newark, NJ in October, 1937. Nine railroads operating in New Jersey filed a statement last month with a special board of the US War Department engineers in opposition to the reconstruction of the D&R Canal by the Federal Government in New Jersey. The railroad statement in opposition to the canal maintains that estimates of the cost of deepening and improving it are too low, and that estimated expectations of tonnage are too high. The roads also maintain that there is a present surplus of transportation facilities by railroads, pipe lines, and motor trucks in the area... *Locomotive Engineers Journal, December, 1937.*

Delaware & Raritan Canal Co. had a small steam tugboat built for them by Laird of Birkenhead, England in 1838; Since she could not carry enough coal for the journey, she was "sailed" to New York in 1839 and became the first iron-hulled vessel to cross the Atlantic . The *ROBERT F. STOCKTON*, was admitted to U.S. Registry in 1840, renamed *NEW JERSEY*. She is credited as having the first successful application of the screw propeller on American waters and opening the era of mechanically propelled vessels on American canals. The D&R also operated other steam tugs, including the *RELIEF*, maintenance vessels, dredges, and steam canalboats *ANTHRACITE**, *BLACK DIAMOND**, *IRONSIDES**, *VULCAN**, *CAMDEN*, *MARS*, & *NEW JERSEY*. *These were the first twin-screw vessels in America.

Delaware & Raritan Canal Construction work was entirely under the direction of Canvass White; the eastern section was supervised by John Hopkins; the middle section by George T. Olmstead; the western section and lower feeder by E.A. Douglas; while the building of the upper feeder was under Ashbel Welch. "We learn that a choice of routes has at length been made for the Canal to unite the Raritan with the Delaware River, and that the Millstone route is to be the one. It will come within about 3 miles of this village (Somerville), a few rods east of the mills of W.T. Rogers, Esq. And from thence take an easterly direction towards the Raritan, and probably cross it somewhere near the lower toll-gate. The ground is said to be already staked out, and has been broken near Kingston. *Somerset Messenger, November 10, 1830; and Sentinel of Freedom, November 16, 1830.* Note: On November 10th ground was broken near Kingston.

Delaware & Raritan Canal Co. Directors: (Officers) On the May 10th, 1830 meeting of stockholders the following persons were chosen Directors: John Potter, James Parker, James

Neilson, Garret D. Wall, Robert F. Stockton, James S. Green, Joseph M'Ilvaine, John R. Thomson, and William Halsted. Robert F. Stockton was elected President of the Board and was authorized to employ engineers and take all necessary measures preparatory to a speedy commencement of the work (building of the D&R Canal). *New Jersey State Gazette, May 15, 1830*. In 1841 the directors/officers were: Robert F. Stockton, President; James Neilson, Treasurer; and John R. Thompson, Secretary. Directors in 1843 were: R.F. Stockton, John Potter, James S. Green, James Neilson, James Parker, G.D. Wall, John R. Thomson, John C. Stevens, and James Potter. *New Jersey State Gazette, May 12, 1843*. 1871 Directors: Robert F. Stockton, John M. Read, Moses Taylor, John G. Stevens, Richard S. Conover, William W. Shippen, Albert W. Markley, John Jacob Astor, and G. Morris Dorrance. 1872 directors: Robert F. Stockton, John G. Stevens, John Jacob Astor, and Ashbel Welch. *Daily State Gazette, May 21, 1872*.

Delaware & Raritan Canal Company Establishment: In 1820 a bill to incorporate the NJ D&R Canal Co. was adopted by the Legislature. The company failed the same year when NJ was unable to secure an agreement with PA regarding the use of water from the Delaware River. In 1821 a canal proposal, calling for a water depth of only four feet in the main channel, was rejected by the Legislature on the grounds that it would be inadequate to handle the anticipated traffic. In 1824 yet another canal company for the D&R route was chartered but, like the company of 1820, this latest body passed out of existence because of Pennsylvania's refusal to consent to NJ's use of the waters of the Delaware River. Finally, on February 4, 1830, the NJ Legislature again created a private corporation chartered to construct an artificial waterway between the Raritan and Delaware Rivers. The dispute over water rights to the Delaware River no longer existed. The problem had resolved itself in NJ's favor when PA began construction of their Delaware Division Canal in 1827. Although the 1830 company succeeded in the building and operation of the D&R Canal, it faced adversity from the moment of its inception. That very day the NJ Legislature also chartered the Camden & Amboy Railroad to run across the highly prized "waist" of the State in direct competition with the canal. The subscription books of the canal company were opened one week before those of the railroad company in the hope that public opinion would be diverted in favor of the waterway. The results of a three-day sale which began on March 23, 1830 were not encouraging. In sharp contrast to this, the entire stock of the railroad company was subscribed within ten minutes after the books of that company were opened to the public on March 30, 1830. Under the terms of the act of incorporation, the charter of the canal company would become void if the stock was not fully subscribed within a year after opening of the books. The D&R Canal Co. was rescued from dissolution when Robert F. Stockton bought 4,800 shares. Stockton's father-in-law, John Potter, had recently moved from Charleston, SC, to Princeton. Potter, a man of considerable wealth, advanced almost a half a million dollars to Stockton for investment in the canal. The company organized on May 10, 1830 at Trenton. On February 15, 1831, the NJ Legislature adopted the "Marriage Act." This legislation set up the Joint Companies, and was designed to guarantee the completion of both the canal and the railroad. Each company was permitted to retain its own organization and officers, but they would combine all revenues and expenditures. Although they merged financially, they remained independent. The canal gained more immediate benefit from this merger than did the railroad. The weak financial status of the canal was considerably strengthened by the formation of the Joint Companies. Since the railroad was constructed with less difficulty and more speed than the canal, it opened to through traffic in September, 1833. The canal did not open for through navigation until May, 1834. The primary function of both the D&R and the Morris

Canals was the transportation of heavy loads, such as coal and iron, across the state at a time when neither the roads nor the railroads were equal to the task. The powerful monopoly thus created enjoyed a strangle-hold on the valuable traffic zone across the “waist” of NJ until 1871. No rival company, without the consent of the Joint Companies, could construct a similar conveyance between NY and Philadelphia, according to the terms of the “Marriage Act.” In return the Joint Companies gave NJ two thousand shares of stock and further guaranteed an annual income of at least \$30,000 to the State. This amount was adequate to the modest budgetary needs of NJ for many years. The Joint Companies real estate was consequently relieved of its tax burden. This move not only increased the popularity of the mammoth monopoly, it also assured widespread political support for future actions of the combination.

Richard F. Veit, The Old Canals of NJ.

Delaware & Raritan Canal Feeder saw a fair amount of yachting activity, including: the steam launch *X-RAY* and on June 15 and 16, 1892 the steam yacht *HELEN S.*, owned by William S. Skirm of Trenton, traveled up the feeder to Lambertville; across the Delaware River on the cable ferry to New Hope, and up the Delaware Canal to Easton, PA.; There were even some attempts at passenger service: On April 28, 1852, the small steamboat *REINDEER* operated up the feeder to Bulls Island where it locked out into the Delaware River and continued up to Easton, PA - she ran for only a short time; and in 1879 the side-wheel steamboat *KITTATINNY* also went up the feeder in an attempt to provide local passenger service on the upper Delaware, but was not successful.

Delaware & Raritan Canal Figurines on display in the Canal Society of New Jersey Museum at Waterloo Village depict various canal related people and were carved by the late Ed LeRoy for Bill McKelvey and are on loan from the latter’s collections.

Delaware & Raritan Canal Grand Opening Celebration: “On Wednesday the directors of our canal and railroad companies, and some thirty or more of the principal stockholders, together with the governor (Peter Vroom), and sundry others of our great people, came up the ‘feeder’ as far as Lambertville in a Chesapeake and Delaware canal barge. After dining there all hands got aboard the barge - myself among the number - and started for Trenton about nine o’clock at night... By good luck more than good management, we got to Trenton without wrecking the boat, and after a short nap started off yesterday morning for New Brunswick. The canal banks for the whole distance were lined with people, - that is to say, there were large collections of them at the landings bridges, etc. A more jolly party than ours was in the afternoon you seldom meet. John C. Stevens, James S. Green, and Thomas Biddle acted as fun-makers, and they acquitted themselves admirably... When we arrived at New Brunswick we were greeted with a salute of twenty-four guns, were received by the military with presented arms, stood something less than a half an hour with our hats off while the mayor made a speech and was answered, hurraed in return to their civilities until we were all hoarse, were marched up and down the streets, and a little after dark sat down to a sumptuous dinner, provided at the expense of the canal company. The military, for their arduous services (to wit, waiting under arms four or five hours and being nearly broiled), received their pay partly in champagne, partly in glory.” *The Hon. Ashbel Welch, in a letter to Solomon W. Roberts, Esq., dated Trenton, June 27, 1834.*

Delaware & Raritan Canal National Historic Site designation was achieved in 1973.

Delaware & Raritan Canal Oral History was recorded on cassette tapes by Bill McKelvey in the 1970's and 1980's. Those interviewed included: employee, Ray Arrowsmith; boatman, Captain Harry V. Bennett; Boatmen's Reunion at Blackwells Mills; boatman, Jack Collins; employee, John Dargay; boatman, Captain Harold J. Dennen; historian, William Glas; author, publisher, historian, Harry L. Rinker; employee, Mike Savco; Jake Sherrod, the last mule driver; boatman, Charlie Luffbarry; boatman, Captain Elikim Van Pelt; boatman, Herbert Wager; boatman, Captain John Wright; boatman, Captains Robert Ziegler, Jr. and Sr.

Delaware & Raritan Canal Packet Line was an unsuccessful early (1834-5) provider of passenger service using the horse-drawn packets *UNITED* and *NEW JERSEY*. For the inauguration of passenger service on the D&R Canal, John Stevens of Hoboken designed and built a most unusual type of barge. It was described as '100 feet in length and eight in width, and as sharp as a wedge; will draw but fifteen inches of water and hold sixty passengers; and it is calculated that she can be drawn by horses, without difficulty, at the rate of ten miles an hour... Each (passenger), we understand is to be provided with a comfortable arm-chair, well cushioned. *New York Observer, 29 March 1834 & New Jersey Journal, 1 April 1834.* Running time between New Brunswick and Philadelphia was nine and a half hours. Packet boats were not required to observe the speed limit of four miles per hour on the canal. *Princeton Whig, 2 October 1835.*

Delaware & Raritan Canal Possible Extensions: were explored in 1832 due to concerns with navigational difficulties on the portions of the Delaware River between Bordentown and Bristol, PA although they never reached the formal proposal stage. One was to carry the D&R Canal by aqueduct across the Delaware River at Trenton and continue south to a terminus on Pennsylvania's Delaware Division Canal. Another was the construction of an outlet from the Delaware Canal into the Delaware River not too far below Easton, and entry into a projected northern extension of the D&R Canal feeder for passage on the Jersey side down along the Delaware to Trenton. In 1870, John Brown, the "Canal Manager" of the Delaware Division Canal, proposed implementing the long-held dream of the Lehigh Coal & Navigation Company to build an outlet lock at Lower Black Eddy (now known as Point Pleasant, PA, about a mile north of Bulls Island). In his correspondence with E.W. Clark, president of the LC&N, he revealed some of the residual problems of that company's canal route to the New York Market. Contingent to the proposed outlet would be an agreement to be reached with the D&R Canal to deepen their feeder by three feet, something that he indicated engineer Ashbel Welch of the D&R was already disposed to and was ready to commence at once, not only to satisfy the Pennsylvania interest but also to guarantee "to their Canal in a dry time and adequate supply of water." One probable reason the various programs for improvement of the Delaware Division Canal were never implemented was the extensive damage sustained by the canal as a result of flooding in the fall of 1869 and again in the spring of 1970. Net losses were generated in both years. These losses, plus the new arrangements that were being negotiated with various railroads - notably the Central Railroad of New Jersey and the Morris and Essex - all contributed to the movement of coal traffic away from the canals. *Albright G. Zimmerman, Pennsylvania's Delaware Division Canal.*

Delaware & Raritan Canal Report - 1855: The new system of steam towing introduced by the company has removed all complaints by boatmen, and the banks, woodwork, masonry,

and the works generally, were in complete repair upon opening of navigation. The canal appears to be in a highly prosperous condition, its receipts being \$515,939.59 the past year, and its expense is only \$138,638.29. No less than 1,356,000 tons of coal passed through the canal in 1855. *Hudson County Courier, June 19, 1856.*

Delaware & Raritan Canal Records Microfilming Project was sponsored and funded by the Canal Society of New Jersey LINDA PLEASE CHECK THIS CLOSELY - and completed in 1991???. Records included were those in the New Jersey State Archives (D&R Canal Co. & Camden & Amboy Railroad Co. records); Cornell University John M. Olin Library (Canvass White materials); Bucks County Historical Society (Mercer Museum); and New Jersey Water Supply Authority. Preparation work was done primarily by Linda Barth, with Bill McKelvey and Bill Moss assisting. Also see "New Jersey State Archives." Non-Governmental Records - Delaware and Raritan Canal.

Delaware & Raritan Canal Rules and Regulations: "When under way at night, a small green signal light shall be carried on the stem; a steamer shall carry in addition a white light at the end of her flagstaff, or if towing other boats two white lights at the end of her flagstaff; no other lights or reflectors shall be carried. No vessel shall carry sail in the canal. The speed shall not exceed 4½ miles (statute) per hour. When a vessel overtakes another, the slower shall give the inner track to the faster, unless within 300 yards of a lock or bridge. When in danger of meeting at a bridge or where both can not pass, the one going westward shall lie to. Everything towed by horses or mules, and rafts, on meeting steamboats shall keep on the side next to the towpath; in all other cases, everything meeting shall keep to the right. When approaching a lock or bridge, notice shall be given on arriving within 300 yards of the same by a horn, bell or whistle. Steamboats passing other boats or vessels, either in motion or at stopping places, shall 'slow-up' till entirely past, especially in passing Coalport. Steamboats must not check headway by backing while in the locks, nor blow out their boilers while passing locks or bridges. The signal at night that a lock is ready will be two whistles from the lock engine for boats bound west and four for those bound east. No stones, rubbish, dead carcasses, or other offensive matter shall be thrown or dropped into the water." *Inside Route description for Boaters - 1916.*

Delaware & Raritan Canal Reunion of workers was held on October 2, 1976 at Blackwells Mills. Sponsors were the Canal Society of New Jersey and Blackwells Mills Canal House Association; Bill McKelvey was the organizer. Participating were: Jack Collins, a marine steam engineer; John Dargay - a laborer still employed on the canal at the time; Charles Wilson, Sr., labor crew foreman; and Herbert E. Wager, boat hand aboard the tugboat *TENA WAGER*. Prior to this event there was a signing, by Governor Brendan Byrne, of a legislative proclamation designating October 6th as D&R Canal Day. Attending the ceremony were: David J. Bardin, Commissioner of Environmental Protection; James C. Amon, Executive Director of the D&R Canal Commission; Ronald Bond, President of the D&R Canal Coalition; Jack Collins, Herb Wager, and Bill McKelvey.

Delaware & Raritan Canal State Historic Site status was achieved in December, 1972 through the hard work of the D & R Canal Coalition which was formed by Lee Bullitt and Margen Penick. The declaration was made by DEP Commissioner Richard J. Sullivan. The following year it achieved recognition as a National Historic Site. However, this was not enough to insure preservation, so the State Legislature was approached. Senators Bateman and Schluter

were instrumental in initiating a bill, which, among other things, set up a commission of eight with the Commissioner of Environmental Protection as a ninth member. The commission was empowered to prevent any detrimental construction that would harm the canal and to designate a green belt along it. On 10 October 1974, Governor Brendan Byrne signed that bill into law.

Passage Between Rivers, by Elizabeth G.C. Menzies

Delaware & Raritan Canal State Park Administration: The NJ Department of Environmental Protection, Division of Parks & Forestry, State Park Service owns and manages the D&R Canal as a state park. (609) 924-5705. The D&R Canal Commission, Legislated in 1974, assists with the development of the park and regulates land use in the park's 400-square mile watershed (609) 397-2000. The NJ Water Supply Authority operates and maintains the water transmission complex of the canal as a water supply resource for about one million residents, supplying about 75 million gallons of water a day (908) 638-6121. *D&R Canal State Park brochure*

Delaware & Raritan Canal State Park was created in 1974 when Senators Bateman and Joseph P. Merlino introduced a bill establishing the 60-mile park. The bill passed both houses within two months, and Governor Byrne signed it on October 10th. This now 70-mile linear park is one of central New Jersey's most popular recreational corridors for hiking, jogging, bicycling, canoeing, fishing and horseback riding. It is also a valuable wildlife corridor connecting fields and forests. A recent bird survey conducted in the park revealed 160 species of birds, almost 90 of which nested in the park. With its wooden bridges, 19th century bridge-tenders' houses, remnants of locks, cobblestone spillways, and hand-built arched stone culverts, the canal is a tremendous attraction for history lovers and industrial archaeology students.

www.dandrcanal.com

Delaware & Raritan Canal State Park Friends Organizations includes the Canal Society of New Jersey and seven other local groups. All are listed with contact information on the D&R State Park website: www.dandrcanal.com

Delaware & Raritan Canal Stock: "We understand that upwards of six thousand two hundred shares of this stock are taken by individuals, only one hundred of which are owned by citizens of other states. This is therefore emphatically a *Jersey Company*." *New Jersey State Gazette, May 15, 1830.*

Delaware & Raritan Canal Study Committee Report to the Legislature of December 1, 1973, recommended: 1. The D&R Canal should be established as a State Park; 2. An expanded capital budget; 3. Critical areas and priority items requiring immediate state action; 4. Establishment of a canal commission to: a. Act as an advisory body to the DEP; b. Establish a Master Plan for development of the park; c. Exercise site review over any structure or improvement in the immediate vicinity of the canal; d. All development affecting drainage toward or impact on the canal to be submitted to the commission for an advisory opinion or technical design assistance.

Delaware & Raritan Canal Tolls: In 1842 for coal: for New York - 30¢ per ton through the canal; for any place east of Hell Gate - 20¢ per ton; 10¢ will be refunded on every ton of coal which has paid 30¢ and which is re-shipped from the waters of the Raritan, or Amboy Bay to

places east of Hell Gate; The steam towing from Philadelphia or Bristol to New York - 30¢ per ton; Do. From Philadelphia and Bristol to Amboy - 25¢; Towing any vessel through the canal with 4 horses \$10.50; Do. With 2 horses \$6.00. An **1870** broadside advertised rates for towing and tolls on anthracite and bituminous coal towed through the canal. *Edwin P. Alexander Collection.*

Delaware & Raritan Canal Watch: was established in 1988, by Barbara Thomsen, as a volunteer citizen's advocacy group to help promote, enhance and preserve the D&R Canal State Park, and incorporated in 1989 as a non-profit 501 (c)(3) organization. Members write letters, make phone calls, and disseminate bulletins and other information on behalf of the Park. The Watch also receives (and deals appropriately with) individual criticisms, problems, comments, and questions concerning the canal, and cooperates with other relevant organizations. The Canal Watch sponsors an annual 5K Fun Run attracting as many as 250 runners as a fundraiser; walks along the canal; and holds a June annual meeting with a program, usually a slide lecture. It irregularly publishes a modest newsletter. Events sponsored have included picnics, lectures, night walks, bike trips, canoe trips, trail clearing and maintenance, help with the beautification and promotion of the Trenton sections of the canal, stream monitoring, nature education, participation in fairs, festivals and environmental events. www.canalwatch.org

Delaware & Raritan Canal Water Conduit: A NJ Department of Conservation report in 1942 discussed the future of the canal. Abandonment would have cost more than rehabilitation. The long-established right to divert water from the Delaware River was, and remains, one of the major assets of the canal property. Recommendations were made and enabling legislation enacted to rehabilitate the canal as an industrial water supply with secondary development for recreational use. Rehabilitation was started in 1944. The Trenton "bottleneck" was dredged and flumed to improve flow capacity and three wooden aqueducts, which carried the canal over natural streams, were removed and replaced with reinforced concrete structures. Wooden gates at Raven Rock or Bulls Island, Kingston and Deep Lock in New Brunswick, all major control points, were replaced with concrete headwalls in which were installed steel sluice gates. A 30-year accumulation of flood-deposited silt was removed from the three-quarter-mile intake section at the Delaware River above Raven Rock, assuring a full supply at lowest river stage. Accumulated silt and bars were also removed throughout the narrow feeder to maintain full carrying capacity and a concrete overflow spillway was constructed at the site of two bank washouts near South Bound Brook. In 1949 with the rehabilitation 50% complete, work was suspended because of insufficient State funds. Drought conditions during the summer and fall of 1949 confirmed the advisability of legislation, passed earlier in the year, which authorized the sale and use of canal water, after suitable treatment by the purchaser, for potable purposes. Elizabethtown Water Co. began obtaining water from the canal in 1950 and it is an important source for them - over 20% of their total usage. In subsequent years the six remaining locks were rebuilt; a new emergency control structure and a new spillway were built above and below Trenton; the Kingston flood gate was rebuilt; major repairs were made to the wing dam in the Delaware River at the canal intake and the Raven Rock intake control was restored to reinforce supply at low stages of the Delaware River; and the Kingston and Ten-Mile Lock flood gates were rebuilt. The restoration work was designed to provide a delivery capacity of 75 million gallons per day in the Bound Brook - New Brunswick area. The floods of August and October 1955 caused appreciable damage to the canal along the Delaware and Raritan Rivers, requiring emergency bank repairs and removal of heavy silt deposits. The D&R Canal has been

maintained in such a way that the water quality has held up. This has been bolstered by the work of the D&R Canal Commission, protecting and expanding the natural foliage and green areas along the canal as well as watershed streams and their work with storm water retention ponds. Today, much of central New Jersey relies on the D&R for their drinking and industrial water supplies.

Delaware & Raritan Greenway Land Trust: is central Jersey's non-profit land preservation organization, founded in 1989 through the collaboration and vision of four organizations: the Stony Brook - Millstone Watershed Association, Friends of Princeton Open Space, Regional Planning Partnership, and the Delaware & Raritan Canal Commission. Founders, including Jim Amon, Rosemary Blair, Dennis Davidson, Sam Hamill, and Bob Johnston, realized that our region's open space was threatened with extinction. Their vision of an organization dedicated to the preservation of our remaining natural areas led to the creation of this small grassroots organization that completed the first nonprofit acquisition using Green Acres funds in 1992. Originally named Delaware & Raritan Greenway, their name was changed in 2004 to better reflect their preservation work as a Land Trust, and to account for the expansion of their work beyond their traditional focus along the D&R Canal. In the first 20 years since their founding, the D&R GLT has led the preservation of over 200 properties, valued at over \$300,000,000 and encompassing over 14,000 acres; the equivalent of 22 square miles - an area the size of Manhattan. Their permanent offices are in the Johnson Education Center, one Preservation Place, Princeton, NJ. Phone 609-924-4646 www.drgreenway.org

A **Delaware and Raritan Tour** was organized by the Pennsylvania Canal Society on 12 October 1984 and described in their Canal Currents Issue No. 68, Autumn 1984. They covered the main canal from Bordentown to New Brunswick plus Lambertville and the feeder. Among the 35 canallers were Jill and Emil Gombosi, Steve Humphreys, Lance Metz, John Miller, Howard Swope, David Wright, and Zip Zimmerman. Evening color slide programs were given by Jim Amon and Bill McKelvey.

Delaware Boulevard: An effort is being made to purchase the right of way for the Delaware Boulevard from Trenton to Port Jervis. *Blairstown Press, 30 April 1913* (This road became NJ Route 29, Daniel Bray Highway, as far north as Frenchtown and it parallels most of the D&R Canal Feeder.)

The **Delaware Canal** remained a bottleneck in the system moving coal from the Lehigh Valley to New York via the D&R Canal. In 1868 the Lehigh Canal could carry boats of 175 to 200 tons capacity and the D&R could accommodate boats of even greater capacities, whereas boats on the Delaware Canal were limited to a maximum of 100 tons. If thirty-four miles of that canal, the section from Easton to the outlet lock at New Hope, could be enlarged with an expenditure of \$500,000, the Lehigh Coal & Navigation Co. believed the expenditure would pay for itself in two or three years. *Albright G. Zimmerman, Pennsylvania's Delaware Division Canal.*

Delaware Canal Journal by Clayton P. Yoder, (1972), Pg. 271-3, recaps the story of Capt. Joseph Lum about his working trips through the D&R Canal on L.C. & N. boats ca. 1911.

Delaware Navigation Co. of Phila. leased their 100' long steamboat *TRENTON* to

Johnson & Johnson on a trial in 1903. She was so successful in moving J&J freight between New Brunswick and NYC that they purchased the vessel and soon added others.

Delaware River is the longest free-flowing river east of the Mississippi and is 410 miles from the head of its longest branch to Cape May. The mean freshwater discharge of the Delaware River into the estuary is 11,550 cubic feet per second. All D&R Canal vessel traffic which passed through the entire canal also used the Delaware River. The Delaware River communicated or communicates with the following canals;

Chesapeake & Delaware Canal (once a towpath canal with locks, is now a tidal ship canal) joins the waters of the Delaware with those of Chesapeake Bay.

Delaware & Raritan Canal (no through navigation) continues to carry Delaware River water to the Raritan River at New Brunswick. The D& R Feeder Canal parallels the Delaware from Bulls Island to Trenton.

Delaware & Hudson Canal (abandoned) ran along the Delaware River between Pennsylvania and New York and connected with the Hudson River at Rondout or Kingston, NY.

Delaware Canal (no through navigation) paralleled the west or Pennsylvania side of the river from Easton to Bristol.

Morris Canal (now abandoned and mostly filled in) once connected the Delaware and Hudson Rivers.

Salem Canal provides a tidal shortcut between the Salem River and the Delaware River at Deepwater, NJ.

Trenton Water Power Canal (abandoned and obliterated) once provided water power to Trenton mills and industries.

Delaware River Floods: A winter freshet did extensive damage to the D&R Canal including destruction of the Guard Lock at Bulls Island; breaches in the Feeder; and much of the guard bank of the main canal above Bordentown was washed into the canal and a quarter of a mile of the railroad on the east bank of the canal was carried away. *NJ State Gazette, January 11, 1841; Emporium & True American (Trenton), January 12, 1841.* For the past week the river has been so high and the current so strong that navigation has been greatly retarded. The tugboats are unable to tow more than two boats, and it is with great difficulty that even that number are brought to Bordentown lock. Some 250 canal boats are waiting a diminution of the strength of the current to get locked through the canal, and are at different points between Philadelphia and Bordentown. On Thursday one of the most powerful tow boats, the *BRUCE*, attempted to bring five boats to Bordentown, but found it was impossible to do so, and put in to Bristol(, PA). The present condition of the river has continued eleven days, during which the water has not varied over one foot... *Daily State Gazette, April 14, 1873.* The Delaware has experienced a number of serious flooding events a the result of snow-melt and/or rain runoff from heavy rainstorms. Record flooding occurred in 1955 in the aftermath of the passing of the remnants of two September hurricanes over the watershed area within less than a week: First Hurricane Connie and then Hurricane Diane which was and still is the wettest tropical cyclone to have hit the northeast US. The river gauge at Riegelsville, PA recorded a peak of 38.85' on August 19, 1955. Also see "Canal Breaks."

Delaware River Greenway Partnership is a non-profit organization founded in 1998 that works to bring individuals, communities, businesses, recreational users and all levels of

government together to promote and protect a continuous corridor of natural and cultural resources along the Delaware River and its tributaries. In 2000, DRGP played a leading role in the successful campaign to include the Lower Delaware River in the National Wild and Scenic Rivers System. (The D&R Canal from Bulls Island to Bordentown is mostly within this corridor.) Their strategic mission plan focuses their activities in three areas: • River corridor protection, • Land and water trail development, and • Stewardship and community involvement. www.delrivgreenway.org

Delaware River Mill Society is a non-profit organization based at Prallsville Mills, Stockton, NJ on the D&R Feeder Canal. The first grist mill on the site, at the juncture of the Wickeckeoke Creek and the Delaware River, was built of wood ca. 1720. After it was sold to John Prall, Jr. in 1794 it was replaced by a stone grist mill. Prall also built a saw mill, opened a stone quarry in the area and operated two fisheries in the Delaware River, making Prallsville a major commercial center. The grist mill burned and was severely damaged in 1874 but was rebuilt on the earlier foundation and reopened in 1877, functioning into the 1950's. It was put up for sale as an attractive site for townhouses. A local resident and D&R Canal Commission member, the late Donald Jones, purchased the site in 1969 and held it until the State could afford to purchase it in 1973. The Prallsville Mills were included on the National Register of Historic Places in 1973 and the entire property became part of the D&R Canal State Park in 1974. In 1976 when the State of New Jersey was unable to fund the restoration of its newly acquired Prallsville Mills, local citizens formed Delaware River Mill Society and obtained a long-term lease which gives the Mill Society the responsibility to “restore, preserve, operate, maintain and interpret” the site. The grist mill’s foundation has been rebuilt and deteriorated structural members replaced. Original mill machinery is on display. The old wagon shed was restored to serve as the D&R Canal Commission office. The adjacent Linseed Oil mill, thought to be the best preserved oil mill in the Mid-Atlantic region, had major structural repairs and now functions as an Art Gallery for local artists. Over 30 miles of the abandoned Bel Del Railroad line, from Trenton to Frenchtown, which passes through the Mill site have been converted into a popular recreation trail. Much of that distance was the original, as built, towpath of the Feeder Canal. The Mill Society’s goals are more than architectural. The Mill has become a place of cultural and environmental events attracting wide-spread participation. Concerts, art exhibitions, antique shows, holiday parties, school fund-raiser auctions, meetings, tours, as well as private parties, are a source of income for restoration and maintenance of the site. drms@netcarrier.com

Delaware River Navigation was attempted in 1879. A small steamboat named the *KITTATINNY* was taken up the D&R Canal Feeder to Bulls Island, where it was locked into the Delaware River. It passed up the river to the Delaware Water Gap where the owners planned to run trips to Port Jervis. In attempting to ascend the Delaware she struck a rock at Milford, PA and was badly damaged. After repair and return to the Gap another trip was attempted, but *KITTATINNY* steamed out into the river, struck a rock and sank on May 15th. *Hunterdon Republican*, May 15, 1879. The surface of the Delaware River was one unbroken sheet of ice from the Water Gap to a point near Richmond (Philadelphia). The river was never known to have frozen over completely between these two points before. *Daily State Gazette*, February 3, 1881.

Delaware River Scenic Byway on Route 29 was designated by the NJ DOT in 1996 covering about 34 miles from Trenton to Frenchtown. It offers spectacular views of the D&R

Canal and the Delaware River and travels through the historic riverside towns of Titusville (where Washington Crossing State Park is located), Lambertville, Stockton and Raven Rock (where the D&R Feeder Canal begins), ending at the southern limit of Frenchtown. For further information and a PDF see the NJ DOT website:

www.state.nj.us/transportation/community/scenic/delaware

Delaware River Steamboat Floating Classroom is a project which was headed by the late Bart Hoebel of Princeton. He acquired a replica of an 1880's sternwheel steamboat from a canal in Ohio, brought it to New Jersey and had it totally rebuilt to US Coast Guard standards and it is now based on the Delaware River in Lambertville, along the Feeder Canal and south of the Lambertville Station Inn. It is called S.P.L.A.S.H. for Student Participation in Learning Aquatic Science and History. Mostly school and other groups are taken on a two mile voyage of adventure, history, discovery, and learning - all ages are welcome. SPLASH engages students in the pursuit of clean drinking water with interactive, on-board ecology lessons; biology; physics and chemistry. Other specialized subjects, such as engineering, river art, river poetry, literature, music, etc. can be taught. www.steamboatclassroom.org

Delaware River Trail is in the Hunterdon County segment of the Skylands Birding & Wildlife Trails guide published by the Hunterdon County Chamber of Commerce. It includes seven sites, four of which are in the D&R Canal State Park, along the Delaware River. Directions, Access & Parking, Site Descriptions and Amenities are given for each location. www.njwildlifetrails.org

Delaware River Water Trail project is managed by one of its sponsors - the Delaware River Greenway Partnership. The D&R Canal Commission is one of the cooperating/supporting agencies. The Delaware River offers some of the finest and most accessible recreational opportunities in the northeastern US. Popular activities include boating, fishing, swimming, camping, hunting, hiking, bird watching, sightseeing along designated scenic highways, and cycling along canal towpaths and bike routes. The trail parallels the D&R Main and Feeder Canals and the D&R Canal State Park for considerable distances between Frenchtown and Bordentown. They publish a traveler's waterside guide to the wild and scenic Delaware River from Hancock, NY to Trenton, NJ. The trail system includes uniform signage, maps, a trail guide and an interactive web site. They are also known as Interstate Water Trail (New York, New Jersey and Pennsylvania) www.delrivgreenway.org

Delaware Valley Navigation Co., headed by C.M. Coen, president of the Coen Vessel Co. of Atlantic City, in October, 1905, was organized to operate a fleet of powered steel canalboats, 85' long and 14' at beam to operate in the coal trade between Mauch Chunk, PA and NYC via the Lehigh-Delaware and D&R Canals. It was also looking to establish a vessel-building plant in Trenton. Coen apparently overlooked the fact that most of the Delaware Canal locks were only 11 feet wide. Nothing ever came of his grandiose plans.

E. W. **Deming** made a round trip in his new gasoline yacht, *ZETA* from New Orleans, up the Mississippi across the Great Lakes, through the Erie Canal, down the Hudson, and via the D&R and C&D Canals, along the intra-coastal waterway to Florida and return to New Orleans in 1899. *The Rudder, Vol. XI, No. 4, April 1900.*

Derailment - Singular Accident: Last Monday as the Trenton and Amboy line was on the way to Trenton, by some means two of the freight cars about the center of the train jumped from the track, broke loose from the other cars, and ran into the canal, doing no other damage to the rest of the train. *Bordentown Register, March 14, 1862.*

Derailment at Goat Hill: The Pennsylvania Railroad escaped an appalling wreck just south of Lambertville. A broken flange on a coach wheel derailed a crowded excursion train, which had originated on the Lackawanna. Serious tragedy was averted when the wheels of the derailed coaches remained on the ties until the train was brought to a complete stop. At this point the track was very close to the Feeder (canal) and, in fact, the last car “swung over to a perilous position but the couplings held it..” *Lambertville Beacon, August 6, 1921.*

Derailments at Titusville: Seven cars of coal were thrown from the Belvidere Railroad at Titusville on Monday night, about 11 o’clock, and the contents were principally dumped into the canal. Four other cars were thrown down on the opposite bank. *Daily State Gazette, July 16, 1873.* Around 5pm the locomotive and tender of the northbound passenger express train No. 372 with 150 passengers aboard, approaching Titusville, mysteriously separated from the train, jumped the track, and plunged into the Feeder Canal. The uninjured engineer, Frank Raub of East Stroudsburg, and the fireman, Edward Beaver of Trenton, swam safely to shore. The passenger coaches were undamaged and remained on the track. None of the passengers were injured or even shaken up. Indeed, ladies from the nearby Presbyterian Church, who were holding a church supper at the time, rushed coffee and sandwiches to the astonished crew and stranded passengers. The conductor of the run was William Weaver. *Lambertville Beacon, November 3, 1928.*

Derailment South of Lambertville: A freight train which left Trenton early yesterday morning, in consequence of a snow bank and ice was thrown off the track two miles south of Lambertville and the locomotive and tender were carried into the Feeder of the Canal. The engineer and fireman saved themselves by jumping. In falling, the engine and tender became disconnected from the cars. *Daily True American, January 15, 1856.*

Derailment at Washington’s Crossing: By the derailing of three cars of coke at Washington’s Crossing, on the Belvidere Division of the Pennsylvania Railroad yesterday afternoon, a house was partially wrecked, a woman had a narrow escape from death, a horse ran away, the D&R Canal Feeder was blocked, and 500 people ate suppers several hours later than they intended. Shortly before 4:30 o’clock in the afternoon a northbound coal train, hauled by engine No. 2050, one of the big “hogs,” in charge of Engineer Robert Reed, pulled out of the siding nearest Washington’s Crossing station. When about two thirds of the train had passed onto the main track, the couplings parted, and the locomotive dashed ahead with its trail of freights, until the last car had cleared the road crossing for some distance. When it was discovered that the train had parted, the front part was backed towards the station, and in so doing a car of coke left the rails, on the west side, and crashed into the home of the Nelson’s, wrecking the corner wall up to the third floor... ..In the meantime two other coke cars followed the leader, and all three toppled over into the canal feeder, just above the road bridge, blocking the stream so that boats could not pass... ..The wrecker, which had been doing duty at Manunkachunk, where a coal train was derailed earlier in the day, was called for, and it arrived

on the scene at 6:15. As soon as the wrecker arrived the trucks remaining upon the track, together with one of the coke cars which had only partly fallen into the canal, were dumped unceremoniously down the embankment... The three cars of coke went to "feed the fishes," as nearly the whole amount floated down stream, where it was fished out by enterprising citizens, who saw a chance to secure some good fuel. *State Gazette, May 28, 1904.*

DIANA was a 65-foot-long, wood hull, party fishing boat built in New Brunswick by resident John J. Ziegler. It operated out of the New Brunswick D&R Canal basin and continued to do so for several years after the canal closed as the basin was kept functional. It originally had a 200 hp gasoline engine but by 1960 it had a 330 hp diesel engine and was then owned by Robert F. Ziegler, Inc. After the New Brunswick basin closed, **DIANA** operated out of Brielle, NJ into the 1970's. During WW II the vessel was chartered by the US for coastal patrol service.

Dividends Paid to D&R Canal Co. Investors: The Joint Companies began paying dividends at the rate of 6 per cent in the early 1830's when construction was still under way and capital funds needed. Apparently the directors thought that the companies would be more favorably regarded in the financial world if the stocks yielded a return. The stock was put on a 10 per cent basis in 1838, and for the next two decades the rate ranged between 6 and 12, while extra dividends were occasionally declared. The shares of the Joint Companies usually sold well above par and were considered a prime speculative investment on Wall Street and in Philadelphia. *From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 272-3.* Investors in the Canal Company had been receiving a steady 10 per cent on their stocks for over three decades. *Elizabeth G. . Menzies, Passage Between Rivers.* Five Percent plus an extra dividend of \$12 per share was declared on January 12, 1852. Dividends of the Joint Companies were declared irregularly and ranged from 16 to 40 per cent, while a few sales of the stock were made at over \$1,150 a share. *Neilson Papers.*

Dolphin Line a/k/a Trenton Transportation Co.

William **Durham**, who as a mule driver entered service of the D&R Canal Co. in June 1839 - even before the Pennsylvania Railroad was chartered - has been on the PRR payroll for the longest period (of any worker). At the time of his retirement he was a pilot on the floating equipment at Jersey City. *Old PRR employees, NY Tribune, July 13, 1908.*

Drownings in the D&R Canal occurred by the dozens and the author/editor has chosen to spare the reader/researcher most of the gory details. However, several are necessary to give the proper historic context to this work and they are: Captain Thomas R. Reed of the canal packet boat **DOLPHIN**, had been asleep in a carriage on board; arose and being but partially awake; walked off the stern of the vessel and was drowned. *Princeton Whig, September 23, 1836.* About three o'clock on Friday morning last the captain of a coal barge, while pushing the boat along with a pole, fell into the water in consequence of the breakage of the pole and was drowned before assistance could be given. His body was recovered some ten or twelve hours later. We understand his name was John Carroll. *The Fredonian (New Brunswick), July 20, 1853.* Yesterday morning the schooner **ISAAC ANDERSON** was coming through the canal and when at Baker's Basin one of the hands, named Peter Corson, aged 21, fell overboard and was drowned. He was asleep on deck, leaning against the shroud. The man at the helm saw him fall overboard. The captain was in his cabin at the time. He rushed out and tried to get the drowning man to

catch hold of a pole, but he did not seem to notice it and drowned. An inquiry was held on the body by Squire Baker, and a verdict of accidental drowning was rendered. *Daily True American, June 4, 1857*. Yesterday morning about 3am a boatman named John McCall of Philadelphia, went to the Inspector and Collector's office at the outlet of the D&R Canal, and procured the necessary papers to pass his boat the *GENERAL KINE*, through the canal. Not returning to his boat, a search was made for him which resulted in the discovery of his hat floating in the water about twenty yards from the office. It was supposed that the glaring light of the office dazzles his eyes, and he walked off the pier before he got used to the darkness without. *Bordentown Register, June 16, 1871*. Mule driver knocked off towpath - *Daily State Gazette, May 2, 1873*. A boat hand named Wm. H. Hughey, employed on the boat *SUNBEAM* was drowned at Coalport when he apparently had too much to drink and fell off his boat. *Daily State Gazette, August 21, 1873*. A deck hand named Thomas Alexander fell from the boat at Mitchell's lock last night about 9 o'clock and was drowned. *Daily True American, April 21, 1883*. On Thursday afternoon a young colored man in the employ of Mrs. Martin Crusen, of near Princeton, drove the cows down to the canal to water, and although he was unable to swim, plunged into the water to cool off. He was unable to get out, and no assistance being at hand, he went down and was drowned. *Daily True American, July 7, 1883*. Raftsman Drowned in Canal, *Daily True American, April 17, 1884* A New Brunswick boatman drowned and two other crew members narrowly escaped their sinking canalboat above the outlet lock at Bordentown. *Weekly True American, November 4, 1887*. Henry Strauss, a 12-year-old boy, was drowned in the D&R Canal last night about 8 o'clock between Blackwells and Millstone. The body was discovered by a farmhand yesterday and taken by his father to his home at Upper Black Eddy, Bucks County, PA, on the 7:22 o'clock train this morning. The boy was driving the mules drawing Lehigh coal boat No. 2195. The captain of the boat was the boy's grandfather, William Strauss. In some way the boy and the mules fell into the water and the boy was drowned. The boy's father objected to his son driving on the towpath but the boy persisted and would not stay home. His death is a severe blow to the parents who thought much of the lad. *New Brunswick Times, May 10, 1900*. George Kern, 30, who was captain of the canalboat *ELBE* (owned by George Sheenberger of Walnutport, PA), met death in the canal under peculiar circumstances on Saturday afternoon, between 4 and 5 o'clock. While pushing the boat with a long pole from the dock of P.M. Welsh's coal yard across the canal to the towpath, the pole slipped and he was thrown into the water... Kern had completed the unloading of coal from the boat and had sent a boy for a team of mules to tow the boat through the canal, saying he wished to hurry back to his home at Walnutport... *New Brunswick Times, July 23, 1900*. Two Bel Del workmen, Guiseppi Di Arginin, 30, and Henry Mincarini, 50, engaged in constructing a bridge over the Feeder north of Elm Street, Lambertville, fell from a plank, where they had attempted to wash their hands, into the waterway and perished. Evidently a passing freight train had drowned out their cries for help. *Lambertville Beacon, October 7, 1920*.

Duck Island State Recreation Area is divided by the D&R Canal for over a mile and a half north of Bordentown/Crosswicks Creek. It is also known as the Hamilton - Trenton - Bordentown Marsh. Also see "Friends for the Marsh."

F. Spalding **Dunbar**, a yacht designer and builder of Chatham, MA, in the spring of 1932 (the last year of operation of the D&R) traveled through the canal with his recently purchased 60-year-old, log-built, 42' oyster dredge, *BUG EYE*. His experiences well document the deplorable condition and operation of the D&R at that time. *Letter to William J. McKelvey, Jr. Dated May*

3, 1974.

E.I. DuPont gunpowder had been transported through the D&R Canal regularly from the DuPont's mills near Wilmington to New York in the sloop *DUNWOODIE* for fifteen years. In June, 1877 while passing the State Prison with 300 barrels of the hazardous cargo, she was struck by lightning. The mast was so shattered that a new one had to be fitted in Trenton, but the cargo fortunately was not affected. *Bordentown Register*, 29 June 1877. At the end of May, 1902, a gunpowder load totaling 12 tons was shipped from Wilmington, DE to Bridgeport, CT in the steamer *MARY*. Two weeks later another load was also shipped through the D&R, this time in the *FLORENCE NORTON*, bound for New York. Both vessels encountered lightning storms in the Bordentown area, but were also fortunately not affected. *Bordentown Register*, 30 May 1902.

Durham Boats: were last used in the Lambertville area. They were taken into the Delaware River and used to collect boulders from the shallow river bottom for use in paving city streets. These were true "cobblestones." The last Lambertville boat also served in carrying various kinds of produce, and especially clams from New Brunswick to towns along the canal. They were not randomly sold, but had to be pre-ordered. *Navigation of the Upper Delaware*. Also see "Brooklyn Navy Yard," and "Cobblestones."

Eagle Fire Co. of Bordentown provided a steam pumper which was hauled by horses north along the railroad two miles to fight a huge fire resulting from an explosion of oil on a canalboat in the adjacent canal on June 23, 1864. Hundreds of barrels of coal oil were consumed and the surface of the canal and the railroad ties were on fire. Both the canal and the railroad were blocked. The fire pumper worked for 11 hours and finally put the fire out. The name of the canalboat was not known. *Daily True American*, June 24, 1864.

Earnings of the D&R Canal: Compared with the Camden and Amboy Railroad, the D&R Canal enjoyed only a moderate financial success and the act of union (the joint ownership) proved a great boon to its stockholders. Although receipts steadily increased, the earnings were for many years insufficient to support the capital investment, and were possible only because of the large profits of the railroad. During the first ten years of operation the canal returned on the average less than 1 per cent on its cost. Gross income rose from \$47,141 in 1835 to \$79,467 in 1840, while net income ranged between \$10,000 and \$40,000. During those same years the Camden and Amboy was earning \$300,000 or \$400,000, or more than ten times as much. With the increase of coal shipment in the 1840's this disparity became less, and in 1847 the canal earned \$161,707, and this proportion of 1 to 2 remained fairly constant until the Civil War. The earnings, of course should be considered in relation to the capital investments. In 1852 the canal had cost \$3,040,506, the railroad \$4,327,498. Thus the former earned in that year about 8 per cent, the latter about 11. In the Civil War the canal exceeded the railroad for the first time. As in the case of the Morris Canal, wartime activity caused a great expansion in traffic, and in 1865 D&R earnings amounted to \$810,431 – almost as much as that returned by the railroad. Unlike the Morris, however, the D&R continued to enjoy prosperity, and in 1871, the year of its lease to the Pennsylvania Railroad, its net income was \$1,212,429. *From Indian Trail to Iron Horse*, by Wheaton J. Lane Peak net earnings year for the D&R were \$933,643 in 1866 and peak gross income for the D&R was \$1,519,991 in 1873. After 1892 the D&R Canal operated in the red. Early annual reports provided meager information on the income generated by the D&R Canal Company.

Earnings of the D&R Canal Company in its most profitable years have been characterized by some knowledgeable historians as “studious concealment” and “organized plunder.” Also see “Dividends Paid.”

East Coast Greenway: is a developing trail system spanning nearly 3,000 miles between Canada and Key West, FL, linking 25 major cities of the eastern seaboard. The NJ portion of the Greenway covers 94 miles between PA and NY. It passes through bustling urban areas - Jersey City, Newark, Union, Rahway, Edison, Metuchen, Woodbridge, Highland Park, New Brunswick, Princeton, and Trenton - as well as quiet suburban settings and more rural landscapes than one might expect. The route is currently 48% on traffic-free paths, and has the second highest percent of completed trail in any Greenway state. The route includes the ECG’s longest completed segment - the D&R Canal Towpath, which is 34.3 miles long. A guide to the New Jersey Segment of the East Coast Greenway Multi-use Trail has been published.

www.greenway.org/nj

East Millstone is located on the D&R Canal in Somerset County between Blackwells Mills and Zarephath. It was incorporated in 1873, but became part of Franklin Township in 1949. The East Millstone Historic District was added to the National Register of Historic Places in 1983. The Mercer & Somerset Railroad, connected with the “frog war” ran to the village and the New Brunswick and Millstone Railroad connected it with the Pennsylvania Railroad main line. The village once had a busy basin on the canal, but it was filled in long ago. The site is now occupied by the East Millstone First Aid Squad building and a playing field at the rear. Also see “Mercer & Somerset Railroad.”

Easton & McMahon Transportation Co. operated boats from the Delaware Canal to the D&R ca. 1907. The principals were James T. Easton and James McMahon per Federal Case No. 7,134, Jackson v. Easton et al. In the latter case E & M hired a canalboat for \$5 a day, they to pay for the towing of the boat, from New York to Baltimore and back (via the D&R Canal). They employed a tug, which was apparently a proper one, to tow the canalboat, and while she was being towed, the boiler of the tug exploded, and the canalboat was so injured that she sank. Her owner, Jackson, filed a libel against E. & M. to recover damages: *Held*, that, under the contract between J. And E. & M., the latter did not become insurers of the canalboat. See also “Warn v. Easton & McMahon Transportation Co.,” 2 NY Supp. 620, 622

Eckloff Marine: in 1926 purchased an ex oyster boat, powered by a gasoline engine, built in 1917 at Paulsboro, NJ. It was converted to become the firm’s first oil boat, *AZALEA*. It was so named because of the flowers along the D&R Canal through which it operated.

The **Edison Film Corporation** favored Raven Rock or Bulls Island, seven miles above Lambertville, for shooting films. During May 1910 the classic, early motion picture, *A Western Romance*, was filmed at this location near the terminus of the Feeder Canal. *Lambertville Beacon*, May 5, 1910.

Eighth Massachusetts Artillery, Captain Cook’s Battery was aboard a special Camden & Amboy Railroad train from NY to Camden in June 1862. A railroad crew, set out a signal to do repair work and had removed a rail below Trenton where the railroad runs along the

D&R Canal. The train failed to stop and was derailed - the first car was completely demolished and four of the others were precipitated into the canal. Two of the soldiers was killed; four injured, and twelve horses were lost. Water was let out of the canal to facilitate the recovery of commissary stores, ammunition and Colt pistols by workmen. *Daily True American, June 26 & 27, 1862; Newark Daily Advertiser, June 26 & 27, 1862.*

Eldridge; The body of Capt. Alvah Eldridge, of the Delaware and Raritan Canal Company's barge Pequest, was found in a lock at New Brunswick, N.J., Saturday Aug. 1st. Capt. Eldridge was 67 years and 7 months old, and was formerly from Noyan, L.I., from which place he leaves many dear friends to mourn his loss. *The Long Island Traveler (Cutchogue, N.Y.) 1971-1940, August 13, 1874, Page 2, Image 2.*

Eleutherian Mills Historical Library, Greenville, DE, among items of D&R Canal interest, holds a series of aerial views of the canal, mostly along the Delaware River, showing Trenton, Bordentown and the feeder, but also in the Princeton area, mostly taken in 1930 & 1931. www.hagley.lib.de.us From 1802 to 1921, Eleutherian Mills was a gunpowder mill site, used for the manufacture of explosives by the Du Pont family business - and some of their product was shipped north via the D&R Canal. In 1952 the site became an outdoor museum and the Hagley Museum and Library were founded. www.en.wikipedia.org Also see E.I. DuPont.

ELKO, a large freight steamer belonging to William Clyde & Co., which left New Brunswick at 11 o'clock Monday evening was nearing Trenton when she was discovered to be on fire. At No. 3 Lock opposite Riverview Cemetery the fire got beyond control and Trenton engines were called to the spot. In spite of this assistance the steamer was burned to the water's edge with her entire freight which included a number of horses. The steamer *ELKO* makes weekly trips between Philadelphia and New York, Albany and Troy and was in charge of Captain Warren. *New Brunswick Daily Press, 4/23/1902.* The 206-foot steamer *ELKO* of the Clyde Line caught fire mysteriously last Tuesday at the Three-Mile Lock and had all above the deck destroyed. The hull and cargo were saved by scuttling the steamer. The loss is about \$80,000 but would have been greater if the cargo in the hold had not been saved. Two Trenton steam fire engines did excellent service during the fire. Wednesday, the tug *LOOKOUT* from Philadelphia came up and the water was pumped out, and yesterday arrangements were made to tow the wrecked steamer to Philadelphia where she will be rebuilt if it will pay. There was some insurance. A lot of people went up to view the wreck which fortunately lay in such a position as not to prevent traffic through the canal. *Bordentown Register, 25 April, 1902* Monday the burned hull of the *ELKO* was towed to Philadelphia. The loss of the cargo was total as the fire burst out again on Friday and finished the work begun two days previously. *Bordentown Register, 2 May, 1902.*
NEED TO CONTINUE RESEARCH IN US MERCHANT VESSEL REGISTRIES @
PRINCETON UNIVERSITY

The **Enterprise Railroad,** a Bel-Del subsidiary, was chartered on July 26, 1884 to build industrial trackage north from Feeder Junction on the west side of the Main Canal in the Coalport area of East Trenton. The Enterprise Railroad was completed increasing trackage facilities for developing manufacturing firms and businesses. This industrial line was built at a cost of \$45,114.49, including a bridge over the Feeder Canal, 1.26 miles of main track and 0.3 miles of sidings. Within a decade the line extended a total of 2.2 miles, and on April 14, 1896 the railroad was merged into the Bel-Del. *Daily State Gazette, July 26, 1885.*

Epizooty, the horse disease, was contracted by 90% of the 600 mules used by R.S. Conover in towing on the D&R Canal in November of 1872. The principal hospital for sick animals was at Trenton. *Bordentown Register, November 15, 1872.* Yesterday was a bad day for horses. The disease was very bad among the horses at the canal stables. One horse that had been quite sick was put to service yesterday, and after being driven about town a short time fell down dead. There were few on the streets yesterday. A gentleman, who professes to be learned in horse diseases, gives it as his opinion that the disease is scarlet fever, and gave some very sensible reasons for his opinion. *Daily State Gazette, November 15, 1872.* The horse disease, we are happy to hear is abating. There were quite a large number of horses out yesterday. We learn that all the mules at the canal stables are well. Mr. McGuire's team was out yesterday, and the horses of a number of others were out performing a little service. *Daily State Gazette, November 22, 1872.* A team of mules, very much afflicted with the epizooty, came up to the canal stables on Thanksgiving Day, and were compelled to stop. It wasn't long after when one of the animals died. *Daily State Gazette, November 30, 1872.*

John **Ericsson** was the designer/inventor of the screw propeller who Robert Stockton engaged to apply to the small tugboat he had built at Birkenhead, England for the D&R Canal Co. Ericsson followed the tugboat *ROBERT F. STOCKTON* to New York in November, 1839. By the close of 1841 he had built six more propellers. The next year he launched nine and in the following year sent 26 down the ways. His contractors were the young and enterprising firm of Hogg & Delamater, who took over Cunningham's old Phoenix Foundry in New York soon after he came to New York. One of the most immediate results of Ericsson's activities was the establishment of the Swiftsure Steam Transportation Line between New York and Philadelphia, via the D&R Canal. In 1842, four iron propellers designed by Ericsson were laid down in New York for the purpose of carrying coal on the D&R Canal. *Queens of the Western Ocean, by Cutler.*
Note: A statue of Ericsson is located at the Battery in New York City.

Ericsson Propellers: It is stated that it is a proposal so to reduce the toll on the D&R Canal as to make it an object for the Ericsson propellers plying the sea between Baltimore and New York to take the inland route - passing through the Chesapeake and Delaware Canal and the D&R Canal. The only condition required to consummate is that the line now running outside shall not land at Philadelphia and thus interfere with the carrying of trade between Philadelphia and New York which the D&R Canal now enjoys. Should the arrangement be made and the tolls on the D&R Canal be reduced as desired, much the greater portion of the trade between Baltimore and New York now carried on the sea in sloops &c would pass up the Delaware and very materially swell the receipts of the canal. *Public Ledger (Philadelphia), April 14, 1845.*

Erie Canal Electric Traction Co. of New York tested a battery-powered towing vehicle it was hoped would be able to replace mules. Near Trenton it successfully towed a 100 ton boat at 3mph. However, as it was being turned to go back to the stable it failed to work properly, and instead of going forward it lurched back and plunged into the canal... *Bordentown Register, May 4, 1900 & New Brunswick Times, April 19, 27, and 28, 1900.*

Excelsior Terra Cotta Co. established a manufacturing facility along the D&R Canal at Rocky Hill in 1894, enabling them to utilize the canal for transportation. However the Pennsylvania Railroad soon took most of the business from the canal. In 1907 Excelsior became

part of the Atlantic Terra Cotta Co., the world's largest manufacturer of architectural terra cotta. At its peak the Rock Hill facility, known as Plant No. 3 employed 2-300 workers and operated nine kilns. The factory closed in 1932, the same year as the canal.

Experiments With Boat Models in D&R Canal: Messrs. Stevens have been engaged for some time in experimenting with model boats in the canal near Bordentown. They have ascertained that by breaking the vacuum of the water from the bottom of the boats, which is done in a simple manner, by the insertion of air tubes in the bottom, the boat will attain a speed double of that now made. A day or two since they attached the end of a line to a model boat and the other end to the locomotive on the track extending some distance along the canal, and the boat was towed at the rate of 35 miles an hour. This appears to prove that steamboating is yet in its infancy, and by this above improvement steamers of all kinds can be made to travel at the rate of 50 miles an hour. *Jersey City Advertiser and Hudson County Republican, October 20, 1846.*

Explosion: The steam propellor *MICHIGAN*, Captain Jones, burst her boiler on Thursday (Sept. 15th) near Rossville, Staten Island. The steward was killed and the captain and engineer wounded. Several of the injured passed through (Trenton) yesterday on the steamer *VULCAN* on their way to Philadelphia. The *MICHIGAN* is one of the propellers of the Philadelphia and New York Line that pass through the canal daily. *Daily True American, September 17, 1853.*

Express Steamboat Co. operated NY - Phila. ca. 1860. Per ad of 1860, Wm. P. Clyde & Co. of Philadelphia were agents.

Extension of D&R Canal to Phillipsburg: In our advertising columns is given that application will be made to the next legislature, for authority to construct a canal or slack-water navigation, from the head of the navigable feeder of the D&R Canal to Phillipsburg, opposite Easton. If this canal should be built, boats loaded with coal can pass from the Lehigh Canal directly into the canal on the Jersey side, and thence by the most direct route, into the D&R Canal at Trenton, a great saving of time over the route by Bristol (PA) and Bordentown, and avoiding the Delaware Division of the Pennsylvania canal altogether. There is now an outlet lock in the Pennsylvania canal opposite Lambertville, by which boats can pass into the Feeder, but by the regulations of the Pennsylvanians it costs more to bring a boat to Trenton by that route than it does by way of Bristol and Bordentown. *Daily State Gazette, September 2, 1858.*

F. W. BRUNE was an iron-hull, steam powered, propellor driven, freight canalboat built in 1860 at Wilmington, DE by Harlan & Hollingsworth. She was nearly 400 tons, 154' x 23' beam x 7'6" draft, loaded, and had a crew of eight. *BRUNE* was originally operated by the NY & Baltimore Transportation Line, operating through both the D&R and C&D Canals. She had a splendid Civil War record, carrying troops and supplies via the inside passage from New York to Washington, DC and was purchased and operated by the Trenton Transportation Co. in 1901. This vessel was the oldest steamboat in the Delaware Valley prior to abandonment in 1927.

Facilities for People with Disabilities: The towpath and recreational facilities at the D&R Canal State Park are partially accessible to persons with disabilities. Please contact the park office for further information regarding disability access needs. Text telephone users, please call the New Jersey Relay Service at (800) 852-7899. *D&R Canal State Park brochure*

Faherty's On The Delaware Restaurant has a lovely location overlooking the D&R Canal; the former site of the Bel Del Titusville railroad station; the Delaware River; and the bridge to PA. They also have a VERY NICE deck, seating 35 on the river side. Offerings include: soups & salads; appetizers and sandwiches; entrees of fish, steak, chicken, ribs, etc.; various sides; a children's menu; beverages and many beers. If located in the UK it would not be "Faherty's", but would have a large rectangular sign out front with an illustration of General George Washington crossing the Delaware hanging out front. Rt. 29 (River Road) and County Route 546, Washington's Crossing (Titusville). Open Daily, Phone 609.737.0002 NEW NAME UNDER NEW MANAGEMENT....

Feeder Canal: Construction of the D&R Feeder Canal began in 1831. Sandstone for the locks and culverts of the waterway came from the Prallsville, NJ quarries. *Lee, Warren F. & Catherine T.; A Chronology of the Belvidere Delaware Railroad.*

Financing D&R Canal Construction: Soon after the charters for the D&R Canal and C&A Railroad were simultaneously granted on 4 February 1830, the sale of stock was begun. All the railroad stock, amounting to \$1,000,000, was subscribed in ten minutes, whereas only slightly more than \$100,000 of canal stock was taken in the first few days after the books were opened in Trenton, Princeton and New Brunswick. The situation appeared "almost hopeless" when Robert F. Stockton came forward and subscribed to 4,800 shares, enabling the company to organize. The future Commodore persuaded his father-in-law, John Potter, who had recently moved to Princeton, to advance the money, and the major proportion of these shares was subsequently transferred into Potter's name. Since the canal cost far more than expected, the receipts from the original sale of 10,000 shares and the later offering of 5,000 shares proved inadequate. Note: Each of the Joint Companies gave 1,000 shares of stock to the State of New Jersey. Each levied an extra assessment of \$10 a share on the original issue to secure capital equivalent to the face value of the stock given to the state. The second issue of canal stock was offered in 1832 and apparently all but 40 shares were taken at that time. To finish the work, the canal company put out an issue of notes totaling \$800,000, bearing 6 per cent interest and payable in 30 years. The notes were purchased at 108 in the summer of 1833 by interests associated with or friendly to the enterprise, since New York bankers had demurred over the issuance of such a loan and doubted their ability to float it. *New Brunswick in History, by W.H. Benedict, p. 221 & From Indian Trail to Iron Horse, by Wheaton J. Lane* John Potter alone took \$405,000, Nicholas Biddle, the president of the Bank of the United States, took \$245,000, R.L. Stevens \$100,000, and the Trenton Banking Company \$50,000. Although this debt was incurred for the benefit of the canal, all loans were necessarily joint obligations of the two companies. The total cost of construction of the D&R Canal was about \$2,800,000, which in 2010 dollars would be about \$75,000,000 In 1835 recourse was had to the English market, and \$210,000 at 5 per cent was obtained through the banking house of Baring Brothers. *Neilson Papers* The panic of 1837 weakened the financial position of the Joint Companies, since all available funds had been used for railroad construction. It was impossible to obtain a loan on reasonable terms at home, and Stockton went personally to interview the London bankers, despite the fact that American securities were generally regarded with disfavor. By mortgaging the canal he was able to sell a 6 per cent bond issue of \$225,000 at 95, a feat which was "deemed at the time a financial operation of no ordinary character." *A Sketch of the Life of Com. Robert F. Stockton (New York 1856), p. 66* The funds

received from these three loans totaled \$2,833,829, a sum which was almost evenly divided between the canal and railroad companies. *Report of the Joint Board of Directors, 1840.* With the increase of traffic in the late 1830's, both canal and railroad entered a long period of prosperity. *From Indian Trail to Iron Horse, by Wheaton J. Lane.*

Fire at Canal Shop: At one o'clock on Sunday morning the carpenter shop belonging to the D&R Canal Company caught fire and was destroyed. Besides a large amount of lumber, one mule, five hundred dollars' worth of rope, one wagon and 500 cedar shingles were lost. The total damage will amount to &15,000. There is no doubt the fire was incendiary, but no clue has been discovered as to the perpetrator. *Newark Daily Journal, May 8, 1871.*

Fire Averted: On Monday night the private watchman for the Merchants' Line noticed a strange light over the office of Fish & Green, occupied by the Canal Co. He called Mr. Hillman up, who proceeded to the office and found the stove upstairs red hot. In a few moments the place would have been on fire, which was prevented by the timely discovery. *Daily True American, October 30, 1872.*

Fire Caused by Railroad?: In February, 1885 a collision on the Pennsylvania Railroad in New Brunswick resulted in the release of oil from tank cars which ignited and then flowed into the gutter and into a sewer, which then ran into the canal. This resulted in burning oil on top of the ice in the canal with flames two or three feet high. This chain reaction resulted in a fire which did an alleged several hundred thousand dollars of damage to the Janeway & Co. factory which was located on the bank of the canal. The denial of restitution by the PRR resulted in litigation heard in the U.S. Circuit Court. *Weekly True American, April 23, 1886.*

Fire on a Boat: Yesterday, about half-past 12 o'clock, an alarm of fire was sounded, and the department responded. It proceeded from a canal boat named *OWEN BRADY*, a short distance north of the prison locks. A kettle of pitch was boiling on deck, and while the men were engaged in unloading the boat the pitch took fire. The flames presented a formidable appearance, and an awning was slightly burned; but the flames were extinguished without the aid of the department. *Daily State Gazette, September 6, 1872.*

Fire Pumper: A large gathering of firemen assembled on the canal bank, near Prospect Street, Monday afternoon to witness the testing of the America's re-built (steam pumping) engine. The test is pronounced satisfactory in every respect. ...It was stated last night that a stream measuring 307 feet in length was thrown by the engine during the test. *Weekly True American, March 26, 1886.*

First canal boats from Pottsville to New York were the *GREAT WESTERN* and *SIRIUS* which arrived at New York via the D&R Canal with coal belonging to Messrs. Stockton and Stevens. *Jersey City Advertiser and Bergen Republican, July 3, 1838.*

The First interlocking in America The location of this first interlocking tower was the "Top of the Hill", Trenton, alongside the D&R Canal, where the Bordentown Branch joined the new main line at Hamilton Avenue. It was south of the current Trenton station, very near the present Trenton-Camden RiverLine light rail vehicle service/storage building. (Adapted from an article printed in the Railroad Age Gazette on Sept. 25, 1908 by J.A. Anderson who was

employed by the Belvidere-Delaware Railroad.), published in Vol. 1, No. 1, Fall, 1993 issue of The Home Signal, a publication about railway interlockings and towers compiled by Richard P. Stair and Jon Roma.

First New Jersey Brigade, New Jersey Militia was mustered into the service of the United States at Trenton on April 30, 1861. Because of the destruction of railroads and bridges between Philadelphia and Baltimore, 14 steam (canal) transports were hastily fitted out and the First New Jersey headed for the nation's capital where its defense was considered of great moment during those opening days of the war. Brigadier Theodore Runyon, with the brigade, reported to President Lincoln at Washington, May 6, 1861, and it had the distinction of being the first fully organized brigade to reach the nation's capital for its defense.

First Steamboat Through the D&R Canal? The steamboat *MACON* passed through the canal on August 10, 1834 en-route to GA. "...we understand that the experiments with the boat on the canal... satisfied the officers of the company..." *State Gazette, August 16, 1834* and *Newark Daily Advertiser, August 28, 1834*.

First Trip on the D&R Canal: A number of gentlemen made a trip on the canal between Trenton and Kingston in a barge drawn by two horses in about four hours. The water had been let into the level to about three feet deep. At Kingston they had an elegant dinner and then returned to Trenton. *Emporium and True American, November 30, 1833*.

Benjamin **Fish** operated vessels between Trenton and Philadelphia on the Delaware River and began using the D&R as soon as it opened; eventually merged to become part of The Merchants Transportation Co. "Mr. Benjamin Fish is putting up a new storehouse at the Trenton Basin, 40 feet square of stone. A frame shed extending from the main building to the basin is to be attached to facilitate the loading and unloading of vessels." *NJ State Gazette, April 5, 1851*. Fish operated one of the first steamboat lines in the D&R Canal.

Fish Eaters Club chartered the steam canalboat *DELAWARE* for a cruise from the Port of Trenton through the D&R Canal to Sandy Hook in August, 1865. There they fished the banks off the light and presumably ate well as they had a cook on board. Additional delegations of the club boarded at Princeton and New Brunswick. They towed a disabled schooner, *MERCHANT*, through the canal to New York. The return trip was not documented. *Daily True American, August 11, 1865*.

Carl G. **Fisher** owned the 22 gross ton, 56' x 11.6' beam 460 hp gasoline powered yacht, *SHADOW J.*, built in 1924 at Trenton, MI. It was an express cruiser with a crew of 2 which was observed going through the D&R. In the following year, Fisher had the 150-foot, steel hull, *SHADOW K.*, built by Consolidated Shipbuilding Corp. It had two 6 cylinder Winton diesel engines with 14" bore and 16" stroke. This type of engine was used in railroad locomotives and was the predecessor of General Motors Electro-Motive Division power plants. The "K" may have been too big to go through the D&R, although the author was told by Bill Glass of Princeton that it indeed did. The self-made Fisher lived a fast-paced life, making his first millions in 1909 after he sold his Prest-O-Lite auto headlamp to Union Carbide. He loved speed, built roads and racetracks, and was instrumental in the construction of the first transcontinental highway, the Lincoln Highway. He was an excellent promoter and is credited with building

Miami Beach and at the height of the 1925 land boom his fortune was estimated at between \$50 and 100 million. He leveraged that to build a northern Miami Beach at Montauk at the tip of Long Island. Fisher's downward spiral began in 1926 and ended in his death from alcoholism in 1939.

Fishing is permitted the entire length of the D&R Canal. Trout are stocked at various locations in central portions of the canal during the spring months. Anglers will find bass, sunfish, catfish, perch and pickerel year round. Access for fishing in the Delaware River is available at several locations along the feeder canal. Fishing is subject to New Jersey Division of Fish and Wildlife regulations. *D&R Canal State Park brochure*

A Fishing and Shooting Cruise to the Chesapeake, by L.H. Rushmore, describes the voyage of the 45-foot wood yacht *WAYFARER*, with a 4-cylinder, 30 hp Ralaco gasoline engine, south and through the D&R Canal. *Yachting Magazine Vol. XVIII, No. 5, Nov., 1915.*

Foam Corp.: See "McAllister Co."

Edsel B. **Ford** was the owner of *MARLIN*, a 23 gross ton, 50-foot sport fishing boat which went through the D&R in 1932. She was built by F.D. Lawley, Inc. at Quincy MA in 1931 with 100% natural finish mahogany. Power was provided by twin six-cylinder Sterling gasoline engines. This vessel was later owned by John F. Kennedy at Hyanisport, MA.

4,000 MEN WANTED Engineers Office, Trenton, N. J. - Enlargement of the Delaware and Raritan Canal - Wanted, Immediately, for this work, 4,000 Men, including a large number of Masons and Carpenters. Also, first-rate energetic and experienced Superintendents, and about 50 Foremen. None but those known to the undersigned, or bringing the very best recommendations, need apply. Applications for these situations will be received at this office on Monday afternoon, the 27th inst., and until Jan. 1. ASHBEL WELCH, Engineer D. and R. Canal. *New York Tribune, 12/22/1852.*

Franklin Line a/k/a Franklin Transportation Co., operated steam canalboats NY - Phila. beginning in 1857. "The barges of the Franklin Line, a new transportation line between New York and Philadelphia, are now performing regular trips. One of the barges was engaged yesterday in loading joists, iron beams, etc. at Whitaker's Basin. By this new line the facilities for transportation are greatly increased. The line stops at all intermediate places on the route." *Daily True American, April 3 1857.*

Franklin Transportation Co. a/k/a Franklin Line, operated the steam canalboat *FANNY GARNER* which was owned by Jacob Shurts of Bound Brook. On April 25, 1857 this vessel suffered a boiler explosion at Weston, five miles from Bound Brook killing five crew members and totally destroying the boat. "The boiler (which was new and only in use four weeks) was carried forward some 200 yards over a hill 50 feet high, through an orchard, and was nearly buried in the ground. Fragments of timber, iron, coal, barrels of eggs, and every description of produce were scattered from 200 to 300 yards around. A part of her connecting pipe and a stick of wood were found in the woods over 500 yards off. A dwelling house on the canal, and within 50 yards of the explosion, escaped with only broken windows, from the fact that the force of the

explosion carried everything over it... ...The following were killed instantly: Coryell Bird, captain; James McMann, Michael Nugent, Patrick Comfort and John Thornhill, deck hands. The injured are A.M. Plack, a passenger from near Princeton, on a visit to his son-in-law in Bound Brook; James F. Barrett, engineer, and W.M. McElvery, fireman - all seriously. The pilot, George R. Mitchell, was thrown out of his pilot house window, and Andrew McCarty, steward, out of his berth on the forward deck. These were the only persons on board that escaped without serious injury. *Newark Daily Eagle*, April 26 & 29, 1857. *New York Tribune*, April 27, 29, & 30, 1857; *Daily True American*, April 27 & 29, and May 2, 1857. The *FANNY GARNER* - This beautiful propellor has again resumed her trips between Albany and Baltimore. She passed through the canal on Tuesday last, and has been thoroughly repaired and repainted. It will be recollected that the propellor blew up some months since on the canal killing ~~three~~ five men. *Daily True American*, September 10, 1857.

Frauds: “An Act to prevent frauds in the manifests of vessels navigating the Delaware and Raritan Canal” was apparently necessary because the honor system had failed... If the manifest “does not contain a just and true account of the said cargo, the master or other person having the charge or command of such vessel or boat shall forfeit and pay the sum of one hundred dollars to the Delaware and Raritan Canal Company...” It was passed on February 16, 1838 by the New Jersey Legislature. Also see “John D. Hager.”

Freight Business on the railroad and canal is enormously heavy just now. On Wednesday up to noon 105 boats were locked through the canal. Some of the freight has to be transhipped to cars and carried through on the road. Who would have supposed that the Delaware and Raritan Canal added to the numerous freight trains would not be able to carry all the freight requiring transportation between the two great cities? And yet this is a fact. The increase in the last five years has been almost incredible. It is safe to say that the Pennsylvania Road is carrying four times as much as the old company did. *Daily State Gazette*, April 18, 1873.

Friends of the Abraham Staats House is located at 17 Von Steuben Lane, on the D&R Canal at South Bound Brook. History toooo long & convoluted - need condensed version...

Friends of the Delaware and Raritan Canal: had a meeting at Princeton, yesterday. We indulge a strong and confident hope, that another session of the Legislature will not pass by, without a law, authorizing the State to commence the work, being passed. The Central Committee on Internal Improvements, hope soon to have ready for the press, a mass of highly interesting and important matter, connected immediately with, and bearing on this subject. *The Mirror of Mount Holly*, July 9, 1828.

Friends for the Marsh is an all-volunteer group whose goals are preservation, advocacy, education and protection. for the huge marsh located in Trenton, Hamilton and Bordentown. Organized in 2004, they are in partnership with the D&R Greenway Land Trust and the Mercer County Park Commission. The Hamilton/Trenton Marsh is a unique urban wetland with significant natural and historical resources. These marshlands connect multiple ponds, several creeks (the largest being Crosswicks Creek), the D&R Canal, and the Delaware River. It also links the Crosswicks, D&R and Delaware River greenways. The diverse wildlife habitats support more than 1,000 identified species of plants and animals and is an outstanding birding area. The Marsh is recognized as a natural attraction and is enjoyed for its scenic vistas, hiking,

canoeing, fishing, photography, birding and other outdoor recreational activities. The area boasts a rich human history that includes the Abbott Farm National Historic Landmark, where Native Americans thrived some 6,000 years ago. In the 1800's the D&R Canal and the parallel Camden & Amboy Railroad were constructed across the marsh. Transportation in that historic corridor continues as it is now the route of the RiverLINE interurban railway between Trenton and Camden. Canoe and kayak trips into the area are organized by the Outdoor Club of South Jersey. The Friends for the Marsh website includes links to the latter organization as well as tide charts for nearby Bordentown Beach where the trips originate. A walkway has been provided on the west side of the RiverLINE bridge over Crosswicks Creek to permit exploration of the Bordentown outlet lock, which is the only known surviving wood crib lock in the US. There is also great potential for a shallow tour boat operator to provide trips for the public on the Delaware River, Crosswicks Creek/the Marsh, and into the lower end of the D&R Canal at high tide as the area is within easy walking distance of the RiverLINE Bordentown station. The Marsh is also known as Duck Island State Recreation Area. www.marsh-friends.org

Friends of Princeton Open Space is a non-profit, tax-exempt organization which was founded in 1969. They have raised funds for the acquisition of easements and the purchase of lands for permanent open space. They have forestalled proposed development which would have destroyed historic farmlands and woodlands. They helped form and fund the Delaware & Raritan Greenway Alliance; raised funds for completion of Turning Basin Park on the D&R Canal; and promote maintenance, publicity and stewardship of existing Princeton parks and open spaces. www.fopos.org

Friends of the New Jersey Transportation Heritage Center, Inc.: Purpose: and intent of the Corporation is to aid in the establishment, maintenance and operation of the New Jersey Transportation Heritage Center; provide support in the procurement, operation, maintenance and preservation of transportation vehicles and related equipment, artifacts, and historical documentation; identify, acquire, secure, protect and donate portions of New Jersey's transportation heritage to a public sponsored railroad and transportation museum or in it's absence, a private non-profit museum within New Jersey. The Corporation shall seek grants, donations and other forms of financial assistance to be used to rehabilitate and/or preserve railroad, bus, trolley, truck and canal vehicles and related equipment, artifacts and historical documentation for the betterment of the New Jersey Transportation Heritage Center; and shall provide a point of contact in these matters for others to deal with in the ongoing efforts to support the above endeavors. Said corporation also referred to as "Friends" is a non-profit corporation of the State of New Jersey and is organized exclusively for educational purposes, including, for such purposes, the making of distributions to organizations under Section 501(c)(3) of the Internal Revenue Code (or the corresponding section of any future Federal tax code). www.njthc.org

From New England to the Chesapeake: Cruising Under Sail and Power in Some of the Most Interesting Waters within Easy Reach of Big Coast Cities, by Major J. Casey describes their trip south in their 30-foot ketch-rigged sailboat, *SAFETY FIRST*, with an auxiliary Doman two-cylinder, 10 hp gasoline engine. "We enjoyed the (D&R) canal as much, if not more, than any other part of the trip... ..it seemed like a fairy tale, sailing across the beautiful state of New Jersey on the peaceful waters of the canal." *Motor Boating, July, 1920.*

Albert **Gallatin** recommended a conventional canal across the neck or waist of New Jersey in his *Report on Roads and Canals* submitted to the United States Senate in 1808.

Galinsky Saved From Feeder: Samuel Galinsky, a boy, a horse, and his wagon load of rags were prevented from falling into the feeder at the park entrance by Park Guard John G. Delaney yesterday afternoon. Galinsky was perched on a big bundle of rags and driving his horse at a hasty gait to the brow of the Park Lane bridge. A canalboat was slowly moving toward the city and the bridgetender carelessly turned the bridge. Galinsky was busy talking to a boy on the wagon and did not notice the opened bridge. Park Guard Delaney rushed to the lines of the horse and yelled to Galinsky to stop. The driver got excited and pulled the lines to the right. The horse became frightened and ran up the railroad track, pulling the wagon and the excited occupants over the rails and ties. The 4 o'clock Lambertville Express was nearly due and the horse was hastily backed to the road and gotten safely out of the way before the train came wandering along. *Daily State Gazette, May 14, 1904.*

Charles H. **Gallagher** operated boats such as the tug boat *EDNA*, on the D&R in the late 1890's and early 1900's. His 1899 letterhead stated: "Chas. H. Gallagher, Coal Port, Trenton, N.J., Contractor of Freights between Phila. and New York, Via Delaware and Raritan Canal, Coal Carrying a Specialty, Sectional Boats from 100 to 500 tons capacity." In 1902 he had a two-section, 125-foot-long, wooden canalboat built at Elkton, MD. He named it the *GEORGE B. MORRISON* (of Trenton) in honor of the local freight agent of the Pennsylvania Railroad for whom Gallagher had great regard. In May, 1903 one of Gallagher's boats, the *BURGETTA*, was hit by another boat and sunk in the D&R Canal. "Charlie Gallagher owns the tugboat *EDNA* and fifteen canalboats." *New Brunswick Sunday Times, March 11, 1923.*

Russel H. **Garretson** was the locktender at Deep Lock, No.13, at New Brunswick ca. 1927-9. He sold gasoline, oil, water, outboard motors and marine supplies to yachtsmen. He provided a complimentary 'Yachtsman's Guide' to transiting boaters which gave them the northbound and southbound running mileages for 43 points along the canal. It identified a "Yacht Basin" between lock No. 3 & No. 4 at Trenton and identified lock No. 13 as "the place to fill your tanks." *Copy provided to McKelvey by Robert G. Herbert, Jr. in 1982.* "While the Sunday Times reporter conversed with Mr. Garretson a large one-masted yacht equipped with an auxiliary gasoline engine went through the lock. Shortly after this, two speedboats used by the coaches of the University of Pennsylvania crew went through on their way to Philadelphia. The boys who were driving them back tied up at the pier above the lock while they went in search of dinner. The boats were returning from the regatta at Poughkeepsie, NY. They were followed very soon by a yacht of the United States Public Health Service bound for New York after completing a survey of the Chesapeake Bay oyster beds. Since all these various craft passed through within half an hour, some idea of summer canal traffic may be obtained." *The Sunday Times, New Brunswick, July 3, 1927.*

Gate Broken: We learn that in consequence of the breaking of one of the gates at the lock at New Brunswick, the water of the D&R Canal at the Five-Mile Level is to be drawn off for a few days to make repairs. *Newark Daily Advertiser, July30, 1849.*

Geology and Geography of the D&R: The canal travels through the Piedmont

Lowlands Geologic Landscape between Trenton and New Brunswick. This area of the state is underlain by Triassic rocks. The Brunswick formation is usually a soft red shale with interbedded sandstone most common in its lower part. Named for its outcropping along the Raritan River (and the D&R Canal) at New Brunswick, it is the most common rock type rock in northeastern New Jersey. The Stockton formation, named for its occurrence in quarries around Stockton on the Delaware (and D&R Feeder Canal) is a light- colored arcotic sandstone with interbedded red sandstone and shale. In the Griggstown-Rocky Hill area, the Palisades sill has an arcuate form and cuts across a great thickness of early and late Newark series rocks, thus indicating that it was intruded late in Newark times even though most of the sill is intruded between the lower beds of the series. At the end, the Palisades sill cuts across strata so steeply that it resembles a dike. The trap rock quarry at Rocky Hill was originally a freight customer of the D&R Canal. The clay beds of the Raritan formation are still worked around Sayreville and South Amboy and were formerly worked around Trenton. This clay provided the raw material for bricks, terra cotta and, for a time the porcelain and pottery industry, especially in the Trenton area for which New Jersey is now so well known. Much of these raw materials and finished products were transported by canalboats in the past. New Brunswick, Lambertville, Princeton and Trenton are among the cities with an interesting history of transportation development by road, canal and/or rail because each is at a low level exit from the central Jersey Triassic basin or at a water gate for commerce whether it be ocean or river. The easiest and lowest path across the “waist” of New Jersey was, five to ten million years ago, the route of the Raritan River, which at that time flowed southwest, crossing the state diagonally and pouring its waters into the Delaware River near Trenton. This was during the period when the Wisconsin ice was upon New Jersey and Glacial Lake Passaic apparently flowed through the Rocky Hill gap. If the ocean were to rise one hundred feet, the Coastal Plain would be reduced and shallow straits or sounds would connect Philadelphia and New York through Trenton and New Brunswick. The geographic development of New Jersey was directed by its flanking rivers, the Hudson and the Delaware, and their tributaries. New Jersey’s favorable geographic location, between two of the best harbors on the Atlantic coast, is augmented by navigable waters which form nearly three-fourths of the State’s boundary. *The Geology and Geography of New Jersey, by Kemble Widmer*

Germantown Academy Principal, Dr. William Kershaw, with his son and daughter traveled in their launch from Philadelphia; up the Delaware Canal to Easton, PA; through the Morris Canal to Newark; the D&R Canal to Bordentown; and the Delaware River back to Philadelphia in their 15-foot launch in 1916. *Reference not available.*

Capt. Frank H. **Godfrey**: The following are excerpts from the detailed memories of a canal boatman who went through the D&R. “For two or three years, when I was just big enough to remember, we ran wall paper in rolls from the International Paper Mills at Fort Edward, NY yo above the river lock at New Brunswick to a dock and storehouse on the heelpath. (This would have been the large, 5½ story tall, Janeway & Co. wallpaper factory.) Here the cargo was unloaded and run through the presses to print wall paper designs. We also had odd loads going through to Philadelphia. My grandfather Walrod held the shipping contract and it kept his boat, my uncle’s and my father’s boats busy to keep up with it. Steam canalboat fleets carried cargoes from Buffalo to Philadelphia, Baltimore, and at times to Washington, DC, returning with general dry cargoes for Buffalo. *Notes on the Delaware and Raritan Canal, PA Canal Society, Canal Currents, No. 23, Winter 1973, Pages 3-4.*

Griggstown is located on the D&R Canal between Rocky Hill and Blackwells Mills and was settled in 1733. Lock #9 is located there, as are the Griggstown Muletender's Barracks. A small turning basin is located on the east side of the canal across the bridge, opposite the barracks. The village is now an historic district on both the state and national historic registers and a part of Franklin Township.

Griggstown Copper Mine is located approximately four miles north of the former Rocky Hill railroad station on the east side of the Millstone River, about 150 feet above the water and along the D&R Canal. The mine is located on the smooth, rounded slopes that extend downward to the canal. It was last worked in the 1800's. *The Griggstown, NJ Copper Deposit, Walter Harvey Weed in United States Geologic Service, Contributions to Economic Geology, 1903.*

Gulf Oil Co. tanker *NESHANNOK* delivered fuel oil to customers along the D&R Canal in the final years.

John D. **Hager**, an original stockholder, and formerly secretary of the D&R Canal Company, in 1847 instituted proceedings in Chancery against the officers, alleging fraud and violations of trust, and demanding an accounting. Hager obtained two injunctions restraining the officers, but his motion for the appointment of a receiver was denied on the ground that "if a large accumulation of property by a corporation should appear to be the result of a fraud on the rights of others not parties to the suit, the court would not become the instrument to distribute the moneys accumulated by such a fraud, on the application of one who had been of the fraudulent proceedings which resulted in such accumulation." *6 N.J. Equity, 374.* To avoid a thorough investigation, the stockholders voted to liquidate the assets and dissolve the company. Hager received \$1,445 per share for his stock, but attempted further remedies and lost. *1 Black, 80.* Also see "Hager v. Thomson," 66 US 1 Black 80, for more details on the 1861 litigation involving the complaint of this owner of seven and 2/3 shares of the company charging the firm and its officers with divers breaches of trust and frauds in the management of the company's business.

Ernest **Hahn** was an Executive Director of the D & R Canal Commission following the retirement of Jim Amon

HALF MOON and CLAREMONT: Following the Hudson-Fulton celebration in New York, it was desired to move two of the participating vessels, *HALF MOON* and *CLAREMONT*, south to the Norfolk waterways convention via the inland canal route. However, it was discovered that the height of the topmasts of the *HALF MOON* and the width of the *CLAREMONT* would not allow either vessel to pass through the D&R Canal. *New Brunswick Times, October 16, 1909; Daily State Gazette, February 18, 1910.*

Hamilton's Grill Room at 8 Coryell Street, Lambertville "At the Porkyard," overlooks the D&R Canal in a romantic setting that offers both indoor and outdoor dining. It is a very nice restaurant with Nationally Acclaimed Mediterranean Cuisine, but a bit on the expensive side. Open for dinner seven days per week - reservations recommended. www.hamiltonsgrillroom.com
609-397-4343.

Hamilton-Trenton-Bordentown Marsh: See “Friends for the Marsh”; “Duck Island Recreation Area” and www.drgreenway.org

Handsome Yachts: Last week General Brubb’s yacht passed through the canal en-route to Newport. *Bordentown Register, July 17, 1878.* “Last Thursday a rather neat looking yacht named *LAURA LOUISE* came up the Delaware and is now lying at our wharves waiting for the opening of the canal. On December 10, 1879, the same vessel passed through the canal bound south. She went south as far as Alexandria.” *Bordentown Register, March 12, 1880.* “On Saturday evening two handsome yachts passed through the canal toward New York. The owners of these yachts intending to take in the centennial festivities to-day. These vessels were the *MONARCH*, owned by Mr. Work of the L.O.? Yacht Club of Philadelphia and the steam yacht *MANITTEE* of the same place. On Sunday the canal was kept open to allow the *SYBILLA*, owned by Mr. Betts, a rich Philadelphia brewer, to pass through. Colonel Mann was a guest on this yacht. All of the yachts had a number of guests on board.” *New Brunswick Daily Times, April 29, 1889.* Phil Daly’s steam yacht *CHARLOTTE* passed out of the canal here Tuesday en-route from Long Branch to Florida. The Daly family and a few friends were on board. *Bordentown Register, November 22, 1895.* The Longstreet and Reeder yachts took Bordentown friends to the big boat races off Sandy Hook last Saturday. In size and equipment the Bordentown yachts are not to be compared with the *CORSAIR*, *NIAGARA*, or *ONEIDA*, but the occupants probably had as much real enjoyment on the occasion as those on board floating palaces. *Bordentown Register, August 28, 1903.* The D&R Canal opened for the season on Monday night. The gasoline yacht *KATHERINE* bound from Florida to Fort William Henry, New York, was the first boat to enter the locks at this end. *Bordentown Register, March 12, 1908.*

HARFORD, a steam tug was built in Camden in 1881, is pictured at the Bordentown outlet lock of the D&R Canal in McKelvey’s *The Delaware & Raritan Canal: A Pictorial History*, when it returned to the Delaware River from Georgetown, DC about 1900. There is no doubt that this vessel was used to tow canalboats on the Delaware River to and from the D&R Canal. Interestingly, the vessel survives at Kingston, NY as the *ELISE ANN CONNERS*, and is owned by Gary Mathews under the umbrella organization “Defiance Marine” formed to save local working maritime history. Gary is the licensed boiler engineer who maintains the Susquehanna’s Mikado #142, the *Walter Rich*.

Hartford Line: See “Philadelphia Steam Propeller Co.”

Hartford, Middletown, Philadelphia and Baltimore Steam Propellor Line ca. 1856 probably a more descriptive name for the CT, NY, & PA Transportation Co. - used steam canalboats *JOSEPHINE* and *ROUGH & READY*.

Hartford, New York & Philadelphia Transportation Co. a/k/a Hartford Line and/or Hartford & Phila. Line, operating ca. 1870-74.

Hartford, Philadelphia and Baltimore Steam Propellor Line advertised new ships *J.R. THOMPSON* and *COL. J. STEVENS* in 1846 operating “Hartford to Philadelphia in 40 hours; Hartford to Baltimore in 60 hours.” *Springfield, MA Weekly Republican, July 25, 1846.*

Hartford & Philadelphia Steamboat Co. was incorporated in CT Nov. 30, 1852. It operated through the D&R Canal.

William Randolph **Hearst**, the publisher, had a 112-foot, wood, speedy, steam yacht, *VAMOOSE*, which he used to carry news from Cuba back to the offices of the New York Journal during the Spanish-American War. One night in 1899 while she was en-route through the D&R at night the Captain scared people along the route with the unearthly howl of her steam siren. ‘*An Unearthly Howl Pierced The Night*’ by Mark N. Finston in *Trenton Evening Times*, April 10, 1964. *VAMOOSE* was built in 1891 at Bristol, RI by the Herreshoff Manufacturing Co. Her vertical compound, five-cylinder steam engine was rated at 800 hp giving her a speed as high as 30 mph, one of the fastest steam vessels ever built. *Samuel W. Stanton, American Steam Vessels (1895)*.

Robert Gaston **Herbert, Jr.** sent McKelvey a typewritten copy log the log of his trip through the D&R Canal on April 30 and May 1, 1929. It was his delivery trip of the sloop *COMET* from the builder in Annapolis, MD to her owner at City Island, NY. The craft was a 21-foot day sailer, powered by an outboard engine and the “ship’s company” consisted of Robert as captain and his father as crew. The log is very unusual in that it documents the minute by minute detailed timing of the transit. Total elapsed time was 24 hrs., 14 min.; total delay time was 15 hrs., 47 min. including 11 hrs., 10 min. night layover; average speed was 5.17 mph.

Hiking: The historic towpath found along the feeder and main canal is suitable for hiking, jogging and biking. Horseback riding is permitted on the main canal only. Motorized vehicles or ATV’s are not permitted on trails in the park. In addition to the canal trail, patrons can access trails at the Six Mile Reservoir Site, Kingston Greenway and Cook Natural Area Trails from the park office located in Kingston as well as one trail found within the Bull’s Island Natural Area. *D&R Canal State Park brochure* Hiking along the D&R Main Canal and Feeder are frequently organized by the American Hiking Society; the Canal Society of New Jersey; the D&R Canal Watch; the NJ Sierra Club; and other groups. Groups from out of state can arrive at New Brunswick by train and hike to Princeton where they can take the NJ Transit Princeton Branch Shuttle back to the main line at Princeton Junction.

Historical Society of Princeton was established in 1939 and their collections contain photographs, manuscripts, postcards, architectural drawings, maps, oral histories, vertical files, newspapers, books and more with excellent coverage of the D&R Canal. Headquarters: Bainbridge House, 158 Nassau Street, Princeton, NJ 08542 www.princetonhistory.org

Lewis H. **Hoagland** commenced ship-building, spar making, and calking about 1855 in New Brunswick harbor. He had drydocks and a sawmill. Up to 1875 his yard built 84 vessels, did a vast amount of repairing, and employed up to 40 men, but business in 1875 was very slow.

Hogs: A sloop load of hogs passed through the canal on Nov. 15, 1849 on a one-way excursion to the butchers of New York. They appeared to be quite musically disposed and made a noise that would have done honor to a political meeting. *Daily Trentonian, November 16, 1849*.

Holcombe-Jimison Farmstead Museum is dedicated to the preservation of Hunterdon County’s agricultural heritage from the 18th into the 20th Centuries. It includes a vintage post

office, blacksmith shop, carriage shed, tractor barn, paint shop, Dr./Dentist office, a dairy exhibit, and the John Holcombe home. It is located along the D&R Feeder Canal at 1605 Daniel Bray Highway, Lambertville, NJ, just south of the Rt. 202 Delaware River/D&R Canal bridge. www.holcombe-jimison.org

William and Joseph **Holmes** operated two freight schooners, *PARALLEX* and *PRESIDENT JACKSON* on the D&R between Princeton Basin and NYC in 1885 per the *Princeton Standard*.

Philip **Hone**, erstwhile mayor of New York City and celebrated diarist committed the following lines to his journal on May 30, 1839: *Among the maritime exploits with which these adventurous times abound, the arrival, on Wednesday last, of a little schooner, called the ROBERT F. STOCKTON, from England, was one of the most remarkable. She sailed from Gravesend (UK) on April 13. She is only ten feet wide and seventy feet long, and her burthen is thirty tons. She is built entirely of wrought sheet-iron, and is intended as a towing vessel on the New Jersey Canal (the D&R). The commander is Captain Crane. She performed her voyage in forty-six days, with no serious disaster except the loss of one seaman, who was washed off this little cockle-shell by one of the seas which were constantly sweeping her decks. Never, I presume was the western ocean crossed in so small a craft. There was not room enough to lie straight nor to stand erect. This little vessel lies near the Battery, and is visited by hundreds of curious persons, anxious to realize the possible truth of the nursery story about the "three men of Gotham" who "went to sea in a bowl."* The *ROBERT F. STOCKTON* was the first iron-hull vessel to cross the Atlantic and the first commercially successful vessel utilizing the screw propeller. *The Robert F. Stockton and the Introduction of Screw Propulsion, by Alexander Crosby Brown, in Steamboat Bill of Facts, Journal of the Steamship Historical Society of America, No. 40, December, 1951.*

Horse Riding is permitted all along the D&R Main Canal, but not on the Feeder Canal. The towpath trail is flat and horseshoes are not necessary. The Somerset County Horse and Pony Association hosts occasional group rides.

Howell Living History Farm is located on Valley Road, Titusville 1½ miles east of the D&R Canal Feeder and Rt. 29, but it is too good to overlook. It is a 130 acre farm, operated by Mercer County Park Commission, of which visitors can take a self-guided tour of beehives, fences, pastures, chicken brooders, a sheep barn, hog pasture, ox barn, orchard, horse & cow barn; corn crib, equipment shed, wagon house, kitchen garden, outhouse, farmhouse, ice house, and farm pond. Their mission is to recreate an American farm as it would have been in the years 1890 to 1910. Activities and programs include: Ice Harvest; Maple Sugaring; Barn Dances; Work Horse Rides; Sawmilling; Wagon Tours; Potato Planting; Sheep Shearing; Corn Planting; Hayrides; Blacksmithing; Wheat Harvest; Honey Harvest; Potato Harvest; Plowing; Canning; Corn Maze; Pumpkin & Indian Corn Harvest; Quilting; Cider Making; Bacon, Sausage & Scrapple Making; Field Corn & Popcorn Harvest; Old Time Auction; Wreath & Sleighbell Sale; Christmas on the Farm; etc. Phone: 609-737-3299 www.howellfarm.org

Frank Pembroke **Hutchins** owner of the Hutchins Yacht Co. of FL owned the 85 hp, gasoline powered, 58-foot yacht *KEX*, built in 1921 at East Boston, MA which went through the D&R in 1926. *KEX* was the name of a social society at Harvard University.

Hudson to the Delaware by A.T. Merrick is a delightfully detailed account of his journey through the D&R. *Yachting Magazine, July, 1907.*

The **Hugh Bond Gowanus Towing Co.** was hired by the D&R for one summer to do towing on the canal. Two of their steam tugs were *LIBERTY* and *POST BOY*.

Captain James **Hughes** began as a mule boy working from New Brunswick and later operated his own canalboats on the D&R. He organized a freight line from Philadelphia to Washington utilizing 2 boats of 200 tons and the 89' x 19' tug *HENRY C. WINSHIP* of Georgetown. *New Brunswick Times, 9 June 1882*; In 1903 Hughes owned a fleet of 49 vessels of varied descriptions, including several steam tugs and a number of ships and barges of many sizes; he had the largest ship building plant in the New Brunswick vicinity; his yard, with over 60 workers, was doing more work in 1903 than was done by everyone else in the business there in the last ten years; he also was doing an extensive towing business and had his main office in NYC. *New Brunswick Daily Press, August 29, 1903*. James R. Hughes has three tugs, the *MABEL*, *ARROW*, and *WILLIAM G.*, and a fleet of canal boats. *New Brunswick Sunday Times, March 11, 1923*.

Captain James R. **Hughes, Jr.** operated tugboats, including the *MABEL*, *GEORGE HUGHES*, *JOHN J. HUGHES*, and *WILLIAM HUGHES* on the D&R. This family business survives as Hughes Marine Firms.

Hughes Marine Firms: The roots of Hughes Marine Firms go back to Michael Hughes, a "boatman," who arrived in New York from Ireland in 1843, and relocated to New Brunswick, NJ in 1862. His sons, James Hughes, Sr. and John Hughes, were also boatmen and worked in their father's boatyard. When Michael died around 1900, he owned a New Brunswick boatyard along with a fleet of tugs and canalboats which moved Pennsylvania coal to New York, via the D&R Canal. In 1908, with the tug and vessel fleet growing, and business on the canal declining, James Hughes, Sr. opened an office in New York City and began to operate coastwise hopper barges from New England to the mid-Atlantic. John operated the boatyard until it closed in 1914. James Jr. joined the business in 1894. He had a talent for bringing together buyers and sellers of marine equipment. He began a chartering and sales brokerage operation under the slogan "Clearing House for Marine Difficulties". That slogan continues to be the motto of the company today. James Hughes, Inc. was incorporated in 1934 as the transportation arm of the firm. Deck and hopper barges were used to move bulk, and oversized cargoes on inland and coastwise routes (and still are!). James Jr.'s three sons, Bob, Bill, and Jim, joined the firm in the 1930's. During WW II they supervised the loading of numerous boilers, tanks, and other cargoes for transfer between naval bases all along the East Coast of the US. The end of WW II brought with it a need for new bridges, roads, piers, and tunnels. Specialized vessels were needed to support the construction boom. The Hughes boys saw, and met, this need by incorporating Hughes Bros., Inc. in 1945 to provide deck barges to the aggregate and marine construction industries. The Hughes organization continued to expand, operating and renting their fleet of barges, transporting oversize objects by tug and barge, and selling, as brokers, all types of floating equipment through their sales department. The family formed a new entity, Hughes Maritime, in 1992, to purchase, with Reinauer Transportation, an 86-acre pier and warehouse facility, in Brooklyn, NY, known as Erie Basin. The Hughes family manages this marine industrial park on behalf of the partnership. The following year, Hughes relocated its corporate

office to Edison, New Jersey, after almost a century at 17 Battery Place, NYC. Bob Hughes was widely known throughout the industry, having served as Chairman of the national tug and barge trade association, the American Waterways Operators. Bill Hughes was long active in the Moles and the Whitehall Club, of which he was President. The fifth generation family members, Bill Hughes, Jr., Bob Hughes, Jr., and Joe Hughes, came aboard in the 1970's and now collectively manage the business. They rotate the presidency of the corporations in a tradition which they inherited from their fathers. Through their efforts, Hughes commenced a barge building program and acquired a number of smaller barge companies, which doubled the size of the fleet. Today, Hughes owns one of the largest deck and hopper barge fleets on the East Coast. After almost 100 years, they have recently re-entered the shipyard business with the purchase of a floating drydock, and the addition of a skilled shipyard staff at their Erie Basin facility. (The basin was the largest man-made harbor and storage depot on the eastern seaboard. It primarily served canalboats from the Erie Canal.) Hughes Marine Firms has excelled in many aspects of the marine business over the decades. The current owners stand on the shoulders of the generations before them, whose strength has been their ability to embrace change. www.hughesmarine.com

Hunterdon County State Representative: Godown came up from Trenton to Lambertville on the evening train. Instead of walking northward towards the canal bridge, he turned his steps Trenton-ward, where doubtless his thoughts were centered, and as a result walked into the canal below the depot. He was rescued by Mr. Howard Barber who happened to be nearby. Mr. Godown is not in favor of damming the Delaware, but about the time he was pulled out, it was thought he had no objection to trying such an experiment on the canal. The canal water, however, shouldn't be blamed for the accident. *Hunterdon Republican, January 2, 1875.* The headline could/should have read "Godown in Canal" - Ed.

Ice Closes Canal: About fifty boats of all descriptions are stuck fast in the canal, many of them loaded with valuable cargoes. To afford an opportunity for them to get out, we understand the water will not be let out for ten days. Messrs. Wolf & Engle of Philadelphia, lager beer brewers, have several thousand dollars worth of malt on a boat near Baker's Basin. *New Brunswick Weekly Fredonian, December 27, 1866.* The severity of the weather has caused an early suspension of navigation on the D&R Canal. Chunkers, lake boats, schooners, and even steam propellers are closed in with ice in the waterfront of the City and in the vicinity. We hear that men have been engaged in cutting a passage way in the ice to the outlet locks for the loaded boats in the upper and lower basins in order, if possible, to get them to a less exposed position for the winter, or to have them towed to their destination. The present appearances are very encouraging to our local ice companies. Such bitter cold as that of Tuesday night for a few nights longer, and the ice gathering will have the commodity in abundance and begin the work of storing it. *New Brunswick Daily Fredonian, December 6, 1871.* The Clyde line of steamers and barges have several vessels still locked tightly in the ice at various points along the canal, but no doubt will get them all out before the 20th, on which date the canal will be formally closed. Two staunch tugs of the Clyde line, the *LOOKOUT* and the *HUDSON*, bravely cut their way from Philadelphia to Bordentown on Wednesday, accomplishing the journey in six and a half hours, the ice in many places being six inches in thickness. These tugs entered the canal and are now breaking their way to the ice-bound boats, which are towed out of the canal as fast as reached. There are now lying in the creek (Crosswicks) 40 loaded boats bound to Philadelphia and other points below. Of these boats four are laden with potatoes from the northern part of New York,

the number of bushels aggregating 5,000. The shippers, doubtful of reaching their consignees, have offered the potatoes here at \$1.30 per bushel if taken in 1,000 lots. This is ten cents a bushel less than they will receive if they get the cargoes to Philadelphia. If the present mild weather continues, it is likely all the loaded boats will get away. *Bordentown Register, December 15, 1876.* There are thirty boats fast in the canal between Bordentown and New Brunswick. They are loaded principally with coal, and some of them may yet escape their icy fetters. *Winter at the Canal Locks, Bordentown Register, December 17, 1880.* Notwithstanding all the efforts made to release the boats frozen up at several points along the Delaware & Raritan Canal, thirty-seven loaded canallers were unable to reach either outlet on Saturday night. Supt. C. B. Russell, Messrs J. Bingham Woodward and T.H. Van Horn, with sturdy assistants, personally manned the canal company's ice cutter, which was drawn by mules, and did all in their power in behalf of the unfortunate boats, but to no effect. The ice was easily enough broken, but the boats could not stand the hammering of the ice against their bow when in progress. One boat had her bow stove in, and would have sunk had not the canal men speedily applied blankets, quilts, etc. to the breach. The crew consisting of a man, wife, several children and a dog became alarmed when the water began to pour into the boat, and had to be removed to the shore. The dog was the first to rush down the plank placed from the boat's deck to the shore. In fact the animal started before the lower end of the plank was secured, and ran squarely into the face of a workman, upsetting the latter, and barking his nose and cutting his lips. The ice cutter used was one on which several lives were lost about twelve years ago. Since then the cutter has been decked and made perfectly safe. *Fast for the Winter, Bordentown Register, December 24, 1880.* Two propellers having valuable cargoes became ice-bound in the canal, just below this city, early in the week. The tug *JOHN WEAR* finally came to their assistance, having to break through four-inch ice on the way. The propellers were taken down to Bordentown where they are awaiting a break-up in the river. *Daily True American, March 28, 1885.* It was learned this morning at the office of the Raritan Coal Company that one of the biggest shipments of coal by canal had been caught in the ice in the canal this week between New Brunswick and Trenton, and was now held fast. The coal is contained in several of the biggest boats which go through the canal, including two immense "lakers," capable of carrying 300 tons of coal each. With the limited quantity of coal in the hands of dealers at the present time, the news was most distressing. Manager Robert E. Ross stated that he hoped it would be possible to get the boats free of the ice and have some of them reach his docks in New Brunswick tonight. If the weather grows warmer this will be possible. The D&R Canal Co. announced some time ago that the canal would be formally closed on December 15. *New Brunswick Daily Times, December 10, 1902.* The steamers *F.W. BRUNE*, *JOHN W. GARRETT*, and *MARTHA STEVENS*, of the Trenton Transportation Company, which had been frozen up in the D&R Canal while on their way from New York to Philadelphia, arrived at Bordentown last night. The vessels were unable to proceed any further on account of the canal being blocked with ice at the mouth of Crosswicks Creek. The steamers will make an attempt to reach Philadelphia today. *Trenton Gazette, December 25, 1903.* Although the official time for closing the canal is next Tuesday, December 20, nature has closed it a week ahead of time by covering it with ice and catching several boats in its grip. The ice on the canal at New Brunswick is between three and four inches thick and in some places it is much thicker. There are two boats caught in the ice at Bordentown, two at Kingston and five at the Five-Mile Lock. There are also two steamers between Kingston and Trenton which are temporarily held up. The boats are all bound east while the steamers are bound west. *New Brunswick Weekly Times, December 16, 1904.* The D&R Canal was officially closed Tuesday for the winter, but the water will not be let out for a couple of weeks. The sudden

blocking of the canal by ice has worked great hardships on many shippers who took chances with having freight shipped by the canal so late in the year. No less than twelve boats are now tied up by the ice and unable to reach their destination... *State Gazette, December 22, 1904.*

Ice Breaking Accident: In mid-December, 1868 fifteen canal workers were on the ice breaking boat as it was being towed by eight mules at Lock #2. The ice boat was constructed of iron, about 20 feet in length and about 10 feet wide at the stern and was very near the shape of a flat iron. Aboard, the men were rocking it to break the ice as the bow ran up on the sheet. The men stand in the center and hold a rope, secured about waist height, which extends from the bow to the stern. They were rolling it vigorously from side to side when one side of the breaker was drawn up on a large piece of ice and the other side dipped under the water and sank like a stone, leaving the fifteen men struggling in the chilling water. Five men were drowned and several others were injured. *Bordentown Register, December 18, 1868.* COMMENDABLE - The D&R Canal Co. has resolved to keep on the pay rolls during the winter the names of the men who recently lost their lives on the canal above Bordentown. *Courier (Toms River), December 30, 1869.*

Ice Skaters: The canal is still full of water and skaters this week have had a carnival on its icy surface. The basin near the locks and part of Crosswicks Creek is also a field of excellent skating. Three huge sand dredgers, a steam yacht, and the new hull of another, together with a log raft are hemmed in for the winter in the space between Crosswicks Creek bridge and the mouth of the canal. *Bordentown Register, January 10, 1902.*

Ice Trains: A heavy ice train of eighty-two, 42-ton cars, headed by two locomotives, ran from Belvidere to Philadelphia (along the Feeder Canal its entire length). *Warren Journal, July 8, 1901.* Large quantities of Pocono ice were now coming on the Bel-Del from the Lackawanna for shipment to Trenton, Camden, Philadelphia, Wilmington, and other cities. *Warren Journal, July 16, 1901.*

Improvements Planned by D&R Canal: Extensive improvements are to be immediately begun by the Company and will take up the rest of the winter. Work will include several new bridges; 500 feet of new wall at the Ten-Mile level; and various repairs required by the flood of October, 1903. *Daily True American, January 21, 1905.*

Inland Line a/k/a NY & Baltimore Inland Co., a/k/a Inland Transportation Co. operating between NY & Baltimore.

Inland Propeller Line advertised in Jersey City directory ca. 1865: "Freight via water to B&O Railroad and Philadelphia, Wilmington & Baltimore Railroad" - NY office was at Pier 7, North River.

Inland Transportation Co. operated through the D&R with their steam tug *WM. J. WADE* and freight boat *A. WOODALL* in the 1920's.

The **Inn at Lambertville Station** is located to the rear of the Lambertville Station Restaurant, also between the D&R Canal/Bel Del Railroad and the Delaware River. In 1988 the New Jersey Railroad and Transportation Commission and the United Railroad Historical Society

hosted a special rail excursion to Lambertville powered by Morristown and Erie Railroad diesel locomotives for a banquet in the newly opened Inn celebrating the choosing of sites on the Black River and Western Railroad in the Flemington area. The Inn accommodates 150 and all 45 antique-filled rooms and the Riverside Ballroom have a view of the Delaware River and most can see the D&R Canal as well. www.lambertvillestation.com 609-397-4400.

The **Inside Route from New York to Miami** was published in *Yachting Magazine*, October, 1914. It is an abbreviated route description of the route “offering a safe and easily navigated waterway, every mile of which is full of interest.” It was noted that gasoline could be had conveniently at Trenton.

Inspection of the D&R: Several officials of the D&R Canal Co. arrived in New Brunswick this morning for the purpose of inspecting the proposed outlet of the new Sixth ward sewer which is to run under the canal and empty into the Raritan, in order that some agreement might be made with the city. The party was taken on board the Pennsylvania Railroad tugboat, *RELIEF*, to the point of the new outlet above the upper lock. They were accompanied by Aldermen Oliver and Kenney of the Sewerage Committee. Freeholder Dougherty was also on board. On completing the inspection the party returned to this city. The officials in the party included A.P. Guest (Gest), superintendent of the Belvidere Division of the Pennsylvania Railroad, and Captain T.B. Stodham, the canal supervisor. *New Brunswick Times, May 10, 1899.* An inspection of the D&R Canal was performed by Robert Cassatt, son of Pennsylvania Railroad President Cassatt in August, 1905. He was accompanied on the canal “yacht” *RELIEF* by Henry Dunn, Asst. Supt. of the canal; Charles H. Gallagher; Police Commissioner George LaBarre and Sidney Oliphant. The party had an enjoyable trip and Mr. Cassatt expressed himself as much pleased with the condition of the canal and the way it was managed. *Daily True American, August 30, 1905.*

Interpretive Programs: The D&R Canal Park Staff offer a variety of historical and natural interpretive programs throughout the year. Contact the park office for a schedule of programs. Various members of the Canal Society of New Jersey also have illustrated programs on the history of the D&R Canal.

Interpretive Signage panels are located at Bulls Island and Alexander Road, Princeton. Each installation has five identical panels: 1. The Canal Age; 2. The Canal: History; 3. The Canal Builders; 4. Canal Structures; and 5. The Canal Today.

An **Interstate Agreement between New Jersey and Pennsylvania** was signed on December 5, 1829 permitting each state to construct the dams necessary to feed canals. Neither state was at any time to draw more than one-quarter of the water in the current between the two river banks. New Jersey was permitted to erect a dam “at the head of Warford’s Falls, at Eagle Island, or Bulls Island” to supply a feeder for the contemplated D&R Canal. *Albright G. Zimmerman, Pennsylvania’s Delaware Division Canal.*

Iron boat VULCAN has arrived at Albany from Rochester with 900 barrels of flour. This is said to be the largest load ever brought to Albany. *Newark Daily Advertiser, May 19, 1846* Note: the *VULCAN* was built in 1842 in New York by James Cunningham for the D&R Canal Co. and

was equipped with Ericsson propellers. Also see: "Delaware and Raritan Canal Co." and "Iron Steam Boat Line."

IRONSIDES: The boiler of the propellor *IRONSIDES*, which has been running from New York to Philadelphia (via the D&R Canal), exploded at about 11 o'clock yesterday morning between South Amboy and Perth Amboy. The engineer was so badly injured that he is not expected to live; one of the firemen was also severely hurt but there is no hope that he will survive. None of the other hands were harmed. The captain jumped overboard but was rescued when in great danger of drowning. The boat took fire after the explosion, but was soon put out. *Sentinel & Advertiser (Jersey City), 23 August, 1850.* Also see: "Connecticut River," "Delaware & Raritan Canal Co.," "Iron Steamboats," "Iron Steam Boat Line," "Merchants' and Swiftshure Steam Transportation Line," "Merchants Canal Line," "Steam Tow Boat Co.," "Steam Canalboats on Canal," and "Stockton, Captain R.F."

Iron Steamboats: The D&R Canal Co. are now building six iron steamboats, with Ericsson's propellor, in New York, two of which will be employed in towing boats through the canal from Philadelphia to New York and back; two to Albany; and two to Hartford, CT. Four of them are now in an advanced stage to completion and will soon be put in operation. These iron boats be capable of carrying 230 tons coal each and the directors expect to divert a vast quantity of the eastern trade from the Schuylkill to their conveyance through this channel. *Burlington Gazette, April 1, 1842.*

Iron Steam Boat Line a/k/a Iron Steam Packet Line - between Phila. & Hartford ca. 1842-6 (to Albany 1844) with steam canalboats *ANTHRACITE*, *BLACK DIAMOND*, *IRONSIDES*, and *VULCAN*. Also see "Delaware & Raritan Canal Co."

Iron Steam Packet Co.: See "Albany Union Line."

Iron Tug Boat: "The new iron tug boat, built at the Lambertville Iron Works for the D&R Canal Co. will be launched in the (Feeder) canal today." The boat, was 50 feet in length, 10 feet in width, and was fitted with a screw propeller 4 feet in diameter. *Lambertville Beacon, July 18, 1873.*

Ivy Hall, 43 Mercer Street, Princeton was built in 1846 to house Princeton University's abortive attempt to create a Law School. It subsequently served as offices of the D&R Canal Co., and the first home of the Ivy Club. It now belongs to Trinity Church and the Canal Society of New Jersey held a meeting in the building years ago.

Jacoby Flyaway - see National Outboard Racing Commission.

Jam in Canal: There was a jam in the canal in this city (Trenton) between a canalboat and a raft. The jam was so complete, that workmen were compelled to cut away the raft, and to pull it out by locomotive force. *Daily State Gazette, November 19, 1872.*

The **Jamestown Exposition** was a great attraction for yachtsmen and a very great number of them traveled to and from it via the D&R Canal.

Janeway & Co. was established in New Brunswick in the mid 1800's and quickly grew. In 1884 a large five story and basement factory was built along the canal east of the Pennsylvania Railroad main line for the manufacture of wallpaper. By this time they were Janeway & Carpenter were the largest manufacturers of wallpaper in the country. The plant both received paper from New York and Canada and shipped out finished products via the canal. In 1889 Col. Janeway bought out Carpenter and in 1892 sold the business to National Wall Paper Co., but they dissolved after eight years. Col. Janeway bought the business back in 1900 and incorporated under the name Janeway & Carpenter. In 1907 the factory buildings were totally destroyed by fire but were quickly rebuilt even bigger, and became the largest individual wallpaper factory in the US. They had branch warehouses in Philadelphia and Chicago. Also see "Fire Caused by Railroad?" and "Capt. Frank H. Godfrey."

J.B. Woodward & Co. had about 120 mules working on the D&R in 1895. *Bordentown Register, December 27, 1895.* The NY & Baltimore Inland Co. put a fleet of tugs on the canal in 1915 and soon drove Mr. Woodward out of business. *New Brunswick Sunday Times, March 11, 1923.*

J. B. WRIGHT See Wright family

L. D. **Jarrard** was shown as superintendent of steam towing on the D&R Canal. He was listed in the New Brunswick directory as a ship chandler. Jarrard owned several tugboats, including *VARUNA*, which was built in New Brunswick in 1864 and sold to the Camden & Amboy Railroad in 1868.

J. S. Hoskins Lumber Co. operated boats on the D&R ca. 1907. The firm was active ca. 1900 to 1920.

J. VAN DOREN & CO. (Advertisement) Coal! Coal! At a Reduced Price. The subscribers propose to receive orders at the present, for LEHIGH COAL for CASH at 6 dolls. 25 cents per ton, at the Basin, 37½ cents per load for carting. J. VAN DOREN & CO. *Princeton Whig, October 27, 1837.*

JOHN BULL: Engine No. 1, or *JOHN BULL* started to run on the Rocky Hill and Kingston Railroad, Jacob Sprague, Engineer. *From notes of John. S. Woods, Storekeeper at C&A RR Bordentown Shops, published in various places.* Rocky Hill Railroad (which ran along the D&R Canal between Rocky Hill and Kingston) The Princeton Standard says that this road is doing a thriving peach business. Several cars laden with peaches - one day numbering nine cars - leave Rocky Hill every afternoon for New York. The road is a great accommodation to the farmers in that neighborhood, who wish to send their products to New York markets. The engine "Johnny Bull" has been taken off the road, and been replaced by another engine that can make the trip with some regularity. On Monday last 4,500 baskets of peaches were sent to New York. *Daily State Gazette, September 4, 1865.* The "Dummy" (a small steam locomotive used to shuttle a passenger train back and forth on the short Princeton to Princeton Jct. Branch, over the D&R Canal) has been sent to the company's works at Bordentown for repairs. The locomotive "Johnny Bull," which, by the way, is the oldest locomotive running in the United States, and the first employed by the Camden and Amboy Company, has been placed on the Branch to run during the absence

of the “Dummy.” *Princeton Standard*, May 25, 1866. Also see “Rocky Hill Railroad.”

John E. Thropp’s Sons Co. Machine and Boiler Works were located adjacent to the D&R Canal at the Greenwood Avenue bridge. They made the two cylinder engine for the canal tug *WEST JERSEY* and other vessels as well.

Johnson & Johnson was established ca. 1890. It was a fortunate coincidence that Johnson & Johnson came to be located in New Brunswick as the city turned out to be a very good place for business because of the railroad, the river and the canal. J&J shipped its products by rail, but it turned out that water was a faster way to get its goods to ships in New York that would take them to more distant markets in the US and around the world. The building they moved into already had a dock on the D&R Canal level between locks 13 and 14, known as the New Brunswick “harbor.” It was a natural for J&J to use boats to distribute its products as well as to bring raw materials, like bales of cotton, back to the plant. Because many of the products J&J made were essential items like sterile dressings and sutures, the company wanted to ensure their constant availability. This was especially true during WW I when J&J was producing bandages and surgical dressings around the clock to meet demand. Having its own steamboats was a way for J&J to make sure that it could quickly and reliably get huge quantities of products to the docks in New York. Having its own steamboats reduced shipping times to same-day instead of more than a day. “For the most part all goods shipped from the J&J factories at New Brunswick are transported by the steamer *ROBERT W. JOHNSON*, which navigates the (canal), Raritan River and (NY Bay). The steamer landing in New Brunswick being directly on the factory grounds. New Brunswick is situated on the main line of the Pennsylvania Railroad between New York and Philadelphia, thus in shipping by rail there is often a delay in their transshipment at connection points. (There was no rail siding to the J&J plant - all had to be hauled by wagon or truck to nearby team tracks requiring extra handling and expense.) The steamer *ROBERT W. JOHNSON* leaves the factory of J&J every morning and arrives in New York in less than four hours... this method obviates the numerous handlings of the goods with the constant danger of damage and insures prompt transportation.” *The Red Cross Messenger*, Vol. I, No. 3, July 1908. The steamboats were operated by a subsidiary called the Middlesex Transportation Co. Many of New Brunswick’s other industries such as wallpaper manufacturers Janeway and Carpenter (who were the former owners of the first J&J building), also relied on J&J steamboats to transport their goods. The steamboats also brought raw materials like cotton to the J&J factory to be made into products. Because the steamboats were so reliable, the story goes that the J&J boats were also asked to carry US mail to New York as well. J&J started using steamboats in 1902 and had them for 33 years, until the advent of improved highways and trucks reduced the time to get to New York from four hours by water to just one hour by highway, ending the age of J&J steamboats at the beginning of 1936. After the D&R Canal closed, the J&J steamboats docked just east of the outlet lock, requiring a truck shuttle trip between the boat and the factory. Today J&J has become: The world’s premier consumer health company; The world’s largest and most diverse medical devices and diagnostics company; The world’s fourth-largest biologics company; And the world’s seventh-largest pharmaceuticals company. They have 250 operating companies in 57 countries, and employ 119,000 people, but their world wide headquarters remains in New Brunswick, just a few hundred feet from the old D&R Canal. www.jnj.com Also see “Middlesex Transportation Co.”

George W. **Johnson**, a New Yorker, made a 1,200-mile trip via the inland canal route from St. Augustine, FL to the Nonpareil Boat Club on the Harlem River. His single scull rowboat was made entirely of paper in about twenty layers in thickness. He clipped headlines and placed them along the outside. *New York Times, June 16, 1908.*

Johnson Ferry House is located in Washington Crossing State Park, across Rt. 29 from the Feeder Canal. At this site a Delaware River ferry was operated by Garrett Johnson before 1748. General George Washington and 2,400 Continental soldiers, 18 cannon and horses crossed the Delaware here in ferry and Durham boats on Christmas Eve, 1776 to march to Trenton and defeat the Hessian Army. A full-size replica of a typical early Delaware River ferry boat is located behind the ca. 1850 Nelson House between the canal and the river just north of the present County Rt. 546. A view of the Johnson Ferry House with a Lehigh - Delaware Canal boat being towed south on the D&R Feeder Canal appears on page 110, bottom, in *Champlain to Chesapeake*, by McKelvey. The photo has on occasion been reproduced with the image reversed and the canalboat erroneously traveling north. The spring house is on the canal side of Rt. 29 and the ferry house is on the east side of Rt. 29. The photo was taken looking north from a point about 300 feet north of the present County Route 546 bridge over the canal.

“Joint Companies” was the name given to the Delaware and Raritan Canal Company and Camden and Amboy Railroad and Transportation Company, which was a mouth-full. The secrecy that marked the affairs of the company made it a target for those who disliked the monopoly of transportation which the Joint Companies possessed. Not even the stockholders had complete knowledge of the nature and extent of its operations, for E.A. Stevens managed it personally and refused to exhibit the books. Profits and finances were likewise a mystery. Dividend were declared irregularly and ranged from 16 to 40 per cent, while a few sales of the stock were made at over \$1,150 a share. *Neilson Papers & From Indian Trail to Iron Horse, by Wheaton J. Lane.*

JOSEPH B. MOLLESON Explosion: Yesterday morning about half past eleven, as the propellor *JOSEPH B. MOLLESON*, belonging to the Merchant’s Transportation Co. of Trenton, was hauling from the landing at Bakers Basin, D&R Canal, where she had been unloading part of her cargo, exploded her boiler causing serious injury to the Captain and Engineer and death to a lady named Martha M. Bodine, who got on board at Bound Brook. She had been sitting back of the boiler and was blown into the water. Engineer Horatio Moore was badly hurt and later died. Captain Jacob Eichman was thrown to the bow of the boat, where he was overwhelmed by planks, boards, bags of corn, etc. that fell upon him, and was so completely covered up that he was only discovered by his cries for help. The cook, a colored woman, was scalded about the arms and was slightly bruised. The force of the explosion was very great, pieces of the boiler and machinery, planks, boxes, bags of grain, etc., being scattered in every direction for a considerable distance. Of cargo worth \$50,000 the only thing saved was a few barrels of molasses, pork, and fish. The vessel burned down to the water edge. A piece of the boiler weighing 400 pounds was blown 150 yards into an adjacent corn field. A barrel of pork was blown into a home on the basin. *Daily True American, and Daily State Gazette, September 5, 1865, Daily True American, and Newark Daily Advertiser, September 6, 1865, Daily State Gazette, September 7, 1865.*

Kalion Chemical Co. v. The IROQUOIS (District Court, S.D. New York, March 1, 1889) was a action in Admiralty against the ship *IROQUOIS* for improper discharge of libelant’s

chrome ore, whereby libelant was compelled to pay extra forwarding charges. The canalboat was sent alongside the ship on December 13th to receive the ore which was to be transported to Philadelphia via the D&R Canal, which was to close at midnight on December 19th. A quarrel arose between the stevedore's men on the ship and the men on the canalboat in respect to the dumping of the ore by letting it fall a considerable distance (15 to 20 feet from the end of the chute), so as to endanger the wooden boat. On arrival of the canalboat captain on the morning of the 14th when some 5 or 6 tons had been taken on board, he found the boat leaking and injured. The chrome ore was more or less in lumps, some of which weighed 50 pounds each. Arguments between the two caused a delay of two days which did not permit the canalboat to clear the D&R Canal before its closing. The judge only permitted the canalboat to recover half of its loss.

Jerome **Kern**, the American composer of popular music (he wrote around 700 songs!), had a 72-foot wood hull yacht built by Frederic P. Humphreys, Inc. of Keyport, NJ in 1928. She was equipped with two - six cylinder Cummins diesel engines; named *SHOWBOAT*; and went through the D&R in 1929 or 1930. The vessel was seen berthed below South Street Seaport in 1984 and she still carried the same name and still had the piano played by George and Ira Gershwin and Irving Berlin, although *SHOWBOAT* was owned by Jim Goodrich at the time.

The **King of Italy** sent four white camels for presentation to John W. Garratt, President of the Baltimore & Ohio Railroad. They were transported south from NYC in 1883 on a Baltimore Line steam propeller and attracted considerable attention along the D&R. *Daily True American, October 1, 1883.*

Kings Highway, or Old Dutch Road, crossed the D&R Canal on bridge No. 16 at Kingston, which later became the route of the New York City to San Francisco Lincoln Highway. Prior to the coming of the canal the village had been the half-way point for stages between New York and Philadelphia. A dead-end section of the original highway remains, with the 1798 stone bridge, built to replace the one burned by troops during the Revolutionary War. This four-arched structure is listed on the National Register and is the oldest stone bridge in the country still in use. The mill at the west end of the bridge remains from the days of the Kings Highway.

Kingston was probably chosen for the start of the canal construction in the summer of 1830 because it was on the Kings Highway which made it possible to get men, tools, and horses to the site. It was also to be the site of the first lock at the north end of the summit level. In addition it was also conveniently close to sources of stone for the lock and other canal structures. Kingston is a community along the D&R 19.66 miles from Bordentown and 24.3 miles from New Brunswick, at Lock No. 8 and Bridge No. 16. An original telegraph office for canal business survives adjacent to the lock and locktender's house. The lock and the adjacent bridge were documented by the Historic American Engineering Record in 1937 after the canal closed. Kingston is the only tri-county (Mercer, Somerset, and Middlesex) community in New Jersey. www.kingstongreenways.org ; *Along the Delaware and Raritan Canal, by James and Margaret Cawley*

Kingston Historical Society leases and occupies the Kingston Locktenders House as a mini-museum and visitor's center. www.dandrcanal.com

Kingston, Rt. 27 Bridge over D&R Canal & Millstone River: In the late 1960's a new

bridge was proposed for the crossing of the two waterways at Kingston and the destruction of the old bridges was proposed. Two nearby residents, Margen Penick and Charlotte Pierce proposed a small park about the historic bridges with boat landings on the canal and the river and a picnic grove. DEP Commissioner Robert A. Roe and Parks Director Joseph Truncer officially approved the idea in January, 1969, and by 1970 the park was in operation. Here was the nucleus for the D&R Canal State Park, suitably placed at the canal's point of initial construction. *Passage Between Rivers, by Elizabeth Menzies (1976).*

Colonel Anthony R. **Kuser** owned CHELSEA, a 62-foot schooner-rigged steam yacht, built by Hiram Weller & Sons in Trenton on the D&R Canal. It was used by the Newark Camera Club on their trip through the canal in 1891. In 1896 Col. Anthony R. Kuser married Susie Fairfield Dryden, daughter of Senator and Prudential Insurance Co. founder John Fairfield Dryden. "Col. A. R. Kuser's steam yacht *CHELSEA* which sank at her dock near the mouth of Crosswicks Creek one day last week has been raised." *Burlington Register, April 13, 1900.* In 1915 he loaned \$200,000 to producer William Fox to establish what would become 20th Century Fox. In 1922, businessman and philanthropist, Kuser, donated the 10,500-acres of what is New Jersey's highest point and is now known as High Point State Park. Included in the donation was his mansion which the state of NJ failed to maintain and later demolished. Col. Kuser also hired the architect and funded the erection of the High Point monument, which also became very deteriorated due to the lack of timely maintenance by the state of New Jersey. The Kuser family established the Trenton Brewing Co., which later became Champale.

Laborers Wanted: on the D&R Canal, about 2,000 laborers to whom liberal wages will be given. Application to be made to John C. Dunn, Innkeeper, Albany Street, New Brunswick, NJ opposite the Mail Office, who will have all the necessary information. There are three steamboats leaving New York to New Brunswick. - The canal is within a short distance of the wharf. *Truth Teller, May 4, 1833.*

Lake Carnegie, along the D&R Canal between Princeton and Kingston, was man-made and completed in 1907 as an Olympic crew racing course for Princeton University. Funding for its construction was provided by Andrew Carnegie, who was present on board the *RELIEF* for the dedication on December 6, 1906.

Lambertville, alongside the Delaware River and on the D&R Feeder Canal, originally incorporated as a town on March 1, 1849, was reincorporated as a city on March 26, 1872. During the 1700s the City was named after the various operators of ferries across the river to New Hope, PA. It became known as Coryell's Ferry, after Emanuel Coryell who owned the ferry. Coryell's Ferry was the western terminus of the New Jersey portion of the York Road (which has now become US Highway 202) connecting New York City and Philadelphia. The city was named Lambertville in 1814 when the post office was established, in honor of John Lambert, a local resident, who served as US Senator and Acting Governor of NJ. The river, canal and railroad were instrumental in the prosperity of Lambertville. The city lagged for a long time, but in the 1970's it attracted artists and other creative types. The city has become a tourist destination, with many shops, galleries, restaurants, and B&Bs. The canal path offers cyclists a place to ride and is good for hikers as well. www.en.wikipedia.org The early Camden & Amboy locomotive, *John Bull* worked for a period of years on the Flemington Railroad which means that it operated on the Bel Del, through Lambertville and along the D&R Feeder Canal, in

order to travel to and from the C & A main line. Lambertville was the home of Ashbel Welch and was probably why the extensive shops of the Bel Del Railroad were built there. Between 1866 and 1872, 17 locomotives were built and one rebuilt in those shops for the Bel Del. Also see “Ashbel Welch.”

Lambertville House has elegant rooms reflecting the grace and charm of its early 19th Century origin, blended with the comforts and modern amenities expected today. It is located at 32 Bridge Street, Lambertville, a half a block east of the Feeder Canal. Presidents, royalty, military leaders and many theatrical greats have lodged in this inn since it was built as a stage house on what became the Old York Road, by Capt. John Lambert. Each room has been restored and features a Jacuzzi and a fireplace. *Phone: 888-867-8859* www.lambertvillehouse.com

The **Lambertville Lock** on the D&R Feeder Canal could supply hydropower for electricity generation for potential savings of up to \$60,000 per year for the Lambertville Sewerage Authority. *Hunterdon County Democrat, March 12, 2009* and www.lambertvillesa.com

Lambertville - New Hope Cable Ferry: Article 9 of the 1829 agreement between New Jersey and Pennsylvania contained a provision that there should be: an easy, safe, and direct communication, between the Delaware and Raritan Canal feeder and the pool formed by the feeder-dam of the Pennsylvania Canal at Well’s Falls. The connection was bitterly opposed by the capitalists of Philadelphia, who used every political stratagem to keep Pennsylvania coal from being diverted to the profitable New York market. It would be 19 years before a connection was made between the two canals. However, the ferry would significantly reduce the boat journey distance and time. Reported on April 30, 1848: The wire rope has been erected at the outlet locks between Lambertville and New Hope and empty boats have been successfully transported between the two canals. No attempt had yet been made to cross the regular coal trade for the Eastern markets. *Albright G. Zimmerman, Pennsylvania’s Delaware Division Canal.* Mr. Charles Angel, a foreman engaged in constructing an outlet lock on the feeder of the Delaware and Raritan Canal near Lambertville was severely injured last week by a premature explosion of a blast. A canister containing five or six pounds of powder also exploded, setting his clothes on fire and burning him badly. Two other persons standing nearby were slightly injured. *Newark Daily Advertiser, June 29, 1847.* A connection by means of locks into the bed of the river, has at last been effected between the Delaware Division and the navigable feeder of the Delaware and Raritan canal; but the tolls levied by the State upon the former, and by the Delaware and Raritan upon the latter, are such as very nearly neutralize the whole advantage from this connection. *Lehigh Coal and Navigation Co. report dated May 2, 1848.* A large number of Lehigh coal boats, the Trenton Gazette says, are constantly passing to New York by way of the Feeder and the D&R Canal, it having been found that the passing across the Delaware at Lambertville can be made with ease and safety. *June 29, 1849.* NOTICE! Owners of BOATS crossing the ferry at Well’s Falls are requested to have the CLEATS on the forward deck secured to the Deck Timbers by screw bolts instead of spikes; and if the cleats are not known to be perfectly sound to renew them. *Delaware Valley Democrat, June 3, 1853.* The Lehigh Coal and Navigation Co. annual report of 1855 described the New Hope – Lambertville link as “to the magnificent navigation of the Delaware and Raritan Canal Company.” *Albright G. Zimmerman, Pennsylvania’s Delaware Division Canal.* From old records it is found that in the year 1868 there were 4,470 boats passed over the ferry at Lambertville to cross the Delaware River between the D&R Feeder Canal and the Delaware

Canal. During the month of June alone in 1868, there were 936 boats to use this ferry, or an average of 31 per day. *Lambertville Beacon, October 25, 1923*. In 1868, passage through the outlet lock at New Hope was suspended for nine days because high water in the Delaware River prevented “ferriage.” An additional eight days were lost as a result of a breach in the D&R Canal... During the past 1870 season, for forty-three days the water in the Delaware River at New Hope crossing had been “at the lowest stage of the river ever known,” too shallow to permit passage across the river by fully loaded boats, which necessitated either lightening up at New Hope, or loading a Mauch Chunk “from six to ten tons less than we should have done.” The other option was to send the loaded boats to Bristol, PA, and into the D&R at Bordentown but there, because of limited towing capacity, the maximum that could be handled was about twenty-five loaded boats per day, plus there would be “a loss to the Boatmen of about three days to each trip.” *Albright G. Zimmerman, Pennsylvania’s Delaware Division Canal*. The last statistical listing for the Lambertville – New Hope crossing reported by the Lehigh Coal and Navigation Co. was 1,209 tons for the year 1920. The last boat to cross the Delaware River at Lambertville was the *W.E. BERNARD*, captained by William Allshouse. It was loaded with bituminous coal and crossed at noon on November 12, 1923. It returned empty at 9:30am on November 14th. *Microfilmed papers of Harry Warford, Sr. At the National Canal Museum archives. Albright G. Zimmerman, Pennsylvania’s Delaware Division Canal*.

Lambertville Ore Train Wreck: On 28 May 1959, as an 84-car ore train, bound for Bethlehem Steel, was approaching Lambertville, an axle on the 54th car suddenly gave way. The nine cars which left the track ripped up many sections of rail and dumped a considerable portion of the heavy cargo all over the right-of-way. While no one was hurt, the cars were scattered from the canal to the river and the line was blocked throughout the day. *Down Along the Old Bel Del, Warren F. Lee*

Lambertville Station Restaurant is located between the D&R Canal/Bel Del Railroad and the Delaware River at #11 Bridge Street. The former Bel-Del/Pennsylvania Railroad station, was once a hub of local activity with rail service at times to Trenton, Philadelphia and Washington, D.C.; Phillipsburg, the Delaware Water Gap and the Poconos; New England and Boston; and even to the Jersey Shore. The imposing two-and-a-half story stone station was designed by Thomas Ustick Walter, the renowned architect who designed the dome of the US Capitol in Washington, D.C. Completed in 1867, the station initially was the headquarters of the Belvidere Delaware Railroad which served passengers traveling on the local lines from Belvidere to Trenton. In the 1970's the Canal Society of New Jersey considered the abandoned building as a possible site for their museum and headquarters. In 1982 the current owners purchased the building and renovated and refurbished it, painstakingly preserving what could be saved. They added a caboose and box car at the rear and the following year opened to the public serving American cuisine - open daily for lunch and dinner. Their Canalside Bar is on the unused Bel Del (Black River & Western) Railroad platform facing the D&R Feeder Canal. The lower level bar displays a nice collection of local historic canal and railroad views.
www.lambertvillestation.com

The **Lambertville Waterfront** is the local name given to the area of the Lambertville Station Restaurant and The Inn at Lambertville Station.

Launchings: The steam propellor *HORNET*, designed to ply the D&R Canal, between

this city and New Brunswick, is to be launched today at high water from Fisher & Company's ship yard at Shackamaxon Street Wharf, Kensington (Philadelphia). *Philadelphia Public Ledger, August 11, 1849.* Launch at Wilmington - The *NEBRASKA*, says the Delaware Gazette, is the name of a beautiful propellor steam boat built by Mr. Thomas Young for a company of men engaged in the transportation business between New York, Philadelphia and Baltimore via the canals. *Philadelphia Public Ledger, October 1, 1849.*

Lawrence Historical Society, P.O. Box 6025, Lawrenceville, NJ leases and occupies the Port Mercer Canal House and the nearby Brearley House as mini museums. www.thelhs.org

Leakage from Canal: We received a communication, yesterday, complaining very seriously of the inconvenience of having cellars in Woodruff Street, and part of Perry and Stockton Streets, filled with water. It is alleged that it is caused by leakage from the y Street Basin, and from the drainage from the canal, which has been turned into a private drain of the property owners on Petty's Run, which is said to be entirely too small to carry off the water, and fills the cellars of the property holders in the vicinity... *State Gazette, April 7, 1852.* The Canal Company are spending something over \$50 a day, at present, in labor and machinery, to keep the water from filling the cellars in the northeasterly part of the city. Wells have been sunk, and a steam engine of ten-horse power set in operation to pump out the water. An immense syphon has been rigged to draw the water out of the Perry Street Basin. It is said that enough water is pumped out of one of these wells to supply the city of Trenton. Several men are kept employed, sawing and splitting wood for the engine. This is no small business. *State Gazette, April 30, 1852.* Water in the D&R Canal was so high that it overflowed from the Phillips Basin at Perry Street and ran into the swamp. *Daily State Gazette, August 24, 1860.*

Leaped Blazing into Canal: Paul Wildinger, a Trenton boatman on the D&R Canal, and his young wife, Lillian, were victims of an unusual and serious accident last night near Princeton. The woman tried to revive a dying coal fire with kerosene. The can of oil exploded, setting fire to her dress. She screamed and her husband ran to her assistance. His clothing also caught fire as he was trying to beat out the flames. Panic stricken, the woman jumped from the boat into the canal. He husband followed, and both nearly drowned before assistance could be given them by the crew of the boat. When the two had been dragged out of the water it was found that each had been badly burned, the woman the most seriously. They were taken to a hospital at Trenton. *New Brunswick Daily Times, September 7, 1906.*

Lehigh and Delaware Division Canals: were a second major source of anthracite coal traffic for the D&R Canal. This pair of canals moved coal from the Schuylkill Field near the Lehigh River to Bristol, PA, from where it was towed up the Delaware River to enter the D&R at Bordentown. Late in 1848 outlet locks were built at Wells Falls (between New Hope, PA and Lambertville, NJ) by which boats might pass between the Delaware Canal and the feeder of the D&R, thus shortening the trip to Trenton. The Delaware Canal insisted, however, on charging full tolls to Bristol on those boats which made the transfer at Wells Falls. Whereas in 1848 about 100,000 tons of Lehigh coal entered the D&R at Bordentown, in 1860 only 1,000 tons entered there but more than 300,000 tons came into the main canal over the feeder. Trenton had hoped to become a point of transshipment from the small Lehigh-Delaware canalboats to larger vessels, but it was found more efficient to send them directly through to their destinations. *From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 265*

Lehigh Coal and Navigation Co. Prior to 1851 when the Morris Canal was enlarged to accommodate the boats then used on the Lehigh Canal, the L.C. & N. Co. transported the major part of its coal for NY markets through the Lehigh, Delaware & D&R Canals. In 1847 outlet locks were built on the Delaware and the D&R Canals at Wells Falls, just below New Hope, PA and Lambertville, NJ providing a short-cut connection via a cable ferry between the two canals for LC&N boats. In February, 1902, 23 boats of this firm in the D&R at New Brunswick broke away and rushed down the Raritan River in a severe freshet. In 1913 this connection at Wells Falls was abandoned ending the heavy coal traffic via the D&R Feeder. Note: The L.C. & N. Co. was founded in 1820 by Josiah White and Erskine Hazard. When the last subsidiary of the once famous “The Old Company” was liquidated in 1969, the once giant coal and transportation empire came to an end and one of the oldest companies in the US ceased to exist. *The latter from “The Death of a Great Company”, by W. Julian Parton.*

The **Lehigh Transportation Co.** advertised that they were “prepared to receive merchandise and forward it with promptness and despatch... ..to Easton, Bethlehem, Allentown, Mauch Chunk, Penn Haven, White Haven and Wilkes Barre, and also to intermediate places on the Delaware and Lehigh Canals, and Lehigh and Susquehanna Railroad.” They also forwarded goods to and from New York via Delaware and Raritan and Delaware Canal. “Goods shipped by this line, from New York, will go by A.S. Neilson’s line of vessels to New Brunswick. The schooner R.F. Stockton, sloops Fox and Greyhound, will be found at the Albany Basin, foot of Cedar Street, North River.” “Merchants having goods to ship from New York will find this route the nearest and most expeditious. The company have large and commodious Store Houses at Easton, Bethlehem, Allentown, Mauch Chunk, White Haven, and Wilkes Barre. Jacob Able having disposed of his interest in the late firm of Able, Wilson & Co., the business will be continued as heretofore by the remaining partners, who hope by strict attention to business to secure a liberal share of patronage. Drake, Wilson & Co., Proprietors.” *Republican Farmer and Democratic Journal (Wilkes Barre, PA), 23 June 1852; and Pennsylvania Canal Society’s Canal Currents No. 90* Lehigh Transportation Company was, along with Able, Wilson & Co. One of the major participants in the liberal rebates of tolls by the D&R Canal Company. They were informed in 1849 that the D&R Company would no longer honor the prior arrangements. Both companies protested, but the D&R maintained their position and lost the handling of considerable quantities of Lehigh pig iron, flour and whiskey. *Lehigh Transportation Company to R.F. Stockton, 14 March 1850, Neilson papers, & From Indian Trail to Iron Horse, Wheaton J. Lane, p. 267-8* In 1850 the Lehigh Transportation Company requested a restoration of the old rebate rates, which the D&R Canal Company did, but on a less generous scale. In the half year ending 30 June 1851, receipts from LTC were \$125,958.08, and deductions for rebates amounted to only \$5,649.27. *Neilson Papers, & From Indian Trail to Iron Horse, Wheaton J. Lane, p. 268*

The **Lehigh Valley Railroad** began shipping large quantities of coal via their connection with the Bel-Del Railroad at Phillipsburg to Coalport on the Delaware & Raritan Canal in Trenton in 1856 for transshipment by canalboat to New York or Philadelphia. *Daily State Gazette, January 17, 1856.* In 1879, when the Reading RR secured a lease of the North Pennsylvania RR they blocked use of that line by the Lehigh Valley RR for delivery of their coal to Philadelphia. The Lehigh Valley retaliated by initiating a price war. By routing its anthracite coal shipments to Perth Amboy over its recently completed New Jersey Division, thence to Philadelphia via boats on the Delaware & Raritan Canal, the Lehigh Valley was able to slash its shipping rates to

match those of the Reading. *A history of the Lehigh Valley Railroad "The Route of the Black Diamond" by Robert F. Archer*

Colonel John B. Leverich: A pretty steam yacht, painted white, is lying in the creek (Crosswicks), just above the canal locks. It belongs to Colonel John B. Leverich, of Fishkill, NY. Mr. L., with a crew of three men, left Newburg on the 7th inst., and reached Bordentown on Tuesday. He intended to make an extended pleasure trip to Florida, and remain in the south till spring. Finding it impossible to run down the Delaware with any degree of safety, he determined to leave his boat (*CARRIE A. WARD*) here for the winter, while he made his journey by rail. The *CARRIE A. WARD* is 54 feet in length, depth of hold 4½ feet, beam 12 feet, and 17 tons capacity. She has a vertical engine, with cylinder 9 inches in diameter and 9 inches stroke. She has a locomotive boiler 48 inches in diameter, 6 feet in length and constructed of plate iron 3/8 of an inch in thickness. Pressure allowed - 156 pounds. Among the conveniences are a dining hall and a saloon combined, capable of accommodating 25 first class passengers. The sides of the saloon above deck are fitted with plated glass. Colonel Leverich remained on his boat long enough to have it boarded up around the upper works and have the machinery put in condition to stand the inroads of winter. She will be carefully watched while in her present quarters. *Winter at the Canal Locks, Bordentown Register, December 17, 1880.* The *CARRIE A. WARD*, owned by Colonel John B. Leverich, sank in the Hudson river after hitting a rock while in excursion service on July 29, 1882.

The **Liberty Bell** was transported to Boston for the celebration of the 128th anniversary of the Battle of Bunker Hill in 1903. On its way north the bell went under the canal at Trenton and over it at New Brunswick. In traveled north along the Feeder Canal on the Bel-Del en-route to the St. Louis World's Fair of 1904. On July 6, 1915 the Liberty Bell was taken from Philadelphia where it was placed on a flat car for the long journey to the Pan American Exposition in San Francisco. On November 25th during the return trip to Philadelphia, the bell traveled over the entire length of the Bel-Del and along the canal. *Warren Journal, July 9, & December 3, 1915; Easton Daily Express, November 25, 1915.*

Lilly's on the Canal restaurant is located at 20 Bridge Street (Rear) along the D&R Feeder Canal in Lambertville. Very nice! Lilly's has five other restaurants in eastern Pennsylvania. www.lillysgourmet.com

Abraham Lincoln - Inaugural Train: The Lincoln inaugural train started from Springfield, IL and traveled through seven states in thirteen days en route to Washington. Intermediate cities passed through included: Indianapolis, Cincinnati, Columbus, Pittsburgh, Cleveland, Buffalo, Albany, New York City, then by ferry to Jersey City, New Brunswick, Princeton, Trenton, Philadelphia and Baltimore. The portion of the journey between Kingston and Trenton was along the bank of the D&R Canal. *Trains Magazine, February, 2009.* President Elect Abraham Lincoln stopped off in Trenton at the State Street Depot (along the D&R Canal) en route to his inauguration ceremony in Washington. Many of the 5,000 people who gathered to see him traveled via special trains to the state capital to see their future chief executive. The Wide Awakes Battalion of Trenton performed escort duty for Lincoln during his visit. *Daily State Gazette, February 21, 1861.*

Abraham Lincoln - Funeral Train: Traveled a similar 1,700-mile route back to Springfield, IL in 1865. However, by this time the new Camden and Amboy straight main line between Trenton and New Brunswick was in service and the train went under the D&R at Trenton and over it at New Brunswick. *Trains Magazine February, 2009*. Lincoln's final journey was our nation's first national funeral. His casket as well as the remains of his son - little Willie Lincoln were carried in the elegant presidential car *United States*, also known as the Lincoln car, which had four 4-wheel trucks. Interestingly, it was never used by Lincoln, but was used to carry his remains in the funeral train. "*Last Sight of the Presidential Remains*," *Philadelphia Inquirer*, April 22, 1865; reprinted in *Civil War Railroads & Models*, by Edwin P. Alexander (1989).

Lincoln Highway route predecessors included the Assanpink Trail, the Old Dutch Road and Kings Highway. By 1913 the road from Trenton to Jersey City had become the most heavily traveled route in the nation. The Lincoln Highway originally followed the present Route 27 which crossed the Albany Street bridge at New Brunswick and went through Kingston where it crossed the D&R Canal on bridge No. 16, north of Lock No. 8 and crossed the Millstone River on the 1798 stone bridge. Hotels like the Kingston Hotel (next to the canal) and the Union Line provided lodging for travelers. Within Kingston an original service station building still stands, although no longer serving its original purpose. The original route also crossed the Feeder Canal on the Calhoun Street bridge in Trenton. When the straight US Route 1 opened the Lincoln Highway was shifted east to the more direct route. www.lincolnhighwayassociation.org

Charles A. **Lindbergh** was born in Detroit in 1902. In 1927 he took off from Roosevelt field on Long Island and became the first to fly non-stop, solo, across the Atlantic Ocean when he landed in Paris after 33½ hours in the air. He came through the D&R Canal on his honeymoon on a 38-foot Elco yacht ca. 1928.

Joshua Bertram **Lippincott**, president and chairman of the board of publishing house J. B. Lippincott, Company traveled through the D&R Canal in the late 1920s in his 72-foot, wood hull yacht, *FIRE FLY*. She was built by New York Yacht, Launch and Engine Company in 1924 and had two 6-cylinder 20th Century gasoline engines.

Locks & Locktenders;

Main Canal;

Lock 1, Bordentown Outlet Lock,

Lock 2, So. of Trenton, filled in

Lock 3, So. of Trenton, Ernest Anderson, tender, filled in

Lock 4, Trenton, So. of Laylor St., Ernest Anderson, last Locktender. During the 1853 enlargement, Lock 5 was eliminated by increasing the height of Lock 4, making it the highest lift on the canal at 12.4 feet, filled in, then covered by construction of Route 129

Lock 5, was eliminated in 1853 and combined with Lock 4.

Lock 6, So. Broad St., or "Prison Lock", Trenton, Edward Schenck, tender, removed by construction of Rt. 129

Lock 7, State Street, Trenton, Russel Schenck, Henry Schenck, and Cale Slover, tenders, removed during construction of Rt. 1 Bypass.

Lock 7a, Greenwood Ave., was a reinforced concrete structure built in 1929, Ed Lawrence, tender; filled during construction of Rt. 129, Historic American Engineering Record drawings were made before construction of Rt. 129

Lock 8, Kingston, Dominic “Tommy” Riccardone, last Locktender; house now leased to the Kingston Historical Society

Lock 9, Griggstown, Aaron Slover, was last Locktender; house at #1170 Canal Road survives and is occupied by a D&R Canal State Park employee

Lock 10, Ten-Mile Lock, Zarephath or Weston, Harry Wilson, Locktender; surviving house is leased to NJ Water Supply Authority, presently vacant

Lock 11, So. Bound Brook,

Lock 12, Five-Mile Lock, at Fieldville Dam, Joseph Denson, last Locktender Guard Gate, Bogans Lane,

Lock 13, Deep Lock (actually 0.2" lower than Lock 4 after it was combined with Lock 5), New Brunswick, Russell Garretson, last locktender, and _Robert?_ Nolan was the last occupant before it was moved during construction of Rt. 18 and later demolished

Lock 14, Twin Outlet Locks, New Brunswick, Thomas Lynch, Harbormaster/Locktender, assisted by Al Reid; the original lock was 30 feet wide and was known as the “Sloop Lock”; the second lock of 24' by 220' was built in 1866. “Richard W. Welch (Welsh) was Locktender ca. 1860, living at the Outlet Lock; Harbor Master ca. 1870 and Locktender in 1880.” *Letter of Harold J. Butler, Probate Research Specialist to McKelvey on 26 March 1979.*

Feeder Canal;

Raven Rock Guard Lock and Flood Gates

(Wickecheoke Creek flows across the Feeder Canal above the Stockton Guard Lock)

Stockton Guard Lock, to protect canal from excess flow in Wichecheoke Creek

Lambertville Lock, had an adjacent outlet lock into the Delaware River to facilitate passage of boats to and from the Delaware Canal on the PA side; house survives and is leased to NJ Water Supply Authority, presently vacant.

Locomotive Accidents: The engine which took the Philadelphia train to New Brunswick, was left in care of the fireman for the purpose of placing it in the engine house. The fireman, it appears, in backing the engine came in so rapidly that the speed could not be checked until it came in contact with the rear wall of the building, which was much broken by the collision. The falling of the broken wall led the fireman to think that the building was about to come down upon him, whereupon he threw the machinery into forward motion and jumped from the engine to save himself. The engine, under a heavy head of steam, instantly started forward and ran at great speed toward the railroad bridge, the draw of which was open, and the locomotive was precipitated into the canal with a tremendous crash, which destroyed it. *Princeton Whig, December 1, 1848.* The locomotive that plunged into the Feeder near Warren Street Monday, will be taken away for repairs probably today or tomorrow. Crowds of idle people watched the railroaders at work dragging it up from the bottom yesterday. The locomotive will be removed in sections. *Daily True American, August 19, 1884.*

Locomotive towing: All the towing on the “fifteen-mile level” between Trenton and Kingston, on the Delaware and Raritan Canal is now done with a locomotive; horse power has been entirely dispensed with. *Public Ledger (Philadelphia), September 8, 1840.*

J. Holmes **Longstreet:** DO A SEARCH FOR HIM
Was captain of his own steam yacht *MAY*, US Registry #92440, built in Bordentown in 1892. It

was 60 feet long 9,3 feet at beam and drew 4 feet of water.

LOOKOUT: the National Iron Armor and Ship Building Co. of Camden built the iron-hull steam tugboat *LOOKOUT* in 1862. Her US vessel registry number was 15080. "...Bright and early Monday the little ice (breaker) boat *LOOKOUT* started out bravely to open a way to the locks and succeeded after a persistent effort. The *TRENTON* and the *MARCUS L. WARD* were released and took their positions in Crosswicks Creek. The Clyde propellers returned to Philadelphia, the *LOOKOUT* taking the lead and breaking the ice. In the wake of the Clyde steamers followed the following vessels, all loaded and caught in the ice at this place (Bordentown): *WILLIAM WOODWARD*, *F. W. BRUNE*, *VINELAND*, and *OLNEY* of the Phila., Balt. & N.Y. Line; and the *TRIPLET* of the Phila., Wil., & N.Y. Line..." *Caught on Their Last Trip, Bordentown Register, December 24, 1875.* "As of mid-1978 *LOOKOUT* was elevated to the oldest vessel in US commercial registry with the scrapping of the *MAJOR HENRY BREWERTON* (1857) on the Delaware River. Letter of Harry Jones to the author on 15 March 1979. Also see "National Iron Armor and Ship Building Co."

Captain Richard F. **Loper:** In 1844 the Joint Companies made a contract with Richard F. Loper, and M.W. Chapin & Co. of Hartford, CT for running a line through the canal between Philadelphia and Hartford. They paid 10% of the total freight charge on merchandise and 5% on coal in lieu of regular tolls. "The Merchants and Swiftsure line of boats - heretofore known as the Napoleon Company, have been purchased by Captain R.F. Loper of Philadelphia. Last year there were four steamers and 16 barges on these lines. Captain Loper will add four steamers and four barges for the ensuing season." *Sentinel of Freedom, March 5, 1850.*

Lost Canalboats: On Wednesday a party of gentlemen came to Trenton from Philadelphia to look for a boat that had been stolen. They secured the services of two persons named Murphy and King; who after searching for the boat, found it at Burlington, but the thieves they found not. *Daily State Gazette, August 2, 1872.* A stray canalboat came down the river on Sunday. It was caught at Lambertton and secured. *Daily State Gazette, August 6, 1872.*

Frederick **Lovejoy**, of 143 South Mountain Avenue, Montclair, NJ, (this Classical Revival home was built for him ca. 1903), ordered a 94-foot, wood-hull, yacht from Mathis Yacht Building Co. in Camden in 1927. The 140 gross ton *NICOYA* was powered by two-six cylinder Winton diesel engines and went through the D&R in the final years. Winton was acquired by Electro Motive Corp. and the Winton design was adopted by the Electro Motive Division of General Motors becoming the most widely used diesel engines in railroad locomotives. Lovejoy was in the steel business and worked in NYC. Nicoya is a resort town in Costa Rica. Incidentally, Lovejoy's home was pictured in *Concrete Country Residences* published by Atlas Portland Cement Co. in 1907. It was recorded by the NJ Office of Cultural & Environmental Services, Historic Preservation Section in 1981.

LOWRY v. The E. BENJAMIN: Federal Case #8,582 of 1847 is litigation stemming from a load of hay which was "injured" during a voyage. The hay was loaded on the *BENJAMIN*, a licensed boat of 86 tons burden (burthen) having mast and sails employed in navigation from Pottsville, PA on the Schuylkill Navigation system to Philadelphia and through the D&R Canal to New York. The hay was loaded at (So.) Bound Brook to be transported to

Philadelphia.

A **Mail train derailed** at Titusville on November 28, 1928 and the Pennsylvania Railroad steam locomotive ended up smack in the middle of the canal. “Around 5pm the locomotive and tender of the northbound passenger express train No. 372 with 150 passengers aboard, approaching Titusville, mysteriously separated from the train, jumped the track, and plunged into the Feeder Canal. The uninjured engineer, Frank Raub of East Stroudsburg, and the fireman, Edward Beaver of Trenton, swam safely to shore. The passenger coaches were undamaged and remained on the track. None of the passengers were injured or even shaken up. Indeed, ladies from the nearby Presbyterian Church, who were holding a church supper at the time, rushed coffee and sandwiches to the astonished crew and stranded passengers. The conductor was William Weaver. *Lambertville Beacon, November 3, 1928.*

Maps of the D&R Canal with custom local interpretive descriptions have been placed at various locations along the canal and feeder. Their production was organized by the Sierra Club Central Jersey Group with partial funding by *Lambertville Station Restaurant*.

Marl: C.A. Woodward offered marl from his pits on the Delaware and Atlantic Railroad, at Juliustown, NJ for sale. He also offered to deliver it in rail cars to any point on the D&A RR or the C&A RR, including to Kincora wharf on the Delaware River which would be easily accessed by boats for delivery to points along the D&R Canal. *NJ State Gazette, October 12, 1838.*

The “**Marriage Act**”: Robert Stockton managed to meet two of the three Stevens brothers (Robert L. And John C.) At a New York theater, where, with his forceful, energetic, and charming personality, he persuaded them to join the Camden and Amboy Railroad Company with his Delaware and Raritan Canal Company. The “Marriage Act” was passed by the New Jersey Legislature on 15 February 1831. The state then passed an act on 2 March, entitling it to receive \$30,000 a year plus percentages of freight and passenger revenues from the Joint Companies. The legislators included a clause to prohibit the building (or operating) of competitive transport routes across the waist of New Jersey for the thirty-year life of the charter which was later extended to fifty years. Thus competition was precluded and the parallel stagecoach routes became obsolete. *Passage Between Rivers by Elizabeth G.C. Menzies*

Marshall House, (1816) located at 60 Bridge Street, Lambertville, east of the D&R Feeder Canal, was the boyhood home of James Wilson Marshall, the discoverer of gold in California in 1848. Since 1968 the home has been owned by the State of New Jersey and on the National and NJ Registers of Historic Places. It is administered by the D&R Canal State Park and is leased to the Lambertville Historical Society for use as a museum. This Federal style brick structure was built by Phillip Marshall (father of J.W.) who was a cabinet, coach and wagon maker. The home was sold to St. John’s Roman Catholic Church in 1882 and used as a convent for over 80 years. www.lambertvillehistoricalsociety.org

Maxwell & Co. of Perth Amboy operated canalboats on the D&R ca. 1907.

Masted Vessels Through the D&R: 1884: The depth of the water of the D&R Canal appears to be sufficient to pass coastal vessels from the Delaware to the Raritan. The New York

papers mention the arrival of the schooner *SARAH ANN*, loaded with dry goods in 48 hours from Philadelphia, via the D&R Canal. The business on the canal appears to be rapidly increasing – and the novel scene of masted vessels gliding through the cornfields and woods is presented to our view. “*OLD INK*” 125 Years Ago in *Hunterdon Democrat* 24 9 2009 The D&R and C&D canals were unique among the towpath canals in that both utilized swing bridges which provided unlimited overhead clearance. In 1903, with the completion of the stone arch bridge at New Brunswick, masts on sailing vessels and booms on freighting vessels were limited to a 50-foot height above the water surface. Sailing schooners which used the D&R and C&D were of “wall sided” construction to fully utilize the 24-foot width of locks. The Morris, Delaware, Lehigh, Delaware & Hudson, Erie and Champlain canals all had low fixed bridges which prohibited passage of masted vessels. A sailing canalboat developed for use on the Champlain Canal had a mast which could be “unshipped,” or laid down on the deck, to permit passage.

McAllister Co. operated the oil fired steam canalboat *ALBANY* and *JAMES W. JOHNSON*, under subsidiary Foam Corp., providing the last through freight service during the last two years the D&R canal was open. Also see McAllister Towing and Transportation Co., Inc.

Capt. James P. **McAllister** testified before the NJ Board of Public Utilities on April 11, 1933 that a boat of 7-foot draft traveling through the canal was “hazardous, and that from one to two miles an hour was the best speed that could be expected.” “...stones would roll into the canal and break wheels (propellers) and unship rudders; the boats would strike something at the bottom of the canal which would break their propellers.” ...aside from the damage from hitting these stones or incumbrances “when we loaded them we were right down on the bottom. We skated along on the bottom all the time and the average speed was around maybe two miles. Sometimes we did not make five miles in five hours.” Also see McAllister Towing and Transportation Co., Inc.

McAllister Towing and Transportation Co., Inc. is one of the oldest and largest family-owned marine towing and transportation companies in the US. Founded by Capt. James McAllister in 1864 with a single sail lighter, the company has served the maritime community continuously, earning a reputation for unsurpassed excellence. Today the company operates a balanced and extensive fleet of tugs, barges, and ferries in the major ports on the US East Coast and in Puerto Rico. Capt. Brian A. McAllister is the President and great-grandson of the founder, representing the fourth generation of McAllisters at the helm. Four McAllisters of the fifth generation are also employed by the company. Capt. James McAllister started the first McAllister enterprise shortly after he arrived from Cushendall, County Antrim, Ireland. Together with his brothers and in-laws, McAllister formed Greenpoint Lighterage Company. They augmented the lighterage business with towing, with the acquisition of their first steam tug, the *R.W. BURKE*, in the 1880's. In the early 20th Century, Capt. James was one of the first to convert a sail lighter into a bulk oil carrier, for the transport of oil around NY Harbor. The company also became known nationally for its salvage work, which extended from the West Indies, along the Atlantic Coast as far north as Maine. In 1909, the company acquired the Starin Fleet of steamboat excursion vessels, forming the McAllister Steamboat Company, which was one of the largest excursion boat operators in New York, with regular runs to the Statue of Liberty, Bear Mountain, Coney Island, and Long Island. After the death of Capt. James in 1916,

his four sons, the second generation of McAllisters, assumed control of the company via a partnership. By 1918, the company had moved into the ocean towing business. McAllister inaugurated one of the first deep-sea tug-barge combinations with the 156-foot tugboat, *C.W. MORSE*, carrying molasses from Cuba to New Orleans. Always an innovator, in 1927 McAllister installed a 375 hp diesel engine in the *DANIEL MCALLISTER*, making it the first diesel powered tug in NY Harbor. During WW I, Capt. James P. (Capt. Jim) McAllister served with honor on the Board of Embarkation for the US Government. He also held the post of Acting Director for the Army's floating equipment. Between the Wars, a fleet of 27 ocean-going tankers was operated by McAllister to all parts of the world for the US Shipping Board. With the death of Capt. Jim in 1936, the third generation of McAllisters took the helm and are credited with not only pulling the company through the difficult Depression years, but also bringing the company to its present-day prominence. During the 1940's and 50's, the company expanded to include operations in Pennsylvania, Virginia, and Canada. Ca. The 1970's McAllister Tug and Barge Drydocks took over the former Central Railroad of New Jersey marine repair yard in what became Liberty State Park. (Liberty State Park Administrator, Dr. Frank Gallagher worked two summers at the drydocks before college, and the same facility was an account your editor serviced when he worked for the Insurance Company of North America.) Today McAllister operations have expanded to include offices in Portland ME, Baltimore MD, Wilmington NC, Georgetown SC, Charleston SC, Jacksonville FL, Port Everglades FL, and San Juan, Puerto Rico, in addition to NYC, where their office is located at 17 Battery Place, the traditional location of maritime businesses. McAllister's current fleet consists of over 70 tugboats, including 13 tractor tugs, and 12 barges. They also own and operate the Bridgeport (CT) & Port Jefferson (LI, NY) Steamboat Company (ferry). www.mcallistertowing.com Also see McAllister Co. and Capt. James P. McAllister.

McCausland v. The Stram Propeller DELAWARE is the litigation resulting from the collision of the two canalboats in the D&R Canal on April 17, 1879. The decision hinged on the display of the proper lights on the canalboat *S. CRAIG*. Such cases provide a wealth of historic information on canal operations and the circumstances of the event.

McKean, Van Cleve, Dripps & Co. (Isaac Dripps, who had never before even seen a locomotive, assembled the *John Bull* after its arrival from England in 1831) was a manufacturer of large boilers in Trenton. "...it required some 50 men to get one on board the boat lying in the (D&R) basin at the above works. Two boilers are considered a sufficient load for a vessel." *Daily True American, October 30, 1855*. The firm was compelled to take down a large portion of one side of their machine shop to get out the mammoth boiler constructed for the Stevens Floating Battery by order of the Government. *Daily True American, July 16, 1855*. Note: this firm was also reported as "Van Cleve, McKean & Dripps."

McKee's Line Steam Propellor: Operated the 272 ton steamboat *WASHINGTON*, built in 1846 at Southwark, PA, in "opposition to the Great Monopoly. The splendid new steam propellor *WASHINGTON*, G.W. Brown, Master, is now loading and will leave on Saturday, 23rd, at 5 o'clock P.M... ...The *WASHINGTON*, goes round in 24 hours. Merchants and others will find it much to their interest in shipping by her in preference to the great monopoly, the Canal Company." *Courier & Enquirer, New York, May 21, 1846*.

Captain Bill **McKelvey**, a canal historian specializing on the D&R Canal; was the author of *Delaware & Raritan Canal: A Photographic History*, (Note: All photos from this book have been donated to the Canal Society of New Jersey) & *Champlain to Chesapeake: A Canal Era Pictorial Cruise*, as well as the author and publisher of other canal and trolley books ; a director of the Canal Society of NJ for several decades; a frequent lecturer; leader of Canal Society of NJ study tours to England, Ireland, Scotland, Wales, Holland, France, Canada, etc.; a director/officer/life member of the American Canal Society; Friends of the New Jersey Transportation Heritage Center, Inc. Charter member/Director/President Emeritus/Curator/Collections Manager/Editor & publisher of *New Jersey Transport Heritage/Annual Symposium Coordinator/Book Sales Manager/Facility Manager: Rail Storage Yard*; New Jersey Historical Commission: Award of Recognition for Preservation of NJ History; Society for Industrial Archaeology, Roebing Chapter, 2004 John Augustus Roebing Award for “dedication to preserving the transportation heritage of New Jersey in all its watered and wheeled forms”; and Recipient of NJ General Assembly Resolution by Assemblyman Alex DeCroce in 2009. (Also see his resume.)

The **Meadows Foundation**, “Stewards of early Dutch & American Heritage - Giving the Past a Future” is based in the Van Wickle House (which was called “The Meadows”), located at 1289 Easton Avenue, Somerset, NJ and adjacent to the D&R Canal. Their volunteers have preserved a unique collection of seven historic properties along the Raritan River and D&R Canal. They include: two early Dutch farmhouses; one pre-Revolutionary family tavern; two Civil War era farms; the D&R Blackwells Mills bridgetender’s house; and one early Edwardian property ranging from 1722 to 1892. The properties are all listed on the state and national historic registers. www.themeadowsfoundation.org

Mercer & Somerset Railroad: “The Iron is all laid on the Mercer & Somerset Railroad and cars have passed over the track (from Lambertville) to Millstone... The bridges over the (Feeder Canal as well as) the river and canal at Millstone are also completed, thus forming a connection with the New Brunswick and Millstone Road.” *Gazette, 14 November 1873 & Hunterdon Republican, 20 November 1873*. Note: This line was built in an attempt to stop the Reading Railroad from reaching NY. Once the Pennsylvania RR lost the “Frog War” there was no economic need to continue the M&S and it was torn up from the Bel Del to East Millstone. *The Mercer and Somerset Railway, by Carl Wieland’25, The Rutgers Alumni Monthly, Vol. IV, No. 8, May, 1925*. Ashbel Welsh, F. W. Jackson, General Superintendent of Belvidere Division, and several of the directors, with a few distinguished invited guests, went in a special train yesterday over the Mercer and Somerset Railway. This road is now finished. It is well built, and passes through one of the most fertile portions of the state. The rich farms of Pennington, Hopewell, Blawenburgh, Harlingen and Millstone, spread out on either side of this road, in rich and beautiful clusters. Mr. Jackson assured us that It was his purpose at once to make out the timetable for this road, and begin without delay, say within ten days, to run trains over the entire road, and thus directly to New York. This will be an important event to the people of Mercer and Somerset counties, not only the great convenience to the people, but it must add immensely to the value of all this section of the state, as well as multiply the population through these beautiful valleys. *Trenton State Gazette, 7 February 1874*. On Sunday evening an unknown man, evidently a tramp, fell from the trestle works of the Mercer and Somerset Railroad at Millstone, striking on a bed of gravel in the river. He was quite seriously injured, but a bottle of whiskey he had in one of his pockets was not broken

by the fall. *Trenton State Gazette*, 11 July 1875 A new through car arrangement between the Bel Del and the Mercer and Somerset has come into effect. The rear car of the train leaving New Brunswick at 4:10 pm over the M&S Railway is detached at Somerset Junction and then attached at the same station to a connecting northbound train in order to go directly through to Lambertville and Flemington, reaching Lambertville at 5:56 pm and Flemington at 6:30 pm. *Hunterdon Republican*, 25 November 1875 Note: The Millstone Branch of the Pennsylvania Railroad, east of the D&R Canal, survived well into the mid 20th century and remnants of the full railroad can be found if one knows where to look. On the east side of the Millstone River, between Millstone and East Millstone a single stone masonry pillar remains and the remains of the west embankment of the bridge over the Feeder Canal can be seen along Route 29 near Jacobs Creek Road.

Mercer County Workhouse, located on the D&R Feeder below Lambertville, received coal and shipped out rock products via canalboat.

Mercer Museum, Doylestown, PA, a part of Bucks County Historical Society, archives contain many early records of land purchases and construction contracts. www.mercermuseum.org

MERCERE was the name of a new and handsome schooner just placed on the line between Trenton and New York via the canal. She was built at Middletown, CT; is about 80 feet in length, 22 feet beam, 6 feet depth of hold, and 100 tons burthen; and in model, finish, symmetry, and general appearance, surpasses any other vessel connected with commerce of this place. She is intended to supersede the *JAMES MADISON* (which will be transferred to the Philadelphia line) and will be commanded by Capt. William Ashmore. *NJ State Gazette*, June 19, 1846.

Merchants and Swiftsure lines a/k/a Napoleon Co., a/k/a Merchants' and Swiftsure Steam Transportation Line were established by the New Brunswick Steamboat and Canal Transportation Co. soon after the D&R Canal opened. *Report of Commissioners Appointed to Investigate Charges Made against the Directors of the D & R Canal, and C&A Railroad and Transportation Companies (Trenton, 1850)* Merchant's was originally owned in part by New York and Philadelphia shipping firms, but in 1841 the NBS&CTCo. bought out its associates. By a contract made in 1836 it was agreed that the Merchant's Line would pay the canal 25 per cent of its receipts instead of fixed tolls. For about ten years its barges were the only ones running regularly between New York and Philadelphia, and its profits were estimated as high as 40 per cent annually on its capital expenditures. *NJ State Gazette*, 25 September 1844. The Swiftsure line was formed in 1838 and likewise contracted to pay 25 per cent. The two lines were thus "subordinate unincorporated nominal companies," keeping separate accounts, and upon them was placed the risk, such as it was, as common carriers. In this way the NBS&CTCo. sought to avoid the responsibility for cargoes lost or damaged or for injuries to others, at one time even refusing to acknowledge ownership of one of the lines in an action at law. *An Exposition of the Character and Management of the New Jersey Joint Monopolies*, by G.W. Tatham, p. 16, 19 & *From Indian Trail to Iron Horse*, by Wheaton J. Lane. Merchants' and Swiftsure Steam Transportation Lines were purchased by Capt. R.F. Loper of Phila. in 1850. In 1849 there were four steamers and 16 barges on these lines. Capt. Loper planned to add four steamers and four barges for the 1850 season.

Merchants' and Swiftsure Steam Transportation Line a/k/a Merchants' and Swiftsure Line. Excerpts from their ad in the Springfield, MA, Republican of March 8, 1850: "...running

between New York and Philadelphia via Delaware & Raritan Canal, and for the better accommodation of shippers, and despatch to correspond with the age, have added several fine Steam-Propellers to their line, which is now composed of 8 splendid Steam-Propellers, and 20 superior Freight Barges, built expressly for the trade, and well adapted for inland navigation... ..The above lines have been in successful operation for 17 years past, millions of tons of good have been transported safely through that great thoroughfare, avoiding the dangerous navigation and risk of sending them by sea..." Their ad in the Philadelphia Public Ledger of June 14, 1850 under the title "Philadelphia and NY Steam Transportation Co. listed their eight 1st Class Steamer Propellers as: *ERIE, CAYUGA, VULCAN, IRONSIDES, NEW YORK, ONEIDA, BLACK DIAMOND*, and *ANTHRACITE*. "Two new steamboats, the *NOVELTY* and *ERIE*, the Trenton Gazette says, have been put on the canal to run New York to Philadelphia. They are finished (sic) with Lopers propellers. Both are of superior speed; the *ERIE* made the last run from New York (to Philadelphia) in 19½ hours including 42 miles of canal transportation." *Sentinel of Freedom, July 30, 1850.*

Merchants Canal Line on shipping bills of 1848 & 9.

Merchants Canal Line, Steam Tow-Boat Co. per freight bills of 1844 for *IRONSIDES* and *VULCAN*.

Merchants' & Millers' Transportation Co. of New Jersey: The propellor *ECHO* having been purchased by the Merchants and Millers Transportation Co. will run regularly from Rocky Hill and intermediate places to New York. *Princeton Whig, March 30, 1849* The firm was incorporated on March 7, 1850 by E. Schenck, D.H. Mount, J. Shurts, A. Veighte & their associates, proprietors of the line of steam propellers and transportation barges (being eight in number at the time) plying through the D&R canal and feeder, between Phila. & NY to and from Millstone and intermediate cities to transport goods, wares, produce, and merchandise.

Merchants Dispatch Propeller Line per an 1868 ad: "Between NY & Phila. in 24 hours!"

Merchants' Line, a/k/a Merchants' Transportation Co. (1830's).

Merchants' Transportation Co. was organized in 1830's; it was a division of Canal Freight Barge Lines after 1836, connecting NY, Trenton & Phila.. For about ten years from 1836 its canalboats were the only ones running regularly between NY & Phila. and its profits were estimated as high as 40% annually. During this period they paid 25% of their receipts in lieu of fixed tolls. The line was sold to Phila. interests (Capt. Loper) in 1850. Also see New Brunswick Steamboat and Canal Transportation Company.

Merchants Transportation Co. was incorporated in NJ on Feb. 6, 1855 by Thomas J. Stryker, William G. Cook, Jonathan S. Fish, and their associates. In 1865 their steam canalboat *J.B. MOLLESON* suffered a boiler explosion, killing two, just south of Baker's Basin on the D&R and burned to the water line. Also see *JOSEPH B. MOLLESON* explosion. In 1884 the firm advertised "Steam Propellers via the Delaware and Raritan Canal Tri-Weekly between Trenton and Philadelphia - All steamers will stop at New Brunswick, Bound Brook, Millstone,

Griggstown, Rocky Hill, Kingston, and Princeton going and returning. *Robert Yuell collection*. The firm was purchased by John A. Roebling & Sons interests in 1901 and after 1914 was known as the Trenton Transportation Co. a/k/a Dolphin Line. Also see “*JOSEPH B. MOLLESON*.”

Merchants’ Transportation Line: The propellers of the Merchants’ Transportation Company have returned from Annapolis, and resumed their regular trips on the line. One of them will leave here (Trenton) on Saturday for New York, and one on Monday for Philadelphia and will run regular hereafter. *Daily True American, 10 May 1861*. The propellers belonging to the Merchants’ Transportation Line of this city (Trenton) have been chartered by the Government and are to be taken to the Potomac. A large number of propellers and other vessels have been chartered for the same destination; all of which looks like the so long expected “forward movement.” *Daily True American, 5 March 1862*. The propeller *DELAWARE* of Merchants Transportation Line arrived here (at Trenton) yesterday very heavily laden with merchandise for our citizens. We had the pleasure of witnessing the interesting process of unloading a vessel, and to contemplate the great variety and immense quantity of all kinds of merchandise which such a vessel as the *DELAWARE* can carry. Among the cargo was a very large consignment of apples to Leeds, Holmes & Company, wholesale merchants, which no doubt will be sought with avidity by our people. *Daily True American, October 17, 1868*. ‘Cheap Freight’ The Merchants Transportation Line of steam boats have commenced running their trips between New York and Philadelphia, stopping at Princeton Basin each way. W. Morris, Agent. *Princeton Standard, March 25, 1870*. (a/k/a Steam Tow-Boat Co. per freight bill of 1838.)

Walter L. **Meseck** was a son of the Meseck family which operated a fleet of tugboats in and around New York Harbor. “While I attended the Lawrenceville School we used to swim in the D&R and some years later while I was in school in Princeton we used to swim in the D&R at the Millstone River aqueduct. In the fall we would watch the yachts go through the lock at Kingston. Back in the early 1920's one of our tugs which was named after me, the *WALTER L. MESECK*, went through the canal when we sold her to a company in Baltimore.” The pilot house of this vessel has been preserved in the Mariner’s Museum at Newport News, VA. *The late Walter L. Meseck letters to the author dated December 16, 1988 and July 8, 1991*.

Middlesex and Somerset Traction Co., the Albany Street Bridge Committee of the Middlesex County Board of Freeholders and the D&R Canal Co. all took a hand Saturday in a squabble at the Albany Street Bridge in New Brunswick which tied up the Bound Brook and Metuchen lines of the trolley company for several hours. The Freeholders’ committee swung the draw so as to prevent the cars from crossing, and it was not until specific orders were received from the canal company’s office at Trenton that the draw was closed. There has been much friction for some time over the failure of the trolley company to replace the worn-out planking on the draw. The Freeholders’ committee declared that the trolley company delayed the work deliberately. Superintendent Walsh, of the Traction Company, said the delay was due to the difficulty in securing lumber. Saturday the work was started and a part of the planking was torn up. The Freeholders insisted that the roadway where the planking had been removed must be closed to all traffic, to protect the county against liability for damages in case of accident. The traction company refused to close the roadway, and Saturday, when the Freeholders strung a rope across the roadway, a trolley car, whose motorman was acting under orders from James Butler, assistant superintendent, ran through the obstructions, snapping the ropes as fast as they were put

up. Then, after a conference with the County Solicitor, H. B. Willis, Freeholders O'Neill and Donovan, of the committee, swung the draw open a few inches, disconnecting the trolley tracks. The bridge was then tied with ropes, so that wagon and foot passengers could cross but trolley cars could not. The Traction Company appealed to James Dougherty, assistant superintendent of the canal company. Mr. Dougherty is a member of the Board of Freeholders and of the Albany Street Bridge Committee. He refused to take any action in the matter or to act for either side, taking this course by consent of the other members of the committee. Superintendent Walsh then kept the wires between this city and Trenton hot with requests and explanations, and at 2 o'clock came orders that the draw should be closed, the canal company claiming the sole right to handle the draw. The open places in the roadway had been closed meantime, and it was agreed that no part of the roadway should be opened until planks were ready for it. Then the draw was closed and trolley cars were enabled to cross the bridge. *New Brunswick Daily Press, 6/8/1903.*

Middlesex Transportation Co. The *ROBERT W. JOHNSON* is the handsome new boat which is being built at Noank, CT to carry freight for the Middlesex Transportation Co. (MTC) between New Brunswick and New York was launched July 10th and will be in service soon. The new 120-foot, 150-ton capacity boat has twin-screws powered by a 500 hp Sullivan engine, steam steering gear, a steam hoist, electric lights and a search light. *New Brunswick Daily Times, July 12 and October 21, 1905.* The MTC took over the old steamboat dock east of the outlet lock in New Brunswick from the Pennsylvania Railroad. MTC also planned to run Sunday excursions to "Dreamland" under the direction of Charles B. McLaury, who had considerable experience in the boat business. *New Brunswick Daily Press, March 14, 1906.* MTC was a subsidiary of Johnson & Johnson Co. and operated freight service between NY & New Brunswick beginning in 1903 and gradually growing with the steam freighters *TRENTON, ROBERT W. JOHNSON, JAMES W. JOHNSON, DENNY BROTHERS,* and *FRANK M. RILEY.* "Get Your Goods by Boat: Steamer *R.W. JOHNSON* leaves New Pier No. 1, North River, 3:30P.M. daily, Sunday excepted, for New Brunswick. Freight received up to 5:30P.M." *Ad of April 1912.* All J&J boats carried a distinctive red cross on their white stacks and primarily served the manufacturing facilities of their parent company on the banks of the D&R. However they later operated a fleet of trucks to pick up and deliver freight in the New Brunswick area.

Middlesex Transportation Co. v. Pennsylvania Railroad Co. is litigation, filed 1.7.1913, to compel the defendant (PRR) to maintain and operate a part of the D&R Canal at New Brunswick during the winter season until the elements make it impossible.

Migrating South on the Delaware and Raritan, by Diane Jones Sliney first appeared in *Time Off*, the magazine supplement to the *Princeton Packet*, November 3, 1981 and was reproduced in *American Canals, No. 44, February, 1983.*

Mile Markers remaining along the D&R Main Canal are reminders of the Joint Companies railroad engineering influence. The posts on the main canal are triangular shaped reinforced concrete posts with numbers cast into them. The posts on the D&R Feeder Canal are the same ones used by the Pennsylvania Railroad. Both styles of posts each have two numbers - one facing up canal and the other facing down canal. The sequence of those on the Main Canal began at Bordentown on the up side and New Brunswick on the down side, so the canaller would know how many miles he had traveled and how many he had to go to the end of the canal.

Those on the Feeder were numbered from Clinton Street, Trenton to Manunka Chunk (67.7 miles), where the PRR Bel Del line connected with the DL&W RR. This is the reason that neither the “down” or “up” miles reflect the actual Feeder Canal mileage. *The Official Guide of the Railways...*

Miller & Banker built and operated canalboats on the D&R in the very early years.

Mills along the D&R Canal: Some mills along the route of the D&R Canal existed before construction of the canal. Prallsville Mill raceways had to be realigned so they would continue to work. A new discharge flume under the D&R Feeder Canal had to be designed for the Jacobs Creek mill. Numerous mills were powered by water from the D&R Canal, primarily in Lambertville, Trenton, and New Brunswick.

Millstone is a borough on the D&R Canal, incorporated in 1894, in Somerset County with a population of over 400. It was listed in the National Register of Historic Places in 1976 and encompasses 58 buildings. The borough possesses a military significance for 1700-1749, 1750-1799, and 1850-1874. Millstone was ranked as the 7th best place to live in NJ in 2008. *New Jersey Monthly magazine* Millstone was briefly the seat of Somerset County until the British burned it to the ground during the Revolutionary War. It was part of a through rail route between Trenton and New York for a few years when the Millstone and New Brunswick and the Mercer and Somerset Railroads were connected. www.en.wikipedia.org “As many as 100,000 bushels of grain have been stored at Millstone at one time waiting for the opening of the canal.” *History of Hunterdon and Somerset Counties, NJ by James P. Snell; Along the Delaware and Raritan Canal, by James and Margaret Cawley*

Millstone River: According to Geologists, the Millstone River, which the D&R Canal closely parallels, originally flowed in the opposite direction a million years ago. During the Ice Age its course was reversed. It’s original source was a huge spring in the Sourland Mountains from which it flowed south to empty into the Delaware River near Trenton. The present source of the Millstone is near Sweetman in Monmouth County, east of the D&R Canal and it passes under the canal which is in an aqueduct, nearly submerged by Lake Carnegie. From this point the Millstone flows north along the route of the D&R Canal and joins the Raritan River on the west side of South Bound Brook. The Millstone River is one of the few streams in the country that flows north. *Exploring the Little Rivers of New Jersey by James & Margaret Cawley and Millstone Valley by Elizabeth G.C. Menzies*

Millstone Valley Preservation Coalition’s mission is to preserve the history, environment and quality of life in the Millstone Valley. They are the sponsor of the Millstone Scenic Byway initiative. They - - - - - plans to move into the Griggstown bridgetender’s house.....???????

Millstone Valley Scenic Byway was designated by the NJ DOT in 2005 covering about 27.5 miles in Kingston, Franklin and Hillsborough townships in Somerset County. The historic D&R Canal runs through most of the byway with Canal Road on one side and River Road on the other. For further information and a PDF see the NJ DOT website: www.state.nj.us/transportation/community/scenic/delaware

The **MONITOR Federal Case No. 9,708 of 1877**: A collision occurred on the Delaware and Raritan Canal about 12 miles west of New Brunswick, in the state of New Jersey, between the steam barge *MONITOR* and the canal boat *ESTELLE*, whereby the latter was sunk in 1876. She belonged in New York, and a libel was filed to recover for the damages. The answer of the owners of the *MONITOR* sets up the want of jurisdiction of the admiralty courts over such cases occurring upon canals. The jurisdiction of the admiralty court over cases upon inland canals was upheld upon authority. The decree was for the libelant.

Walter R. **Moore**, a wealthy owner of fruit groves in FL was the co-owner, with Capt. Frederick C. Voss, of the yacht *DONNY GIL* which came through the D&R in the late 1920's. She was 68 feet long, 18 feet at beam, and built in Bath, ME in 1924 of wood with two Knox four cylinder engines. *DONNY GIL* had a main salon, two double staterooms, 2 single rooms, the Captain's stateroom, 3 baths, a galley, and quarters for the crew of six. *Per William Glass of Princeton.*

Thomas Hill **Morgan, Jr.**, a deck-hand on a Schuylkill Navigation canalboat maintained a daily diary of his 1863 experiences working from Hamburg, PA to Philadelphia and through the D&R to New York and return. The diary was edited by John V. Norris and published as a serial in the Phoenixville, PA Daily Republican beginning June 12, 1958.

The **Morris Canal** was considered a principal rival to the D&R Canal. The anthracite coal trade failed to materialize on the D&R Canal for a number of years. Though numerous efforts were made by James Neilson and others to attract the coal business, the Morris Canal was too firmly entrenched to be dislodged easily. In February 1838, James Neilson confided to John Potter that he hoped "to the coal trade, in the ensuing season, taking the best and most economical route to the Great Emporium (New York) which has heretofore been prevented by the management of our up country opponents..." *James Neilson to John Potter, 22 February 1838; Neilson Papers; Colonel James Neilson by Robert T. Thompson.* Those persons or firms near Phillipsburg could demand special rates from the D&R and those firms at Easton, PA received discounts varying from 10 to 50 per cent, depending on their bargaining ability. It was this readiness to grant concessions that attracted to the D&R Canal via the Delaware Division much traffic that would normally have used the more direct route of the Morris Canal. Able, Wilson and Company of Easton and the Lehigh Transportation Company were among the boat operators who negotiated reduced tolls with the D&R Canal Company. In 1849 the liberal toll rate rebates for these two firms were cancelled by the D&R Canal. The two firms replied that it would be cheaper for them to ship by the Morris Canal. The D&R maintained their position and lost the handling of considerable quantities of Lehigh pig iron, flour and whisky. In 1850 the Lehigh Transportation Company requested that the old reduced rates be restored. The rebating system was restored, but on a less generous scale than before. *Neilson Papers, & From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 267-8.* Such cities as Newark, Jersey City and Hoboken obtained their coal not only via the Morris Canal but also by the D&R Canal. The reorganized Morris Canal and Banking Company of 1844, unlike its predecessor, gave its sole attention to transportation. Realizing that under existing circumstances the canal could not compete successfully for the through coal traffic with the D&R Canal, which had a much greater capacity and operated more efficiently, the management decided to enlarge the waterway. Contracts were let to increase the width to 40 feet at the water line and the depth to 5 feet. The company purchased one hundred new boats with a

capacity of about sixty tons, constructed in two sections and hinged in the middle. *From Indian Trail to Iron Horse*, by Wheaton J. Lane, p. 240. In 1847 most of the Lehigh Valley coal destined for New York was passing down the Delaware Division to the D&R Canal. The Morris Canal soon took steps to secure its share of this traffic. Through rates were cut until it was slightly cheaper to send anthracite from Mauch Chunk to New York over the Morris than over its competitor. *Neilson Papers & From Indian Trail to Iron Horse*, by Wheaton J. Lane, p. 243. The competitive position of the Morris Canal was made more secure when the state of Pennsylvania sold the Delaware Division Canal in 1858. The Morris Canal Company, according to its officers, had found it impossible to obtain a fair share “of the tolls which the coal would bear from the mines to tidewater.” Consequently, when a private organization was formed to purchase the Delaware Division, a group of Morris Canal stockholders became interested and invested heavily. An interlocking directorate was established, and an arrangement made which secured “an approximation to a proper proportion of tolls upon that branch of the business.” *The Economic History of the Anthracite-Tidewater Canals*, by C.L. Jones, p. 117 & *Morris Canal Annual Report, 1859*. Because of this alliance, the Morris Canal gained an enormous advantage over the D&R Canal, which depended upon the Delaware Division, in competing for the transportation of Lehigh coal. The Delaware Division suffered because its new management did not come into friendly agreement with the Lehigh and the D&R Canals as to the amount of toll to be charged. *Jones, p. 70*. Coal shipments over the Delaware Division to the D&R Canal continued, but it was clear that the Morris Canal Company now held the whip hand. It is interesting to note that while the Delaware Division - D&R Canal route was longer in distance, it saved a significant amount of elevation change: Easton to tidewater at New Brunswick via the D&R feeder was about 185½ feet in elevation change while Easton to tidewater at Newark via the Morris Canal was over 1,650 feet in elevation change...

Morris Canal & Banking Co.: As many as 40 boats from the Morris Canal used the Delaware & Raritan Canal in the fall of 1841. Because the Morris Canal was closed for enlargement work their boats navigated to Mauch Chunk, PA via NY Harbor, the Kills and Raritan River; the D&R to Bordentown and then were towed down the Delaware River to the entrance of the Delaware Canal at Bristol, PA. From here they traveled north on the Delaware and Lehigh Canals to load coal. The return trip was the reverse of the route cited to move the coal to alleviate the shortage at NYC. *State Gazette, September 23, 1841*. Morris Canal boats were known to ply the D&R Canal on occasion at other times as well.

John Harrison **Morrison** in *Iron and Steel Hull Steam Vessels of the United States 1825 to 1905. Reprint No. 3 of the Steamship Historical Society of America: 1945. (Originally published in a Scientific American Supplement, October 21 - November 25, 1905)* documents the historic significance of the D&R Canal tugboat *ROBERT F. STOCKTON*.

Morven Museum & Garden at 55 Stockton Street, Princeton was the home of Robert F. Stockton when he was president fo the D&R Canal Company. Morven was built about 1758 by Richard Stockton, the signer of the Declaration of Independence. Robert moved into the mansion after the death of his father in 1827. It was deeded to the state of NJ in 1954 and was the Governor’s mansion for many years. www.morven.org

Moses Skating Club members, of Philadelphia, neared the D&R Canal in the schooner *KATIE BURTON* en-route to New York on 21 July, 1881. The schooner was decorated with

flags at every available point. A salute was fired on her approach to the lock, and was returned with a salvo of artillery from the office of Brevet Colonel R. Murphy, Collector of the Port of Bordentown. *Bordentown Register, July 29, 1881.*

Motion Pictures were filmed at selected locations along the D&R Feeder Canal. In the spring of 1910, the motion picture, *A Western Romance*, was filmed by the Edison Company at Lambertville, the station at Raven Rock (Bulls Island) and at New Hope. Conductor Hoffman and his train were very visible in the stagecoach scene of the movie at Raven Rock. In the fall of 1914, part of the Pathe movie production, *The Perils of Pauline*, starring Pearl White, was filmed on the railroad at Lambertville. *Down Along the Old Bel-Del, by Warren F. Lee.*

Motor Barge No. 30/31? (WJM photo @ Staten Island)

Motor Boat Club of America Cruise to Jamestown, by Arthur Topley with photos by Edwin Levick, was published in *Yachting Magazine*, October, 1907. Photographs survive of their passage through the D&R.

D. H. **Mount** lived along the D&R Canal at Rocky Hill, NJ and had a storehouse at the Rocky Hill basin: Mount was a principal in the Merchants & Millers Transportation Co. of N.J. founded in 1850; M&M owned the steam propellor *ECHO* which operated between New York and Philadelphia; he had a steam canalboat, the *D.H. MOUNT*, built for him at South Bound Brook in 1863; this vessel foundered between Cape Hatteras, NC and Jacksonville, FL two years later with a loss of 24 lives; Mount was the President and builder of the Rocky Hill Railroad between Rocky Hill and Kingston where it connected with the Camden & Amboy Railroad in 1864.

Mud Digger: The Canal Company sent up a machine yesterday to dig out the bottom of the canal. It is an improvement on those heretofore in use, and is to be stationed for the present at Clarksville. It is capable of cutting out the bottom to a sufficient depth, at the rate of a hundred yards in length, the whole width of the canal, in a week. Four scows attend to carry away the mud. To avoid being in the way of tow-lines, while at work, an artificial tow path has been constructed to float on the outside of the machine to connect with the bank, so that animals engaged in towing may pass around without hindrance or detention. The whole of this affair is a curiosity, and shows that there are inventive geniuses in the Company who can overcome all obstacles. A small steam engine has also been mounted on wheels, so that it can be run into (onto?) A scow and taken to any place where an accident has happened and it is necessary to pump out a lock, or some such thing, to make repairs. *Daily True American, June 27, 1853.*

The **Mule Club** cruised through the D&R ca. 1889 in two Lehigh Coal & Navigation Co. canalboats on a most novel trip which began at Trenton; went north to New Brunswick; the Raritan River and the Kills to the Hudson River to Rondout, NY; through the Delaware & Hudson Canal to Honesdale, PA & return; south to Jersey City and through the Morris Canal to Phillipsburg and across the Delaware River to the Delaware Canal; south to Bristol, PA and the Delaware River to Philadelphia, all in about three weeks. *From an undated news clipping - original in Trenton Public Library.*

Mule Drivers Carnival: The drivers on the D&R Canal are to have a grand carnival ball at New Brunswick. *Weekly True American, December 2, 1870.*

Mule Injures Boy Driver: A canal boat boy, named Samuel Baker, aged about fifteen years, and hailing from Reading, PA, was bitten in the mouth by a mule, on Saturday, on the towpath of the D&R Canal, at Bordentown. His lip was torn down to the chin but medical assistance was promptly procured, and the boy was made as comfortable as possible. *Daily True American, April 14, 1879.*

Mules: Two very valuable mules were drowned at the three-locks, on the Canal, on Saturday last. The driver, upon the boat coming out of the lock, gave the mules a severe blow with the whip. The jerk was so sudden that both mules were thrown into the canal. Being fastened together by the gearing, it was impossible to extricate them, although every effort was made. The mule drivers on the canal have the reputation of being very cruel to the animals under their charge. *State Gazette, September 7, 1852.* A lad named William Cogill, between 13 and 14 years of age, in the employ of Blackfan and Wilkins, coal merchants in (Trenton), as a driver was killed on Friday night about 30 miles from (Trenton). He was engaged at the time in driving a pair of mules towing a canal boat, and was walking in their rear whipping them when he was suddenly kicked in the head and instantly killed, his brains being dashed out. His body was brought to (Trenton) where his parents reside. *Daily True American, June 19, 1854.* A large number of mules belonging to the Canal Co. were placed in freight cars at the depot this morning to be conveyed to Bordentown and vicinity and put in winter quarters. *New Brunswick Daily Fredonian, December 6, 1871.* A team of mules drawing a canalboat were thrown overboard by the tow line yesterday near the Feeder Junction. The boatman rescued them after some trouble. *Daily True American, July 26, 1885.* After ten months of toil on the raging canal, about 120 mules belonging to J.B. Woodward & Company passed up the avenue last week on their way to a Christmas rest and to spend the winter on the farm of J. Holmes Longstreet. *Bordentown Register, December 27, 1895.* Originally all towing was done by mules, two to each canalboat. They plodded slowly along the towpath drawing the heavy boat behind them. The barge was kept straight by a rudder or sweep placed at the stern. All the mules were owned by one man who had the mule concession for the canal, a man named Woodward of Bordentown. He kept up a mule supply station at each end of the canal, and as soon as a boat entered the locks it was hooked up to a pair of mules and started on its journey through. When the other end was reached the mules brought another boat back, and so on, like shuttles, they plod their weary way up and down the long miles from New Brunswick to Bordentown. The advent of a canal company using steam tugs “blew the whistle” for the tired mules, and there are only one or two survivors left. There are still two canal boats operated by mule power, both owned by John Roberts, and a close observer may notice one occasionally being drawn slowly along the canal. But the mule really was done when the New York and Baltimore Inland Company put a fleet of tugs on the canal in 1915, and soon drove Mr. Woodward out of business. *New Brunswick Sunday Times, March 11, 1923.*

Mules in Canal: A team of mules drawing a canalboat were thrown overboard by the tow line yesterday near the Feeder Junction. The boatman rescued them after some trouble. *Daily True American, July 26, 1885.*

Robert S. Murphy: R.S. Murphy, Collector of the D&R Canal Company, will pay a \$20

reward for the detection and conviction of the thief who stole a hawser from the canal lock on the night of the 12th inst. *Bordentown Register, October 19, 1877*. Robert S. Murphy and family returned last week from Orlando, Florida, in time for Mr. M. To resume his post as Collector and Inspector of the Delaware and Raritan Canal which opened Monday. *Bordentown Register, March 12, 1897*. Obituary of the long-time D&R Canal Co. Inspector and Collector at Bordentown. *Bordentown Register, July 7, 1901*. Robert was probably the son of Colonel William R. Murphy of the 10th Regiment, New Jersey who resigned his commission in 1863 to accept appointment as Collector of Tolls on the Canal at Bordentown.

Murtie & McMurtha owned the canal steamer *COMMONWEALTH*, Capt. Vankirk, which plied between New York and Philadelphia in 1880. *Winter at the Canal Locks, Bordentown Register, December 17, 1880*.

Muskrats: More than a hundred boats were tied up during the busiest season of the year due to a break in the canal at Clarksville caused by muskrats. Miles of farming country surrounding Port Mercer and toward Princeton were under water and 30 miles of canal were effected. *'Rats Did It All,' New York Herald, December 12, 1899*. The muskrat trapper employed by the D&R Canal company has caught from November 1 to December 10, 347 muskrats along the banks of the canal. This shows that the small animals are not scarce in the Kingston area. Besides the 10 cents for each rat tail he is paid by the canal company, he sells the pelts to New York fur dealers for from 14 to 23 cents. *New Brunswick Weekly Times, December 15, 1905*. A portion of the bank of the D&R Canal thirty feet in length and five feet in depth gave way last night near Turnpike Bridge, in the Summit Level, and created such a falling off of water in the canal that navigation has been temporarily delayed. The break was caused by holes in the bank made by muskrats. *Trenton Times, November 24, 1906*. Obadiah Ayres, of Trenton, who had been engaged in trapping muskrats along the D&R for 24 years, stated that muskrats are becoming very scarce due to their use for the manufacture of automobile coats... *Trenton Sunday Advertiser, February 13, 1910*.

Mysterious Boat: A mysterious craft which has excited a great deal of curiosity is anchored in the canal above the upper lock (in New Brunswick). The vessel looks much like a steam yacht and is about 30 feet long. Where the deck house of such a vessel is usually situated is built a shed-like structure covering the entire deck and with only an opening for a smoke stack. On the vessel are several signs which read, "No trespassing. This means you." with the you in capital letters. There are four or five men on the vessel. They, however, refuse any information and will not allow any one to go near the boat. It is understood that on the vessel is machinery which is being put together for experimenting with new motor power the propelling force of which is to be hydraulic pressure. It is claimed that the new force will allow a boat to obtain a speed of 60 miles an hour. The boat has been in the canal since Thursday. *New Brunswick Times, August 28, 1900*.

"NANCY LEE" on the Raritan Canal, 1928, by Charles H. Vilas is a detailed account of the author's trip through the D&R in his catboat. The eleven page manuscript was completed by the author, of Branford, CT, at the request of Capt. Bill McKelvey.

Napoleon Company: The Merchants and Swiftsure line of boats - heretofore known as the Napoleon Company, have been purchased we learn from the State Gazette by Captain R.F. Loper of Philadelphia. Last year there were four steamers and 16 barges on these lines. Captain

Loper will add four steamers and four barges for the ensuing season. *Newark Sentinel of Freedom, March 5, 1850.* The Napoleon Company (a/k/a New Brunswick Steamboat and Canal Transportation Co.) was used to stimulate regular freighting service on the canal because in 1835 independent barge lines failed to appear on the D&R. Some of the canal directors were much disturbed at the slowness with which freighting services shifted from the ocean route between New York and Philadelphia to the safer river and canal passage. Rebates and other favors were offered to independent lines as well as to the Napoleon fleet of barges. The Napoleon Company also performed towing on the canal as well as on the Delaware and Raritan Rivers - usually designated as the Steam Towing Line. Edwin A. Stevens, treasurer of the Camden & Amboy Railroad was the chief creator and largest stockholder of the Napoleon Co. Also see Canal Freight Barge Lines and New Brunswick Steamboat and Canal Transportation Co..

National Canal Museum, located in Easton, PA, is the only museum in the country dedicated to telling the story of America's historic towpath canals. Their main museum facility was at Two Rivers Landing at Centre Square, Easton, for many years. However that location primarily housed the Crayola Factory attraction for children and they took over the space occupied by the Canal Museum. The Canal Museum is presently located at the Emrick building at the Hugh Moore Park facility. It is located a short distance to the southwest, between the Lehigh River and a re-watered section of the Lehigh navigation system. The Emrick Technology Center now primarily houses the Lehigh and Delaware National Heritage Corridor organization but also houses the National Canal Museum library & archives. The archives of the Pennsylvania Canal Society are included in their collections, which contain significant D&R Canal resources. A replica, mule-drawn canalboat ride is a seasonal attraction within Hugh Moore Park. www.canals.org

National Historic Site status was gained by the D&R Canal on May 11, 1973. It had been placed on the New Jersey Register of Historic Places on November 30, 1972.

National Iron Armor and Ship Building Co. of Camden built the steam tugboat *LOOKOUT* in 1862 for W.P. Clyde. The charcoal iron used in construction made her very rugged and is probably why she lasted so long. She had a long and useful career towing canalboats and breaking ice on the Delaware River and the D&R Canal. After the canal closed she worked for John M. Taylor; Taylor & Anderson (who converted her to diesel in 1942); Atlas Plywood Corp. @ Elizabeth City, NC; Georgia Pacific; John C. Robbins, Jr.; and finally Bay Towing Corp. at Norfolk, VA. As of the 1970's *LOOKOUT* was the second oldest vessel in US commercial registry. National Iron Armor also built the iron clad monitor *KOKA* and the ferry *REBECCA HOWELL*. The following is testimony to her usefulness on the D&R: "Saturday the boats withing the locks, from the Delaware to the Raritan, were brought to a standstill by the ice which was nearly six inches in thickness. Wm. P. Clyde & Co., of Philadelphia, anticipating a blockade to some of their numerous steamers, on Thursday sent up an iron tug named the *LOOKOUT*, which plowed gallantly through the floating in the river and at once entered the canal at Bordentown. Before noon, Friday the *LOOKOUT*, had broken her way through the canal to New Brunswick and released all the vessels bound east. The exceedingly cold spell on Friday and Saturday made the return trip of the natty little *LOOKOUT* more difficult. She left New Brunswick at 4pm Friday and was just two days reaching Bordentown. The crew were on duty almost continuously, and were glad to reach the outlet of the canal. *Winter at the Canal Locks,*

Bordentown Register, December 17, 1880.

The **National Outboard Racing Commission** awarded Fred Jacoby, Jr. a certificate for the performance of his Jacoby Flyaway boat. On June 8, 1940 he operated his boat, establishing a World's Outboard (Speed) Record of 56 (55.994) mph for one mile in Class B, Division 2, on the Delaware & Raritan Canal at Port Mercer, NJ. His Jacoby Flyaway was a favorite racing boat built at his North Bergen, NJ Fred Jacoby Boatworks. *Original certificate is in the Lake Hopatcong Historical Society / Museum.*

National Railway Historical Society Convention of 1988 included a bus tour of the D&R Canal led by Capt. Bill McKelvey on July 25th. Stops were made at So. Bound Brook, Griggstown, Kingston, Millstone Aqueduct, Princeton - Alexander Road (where the lunch stop was made and the group had an opportunity to photograph trains on the Princeton Branch crossing the canal), Trenton - Greenwood Avenue lock - where the group was treated to a passing Conrail locomotive and scale car, and Lambertville Station & Lock. *The Courier News, July 26, 1988.*

National Recreation Trail System: The towpath and trails of the D&R Canal State Park are a part of the NRTS. A dedication ceremony to commemorate the event was held at Prallsville Mills, Stockton, NJ on September 16, 1992. www.nps.gov/nrt/

NAUGATUCK: Camden and Amboy Railroad shop forces at Bordentown, constructed a steam gunboat, *NAUGATUCK* in the fall of 1861 to be presented to the U.S. Government. Near the end of December the partially completed warship traveled north through the D&R Canal to Hoboken for completion and the presentation by Edwin A. Stevens. Near the end of March, 1862 the completed *NAUGATUCK* traveled south through the canal on her way to Fortress Monroe. She again passed through the canal on her way south to New Bern, NC on November 17, 1865, after being refitted following battle damage. *Bordentown Register, 18 Oct., 1, 8, & 12 Nov., 27 Dec., 1861 summary.* **DISTINGUISHED VISITORS** - Last Tuesday Salmon P. Chase, Secretary of the Treasury and two other high officials of the Government (whether of the army or navy we could not learn), visited this place with a view of examining the gunboat *NAUGATUCK* which is to be presented to the Government by Mr. E.A. Stevens and which is now nearly completed. Mr. Stevens accompanied the gentlemen to the Railroad Wharf where the vessel is now lying. Mr. S.B. Dougherty, Master Mechanic, had the vessel fired up and all ready to start when the visitors with Mr. Stevens stepped aboard. The vessel was run up and down the Delaware several times within a mile in order to test her speed and her mode of turning, both of which proved very satisfactory. The *NAUGATUCK* is propelled by two stern paddle wheels which revolve contrawise when she is turning around. While in the middle of the river Mr. Dougherty showed the gentlemen how beautifully she turned. She wheeled about seven or eight times with a speed that was really surprising and did not move half her length any way while doing so. Mr. Chase remarked that she could turn herself as soon as a politician could turn his politics. We understand that the gentlemen were well pleased with the steamer and were anxious to have her sent to Washington at the earliest convenience of the donor. She is almost complete and will be ready to depart in a few days. *Bordentown Register, 8 November 1861.* The gunboat *NAUGATUCK* left the Railroad Wharf last Friday morning for Hoboken via the Canal. We may now expect to hear of her presentation to the Government at any time. *Bordentown Register, 27 December 1861.* The little iron clad steamer, *NAUGATUCK*, presented to the national government by Mr. E.A. Stevens

passed through the canal on Wednesday last, on her way to Fortress Monroe. The *NAUGATUCK* was rebuilt here last fall and winter and has been at Hoboken for the past few weeks receiving her armament. She carries a 10 inch Parrot gun amidships, and two six-pound howitzers. Although she may be able to do good service in the position to which she may be assigned, yet she does not come up to our idea of a regular fighting craft. It seems to us that an ordinary sloop of war or formidable battery on shore would soon whip her. Of course these views are founded on the outward appearance of the vessel. She may be a “singed cat” and another *MONITOR* in miniature. A large concourse of people were at the outlet lock when she went through, and various remarks were made concerning her. We hope soon to hear of her work among the rebels. *Bordentown Register*, 28 March 1862. It is reported that the steamer *NAUGATUCK* was taking a gun yesterday (at Fortress Monroe, Baltimore) to replace the one that exploded during the attack on Fort Darling. *Daily True American*, 20 May 1862. It has been supposed that this vessel (*NAUGATUCK*) was an iron-clad steamer, built especially for war purposes, but such is not the case. It is simply an iron-clad (steam) canal boat propellor constructed for running on the Delaware and Raritan Canal, and arranged to be submerged at pleasure and to serve as a model for the large Stevens Battery in course of construction at Hoboken. This propellor was also arranged for submersion by Mr. Stevens at Hoboken and then presented to the Government. It embodies most of the principles on which the larger battery is built. The dimensions of the *NAUGATUCK* are as follows: Length overall 101 feet; breadth, including bulwarks, 22 feet; depth of hold 9 feet. She is constructed in four compartments of about equal size, those at the bow and stern being intended for water, and the midship section being occupied by the crew’s quarters and engine rooms. Beneath the deck is another compartment running the whole length of the vessel, also intended to be filled with water when the vessel is in fighting trim. When this compartment is empty the vessel draws 4½ feet of water, and when filled - which is done by valves connecting with the larger compartments - she draws within a few inches of 9 feet. Around the vessel bulwarks are constructed of white cedar 4½ feet in depth, 20 inches thick, and extending 18 inches above the deck. The object of this is to afford buoyancy and protection. Her armament consists of one 100-pounder rifled gun, and two 12-pound howitzers. The former is so placed as to point forward, and a space in the bow is made to open, through which the fire is delivered, and then the opening is at once closed. The gun is loaded on the Stevens principle of lowering the muzzle below the deck. The *NAUGATUCK* is now in New York harbor waiting for a new gun. *NY Tribune*, 18 August 1862. It is expected that the US iron-clad steam gunboat *NAUGATUCK* will leave this port with sealed orders in a few days. She is now at anchor near the ferry on the Hoboken side of the river, and has been in the neighborhood of her present berth since her arrival. The delay which the *NAUGATUCK* has been obliged to make here is caused by the repairs she needed in various ways. *NY Tribune*, 29 August 1862.

The **Nautilus Boat Club of Brooklyn** spent Monday night in Bordentown and left the next day in their six-oar barge *PIONEER*. They came via the Delaware and Raritan Canal and are a wiry crew. *Bordentown Register* 18 Sept., 1896.

Colonel James **Neilson** (1784 - 1862) was a merchant, banker, slave owner, farmer, and became a dominant figure in the economic affairs of New Jersey. At an early age he observed his father’s (also James Neilson) wagon freighting business between Lambertton (just below Trenton) and New Brunswick. James was a promoter of turnpike, canal, and railroad

transportation, a pioneer manufacturer, and a proprietor of real estate whose interests extended over lands in New Jersey, New York, Texas and Mississippi. James Neilson was a founding director of the D&R Canal Company and its treasurer, a position he retained for most of the rest of his life. He was also a major stockholder in the New Brunswick Steamboat and Canal Transportation Company, along with other prominent stockholders in the Joint Companies. Essentially the firm was composed largely of the officers and directors of the Joint Companies. Out of these interlocking relationships came confusion and litigation, as well as enormous profits. In addition Neilson was also a stockholder in the Trenton and New Brunswick Turnpike and was their treasurer from 1836 to 1851. James Neilson was an excellent administrator and gave attention to the most minute details of the Napoleon Company as the NBSB&CTCo. was known. He was also the president of the short-lived Raritan Steamboat Co., successor to the Napoleon Co. in 1852. Before it could resume the business it was sold to the D&R Canal/C&A RR Joint Companies, however the majority of the stockholders remained the same. The railroad ramifications of the Joint Companies never became the primary interest of James Neilson, although as a member of the joint board of directors, he shared in the responsibility of formulating plans for railroad expansion and consolidation. He necessarily had a part in the development of the Joint Companies into one of the first holding combines of importance in the US. But his first interest was the D&R Canal, and as a canal man he derived great satisfaction in his declining years from the success of the enterprise for which he labored more than a third of a century. *Colonel James Neilson, by Robert T. Thompson* He is interred in The Presbyterian section of Willow Grove Cemetery.....where????

Nellie Bly Wreck Was One of the Worst Railroad Disasters in Trenton's History.

On Feb. 21, 1901 this Atlantic City-bound express train was running with one more section than usual. On the single track along the bank of the D&R Canal between Trenton and Bordentown an opposing train waited at a passing siding. After the second section passed, the conductor forgot about the extra section and threw the switch and signaled the engineer to proceed. The two trains came together in a terrific crash, sending the locomotives and several cars into the canal. The hot coals from the locomotives ignited the wooden cars and a total of 20 people perished. *Daily State Gazette, February 2, 1901; Incident was recapped by Harry J. Podmore in his 'Trenton in Bygone Days' column (undated).*

Allen **Nelson**, a Canal Society of New Jersey member was commissioned by Bill McKelvey to paint scenes of the D&R which were never recorded by historic photographs: 1. The Mercer & Somerset Railroad bridge over the D&R Canal at East Millstone with locomotive about to cross and a tug and canalboat waiting for the bridge to open; 2. The D&R Canal aqueduct over the Pennsylvania Railroad in Trenton with a steam canalboat passing over a steam locomotive drawn train below; 3. The Reading Railroad bridge over the D&R Feeder Canal in West Trenton, with a mule-drawn canalboat coming south and the tail end of a Bel Del train and "bobber" caboos heading north; 4. The Albany Street, New Brunswick bridge over the D&R Canal with a Public Service Railroad interurban car crossing above a mule-drawn canalboat on the canal.

Nelson House is a small ca. 1850 structure between the D&R Feeder Canal and the Delaware River, immediately north of County Route 546 at Washington Crossing. North of this house is a full-size replica of a typical Delaware River ferry. In the immediate area are a number

of historical markers commemorating General George Washington's crossing of the Delaware on Christmas eve in 1776 and successful march to Trenton and defeat of the Hessian army there. The event has been termed the turning point of the Revolutionary War.

Newark Camera Club: The Third Canal Trip of the Newark Camera Club, with fourteen members, covered the Delaware Canal aboard the *FLORENCE* (the pay out of the Morris Canal) from Easton south to Washington Crossing in August, 1891. There they crossed the Delaware River bridge and rode the Bel-Del RR to Trenton and the following day took a trip on Col. A.R. Kuser's 62-foot steam yacht *CHELSEA* south on the Delaware River to Bordentown and then up the Delaware & Raritan Canal to South Bound Brook. Superintendent W.I. Powers of the Morris Canal, who joined the party at Bulls Island on Wednesday, was an interested observer on the big canal. It was his first opportunity to make a trip over it, and he critically studied all of its features. *CHELSEA* was the former *Col. A.R. KUSER*, extensively rebuilt in Trenton, on the D&R by Hiram Weller & Sons, the year before. Among the members of the Club which participated were: William A. Halsey, Dr. T.Y. Sutphen, F.G. Agens, Professor Edward Weston, Eddie Weston, Dr. C.S. Meeker, I.R. Denman, Theodore Palmer, C.G. Hine, W.T. Hunt, H.C. McDougall, J.C. Vail, and Adolph Heyden. An album of photos taken on the trip survives in the Newark Public Library along with a lengthy and very detailed account of the entire trip.

Newark News: which has been a champion of the poor, downtrodden, much abused D&R Canal for many years, thinks the first thing necessary to clear the canal atmosphere is the publication of the report of the Senate Investigating Committee, which "has had more than two years to find the facts..." ...The D&R Canal once carried more than half as much freight as the Suez Canal, ranking second only to the Mississippi and the Hudson in commercial importance among our rivers, and netted its operators nearly \$1,000,000 a year, could and should be made a big industrial asset to the state. The Newark News also thought that the Donnelly Bill, fixing D&R tolls at ten cents a ton would be unwise legislation. *New Brunswick Daily Times*, April 15, 1911. The Newark News photo archive is held by the Newark Public Library.

Newark Public Library, Charles F. Cummings NJ Information Center contains 835,000 black and white images, mostly from the Newark News, which includes some views of the D&R Canal. They also have an excellent newspaper collection, subject files, and archives. Main Library: 5 Washington Street, Newark, NJ www.npl.org

New Brunswick, was the at the northern end of the D&R Canal within which three locks (Lock 13 and the twin outlet locks) were located. It was located on the southern bank of the Raritan River, about 15 miles from its mouth and near the upper tidal and navigation limit. Originally inhabited by Lenape Native Americans, the first white settlement at the site of New Brunswick was made in 1681. The settlement here was first called *Prigmore's Swamp*, then *Inian's Ferry*. In 1714, the young village was given the name New Brunswick after the city of Braunschweig in Germany. Centrally located between New York City and Philadelphia along an early thoroughfare known as the *King's Highway*, as well as the Raritan River, it became an important hub for Colonial travelers and traders. New Brunswick was formed by Royal Charter in 1730; incorporated as a town in 1736 and chartered as a city in 1784. The Trustees of Queen's College (now Rutgers University), founded in 1766, voted to locate the young college in New Brunswick. Classes began in 1771 with one instructor, one sophomore, and several freshmen at

a tavern called “The Sign of the Red Lion” on the corner of Albany and Neilson Streets (now the grounds of the Johnson & Johnson corporate headquarters). Rutgers University became the state university of New Jersey in 1956. New Brunswick was occupied by the British in the winter of 1776-7 during the Revolutionary War. Canal and water transportation as well as water power supplied by the canal gave incentive to manufacturing industries. The railroads improved on this advantage and even a Mack Truck parts manufacturing plant was located in New Brunswick. New Brunswick early-on was served by the New Jersey Railroad, the Camden and Amboy, and later on, the Mercer and Somerset, and the Raritan River Railroad. New Brunswick is the county seat of Middlesex County and the seat of Rutgers University. It is nicknamed *Hub City* and *The Healthcare City*, the former reflecting its status as a major urban center of Central New Jersey, and the latter due to the concentration of medical facilities and the corporate offices or production facilities of large pharmaceutical companies such as Johnson & Johnson and Bristol-Myers Squibb. www.en.wikipedia.org New Brunswick is a vibrant city of 50,000 residents, a number that triples during the business day with college students and workers. www.NewBrunswick.com The Historic Downtown Walking Tour will take you to the City’s historical sites in the downtown area and show you where a messenger from Philadelphia read the Declaration of Independence in 1776. Available at City Hall or online at www.cityofnewbrunswick.org

New Brunswick Boatyards and Boat Builders (there were at least four) built many vessels which operated on the D&R Canal and elsewhere. Some of them were: the tugboats *CARRIE*, *CLARA*, *DAVID C. COX*, *EDMUND L. LEVY*, *VARUNA*, *MARGARET A. LENOX*, *VARUNA*, *QUICKSTEP*, *CHARLES M. WHITTAKER* (which was purchased by the Baltimore & Ohio Railroad, renamed *CAROLINE* and served more than 40 years in Baltimore) *WILLIE WOOD DUCK*; the steamboats *GEORGE H. STOUT*, *JOSEPH W. HANCOX*, *SCHUYLER NEILSON*, *TOWNLY*, *UNCLE KNAPP*, *WHITEHEAD*; steam vessels which served in the Civil War such as *A.I. FITCH* (as *U.S.S. ROSE*), *ALFRED A. WOTKYNS* (as *U.S.S. ALTHEA*), and *JOHN T. JENKINS* (as *U.S.S. SAFFRON*); the fishing party boat *DIANA*; the yacht *IBIS*; the oyster boats *ADMIRAL* and *OYSTER BOY*; and the steam paddle-wheelers *FLORA TEMPLE*, *GARRETT E. WINANTS*, and *JOSEPH W. HANCOX*.

New Brunswick bridges over the D&R and the Raritan River: The first bridge which was built of wood in 1839 by and for the Camden & Amboy Railroad had a roadway on the lower level. Both the railway and roadway had bridge sections which would permit schooners or other vessels with masts of unlimited height to pass through the D&R as all other bridges on the route had swing spans. It was replaced in 1878 with a two track steel swing bridge over the canal. In 1902-3 the steel bridge was in turn replaced with a four-track stone viaduct, which is still in use. This latter structure had a fixed clearance of 50 feet above the water line and prohibited vessels with masts which were taller to pass. We suspect that those which were taller were cut to allow passage. Interestingly, the two track steel swing span was moved by the Pennsylvania Railroad and was reinstalled at Delanco over Rancocas Creek on their Trenton - Camden line after it was replaced by the stone arch structure at New Brunswick in 1903. The 1878 swing span was removed, scrapped, and replaced with a new, higher level fixed steel bridge when the RiverLINE light rail line was constructed. However, the NJ State Historic Preservation Office did try to find some entity (such as the NJ Transportation Heritage Center) to agree to take the historic bridge and find a new use for it. However, no funding was available for its movement or reinstallation and consequently no offers, including from the NJTHC, were

received. In October, 1915 hearings were held to determine whether the Pennsylvania Railroad or Middlesex County should pay for the new Albany Street bridge over the canal in New Brunswick. The PRR claimed that the water between Deep Lock and the Outlet Lock was actually part of the Raritan River and not owned by the RR. Articles and an editorial "Where does the canal end" appeared in the local paper on October 6, 1915. We don't know what that decision was...

New Brunswick, Deep Lock, locktenders house was jacked up and moved east, out of the way of construction of Rt. 18, which destroyed Deep Lock. It was supposed to be moved to Boyd Park and restored by agreement with the NJ DOT. It sat near the intersection of Routes 18 and 27 for a couple of years, deteriorating. It was eventually moved further east to the middle of Boyd Park and sat there additional time deteriorating. While the City, DOT and DEP haggled about scaling down the restoration, a portion of the roof collapsed ca. 1984. In the end, the historic house was demolished. *The Home News, September 16, 1984.*

New Brunswick Outlet Locks: As a boy I grew up on the edge of the D&R Canal. My parents operated the mule tender's station at the Outlet Locks in New Brunswick. We lived on company property (PRR at the time) and took care of the mule drivers and their mules. We furnished food and lodging for them until they were called out again. The railroad furnished the house, food, feed, fuel, and paid my parents a salary. As I grew up with the men and the atmosphere I learned the procedures. When I was in high school I became employed as night toll collector at the New Brunswick office of the D&R Canal in 1918. Most of the rough and ready men who worked the canal have long since passed on. *John (Jack) Collins, letter to the author dated May 12, 1976.*

New Brunswick Steamboat & Canal Transportation Co. a/k/a New Brunswick Co., a/k/a The Napoleon Co. (the latter from the name of its first steamboat) was incorporated in 1831 to operate between NY & New Brunswick and over the canal. It was obviously purchased for use as a personal organization of the leading officers of the Joint Companies. In 1847 E. A. And R. L. Stevens together held 50 shares; R.F. Stockton, 22; John Potter, 20; James Neilson, 12; and J.R. Thompson 5. *An Exposition of the Character and Management of the New Jersey Joint Monopolies, by G.W. Tatham (Philadelphia, 1852), p. 16 & From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 269* The remaining shares, except for a few in the hands of original owners, were owned either by minor officials of the Joint Companies or by partners of the old Union and Citizen's Lines. Initially, under the active direction of E.A. Stevens, NBS&CTCo. operated steamboats at both ends of the Camden & Amboy RR and engaged in steam towing to New York and Philadelphia. Soon after the canal was opened, it started a freighting business through the waterway. Between 1835 and 1846 it managed the transportation of merchandise over the Camden and Amboy Railroad by an arrangement which secured to the latter the highest rates permitted by the charter. It operated steamboats at both ends of the railroad and engaged in steam towing. *From Indian Trail to Iron Horse, by Wheaton J. Lane* Special contracts and arrangements for the payment of tolls were made at different times by the NBS & CTCo. as well as their related Merchants' Line and Swiftsure Line, and with C. & F. King & Co. of Philadelphia; Miller & Bancker, George McHenry & Co., and James Schott & Co., in New York. Typical of the special rates of the above would be 25% on the whole freight charges in lieu of regular tolls. They also established a line through the canal between Philadelphia and Albany called the Albany Union Line with similar toll rate reductions.

The NBS & CTCo. employed about twelve barges to transport coal through the canal from 1835 to 1846. The Merchants' and Swiftsure Lines usually employed from eighteen to twenty-four barges in the transportation of merchandise, and frequently chartered others. The NBS & CTCo. was superseded by the Raritan Steamboat Co. after 1851. Also see "Hager v. Thomson," 66 US 1 Black 80, an 1861 litigation involving the complaint of the owner of seven and 2/3 shares of the company charging the firm and its officers with divers breaches of trust and frauds in the management of the company's business.

New Brunswick 300th Anniversary Celebration and Raritan River Festival: (It was also, coincidentally, the 150th anniversary of the granting of the charter and the groundbreaking of the D & R Canal.) An estimated 8,000 people turned out to line the banks of the Raritan River, near the Outlet Lock in New Brunswick on August 16th, for the Raritan River Festival. The major feature of the Festival was the river parade and Bill McKelvey took up the challenge. On the very hot weekend of August 2nd and 3rd a former ship's lifeboat became the canalboat *CLAYTON F. SMITH* in honor of the founder and president of the Canal Society of New Jersey. The American Naval Cadet Alliance, a group that trains boys to be good seamen and good citizens loaned us the lifeboat, allowed us to use their base to build the float, towed it from Carteret to New Brunswick and return, and helped in many other ways. Gary McVicker of Westfield donated four gallons of paint, which was applied by John Drennan, Bill McKelvey, Bill Moss, Larry Pitt, Carl Riker, and Pete Vroom. Carl Riker also provided his 16' outboard boat which was disguised as four mules to provide motive power for the "canalboat" in the parade. Capt. Bill McKelvey was at the helm of the *CLAYTON F. SMITH* with his two nieces, Joyce Degnan, and Sarah McKelvey, and their mothers, Doris Degnan and Patricia McKelvey, all in costume providing a real family canalboat atmosphere. Bill Moss played his part as the deckhand fishing from the bow. At the end of the day all the hard work turned out to have been fully appreciated by the judging committee. The *CLAYTON F. SMITH* took the prize for best float, and first prize in the history section. The society was presented with a check for \$100 and a cast metal plaque, and a certificate of appreciation.

New Canal Line per 1834 ad operated a canal packet between Princeton and Philadelphia.

New Despatch Line advertised a regular service from Baker's Basin in Trenton to New Brunswick, with the canal barge *PRINCETON*, connecting with the steamboat *RARITAN* for New York in 1844.

New England Fish Co., of Portland, ME, operated the 91'-long, wood hull, steam trawler *KINGFISHER* up and down the east coast. In 1892 she was photographed traveling north in the D&R Canal between Locks 1 and 2, above Bordentown, towing three large dories or rowboats. *KINGFISHER* was built in 1872 at Bristol, RI and had a crew of from 12 to 26. Her home ports were Mystic, CT; NYC, NY; Greenport, LI, NY; Reedville, VA; and Jacksonville, FL. New England Fish Co. was founded in 1868 by 11 wholesale fish dealers in Gloucester, MA. Limitations of the Atlantic catch caused the firm to expand on the west coast, where it built canneries. By 1931 NEFCO became the largest producer of salmon products in North America. The company was brought down by a glut of salmon while prices fell and filed for bankruptcy in 1980. *Staten Island Historical Society, University of Washington Special Collections.* Plans for *KINGFISHER*

were published in Nautical Gazette/Seaboard, 28 March 1901 issue, page 3.

New Express Steamboat Co. a/k/a Phila. & NY Express Steamboat Com’y per 1862 freight bill.

New Freight Yard: The new freight yard of the Pennsylvania Railroad, at Perry Street and the canal, is rapidly nearing completion. The six tracks are all graded and in use. Between each pair of tracks the yard is being paved with Belgian blocks for the use of the heavy trucks that will load and unload. Patent buffer blocks are being installed at the Perry Street terminal of each track to stop the cars as they come towards the street. Scales are to be installed on a freight clerk with an office will be stationed at the yard to facilitate the handling of freight in carload lots, for which the yard was secured. *Daily True American, October 22, 1904.* The Pennsylvania Railroad Company has erected a big fence and a couple of high gates around its Perry Street freight yards (at Coalport) to prevent thievery. Prior to this the yard was used by pedestrians as a short cut to the Feeder Canal or to Allen Street. Within the yard was a very large traveling derrick which spanned two tracks and had a lifting capacity of 50,000 lbs. *Daily State Gazette, August 26, 1905.*

New Ice Breaker: Yesterday an old boat, laden with iron and stones, was attached to a locomotive (on the parallel Camden & Amboy Railroad) and drawn through the ice, which was about four inches thick, in the Delaware and Raritan Canal from the mouth to some distance above Trenton where three barges freighted with merchandise had been locked up by the ice—a passage being thus cleared, the barges were taken in tow by the locomotive, and delivered safely at Bordentown, where they were taken in charge this morning by the Iron Steamer *ROBERT F. STOCKTON*, and passed here in fine style on their way to Philadelphia. *Burlington Gazette, December 11, 1840.*

NEW JERSEY: was the name of several vessels associated with the D&R Canal: the sleek first mule-drawn passenger boat; the first steam tugboat, the *ROBERT F. STOCKTON*, built in England, “sailed” across the Atlantic, and renamed the *NEW JERSEY* in 1840; and the steam freighter with US Registry number 18,336. It is the latter vessel to which this entry refers.

The story of this other *NEW JERSEY* began in 1862 in the shipyard of Fardy and Auld in the Federal Hill area of Baltimore City. Her registration indicates that she was 166 feet in length, 23 feet in beam, and 8 feet, 9 inches in depth with a total tonnage of 494 tons. She was constructed of wood with a round stern and driven by a propeller powered by a steam engine built in the foundry of Reamy and Archibald of Chester, PA. The narrow beam of *NEW JERSEY* was well-suited for operation through the D&R and C&D Canals. On December 23, 1862, she was turned over to her owners, the Commercial Transportation Company of Trenton, NJ. A deck photo of the *NEW JERSEY* appears on page 49 of McKelvey’s *Champlain to Chesapeake*. During the Civil War, the *NEW JERSEY* was leased on at least two occasions by the Union Quartermaster General to haul troops and supplies from New York to Union forces operating in the James River area of Virginia. Records in the Library of Congress indicate that the *NEW JERSEY* not only hauled supplies, but also brought Confederate prisoners from VA to the prison camp at Point Lookout, MD, and transported Federal troops, including regiments of black troops, to combat areas.

At the conclusion of Civil War hostilities, *NEW JERSEY* was acquired by the Baltimore

Steam Packet Co., more commonly known as the Old Bay Line and was their first propeller-driven vessel. Thereafter she plied Chesapeake Bay hauling freight between Baltimore and Norfolk. On the evening of February 25, 1870 steamed south out of Baltimore with 750 tons of freight and shortly after midnight fire was discovered between decks, amidships. The vessel burned to the water line and sank near Sharps Island, Chesapeake Bay, off the mouth of the Choptank River and gradually faded from memory.

In the fall of 1975 a group of divers of Nautical Archeological Associates rediscovered the wreck which they determined to be that of the *NEW JERSEY* and tried to keep it secret. In 1978 NOAA located the site and published its location on nautical charts of the Bay. By 1981 the site had become the scene of increasing activity by sport divers and relic hunters. They as well as the natural currents began to cause the wreck to deteriorate. Late in 1985 it was determined that the *NEW JERSEY* would soon crumble and disappear and that an intensive underwater archeological survey should be done soon. In November, 1986 the Department of Natural Resources research vessel *SeaROVER* helped perform extensive sonar and robotic systems investigations on the stern section, the engine, boiler, steering gear and propeller of the *NEW JERSEY*. In February of 1987 a full-scale, three-week robotic underwater archeological survey was completed. The project proved that Remotely-Operated-Vehicles can survey and excavate an underwater site more efficiently than human divers. It was estimated that 6,00,000 artifacts from the *NEW JERSEY* wreck may exist underwater. *Robots Under the Chesapeake* by Fred Hopkins in *Chesapeake Bay Magazine*, October, 1987 and *The Shipwreck NEW JERSEY Report* prepared for The Maryland Historic Trust by Donald G. Shomette, 1986.

The 1987 expedition, led by Donald G. Shomette was sponsored by National Geographic, the Maryland Geological Survey, NOAA, the US Navy, Applied Sonics Corp., Datasonics, Inc., Deep Sea Systems Int'l., Nautical Archeological Associates, Inc., The University of Baltimore, and the Calvert Maritime Museum. The *NEW JERSEY* project served well to advance the then decade-long national campaign for Federal legislation to preserve historic shipwreck sites in American waters. Senator Bill Bradley of New Jersey was one of the principal sponsors of the Abandoned Shipwreck Act of 1987. Maryland Governor William D. Schafer was given a demonstration of the robotic underwater survey techniques on February 27, 1987. He was given reports and shown artifacts recovered from the deteriorating *NEW JERSEY* wreck, including its steam whistle. The governor was sold on underwater archeology and a Maryland program on it had been given birth. The example of the devastation done to the *NEW JERSEY* by relic hunters served to draw national attention to the need for shipwreck legislation. Senators like Bill Bradley of New Jersey began to cite the case of *NEW JERSEY* in laying the groundwork for passage of the legislation. On December 19, 1987, the U.S. Senate passed the bill in its entirety. On April 13, 1988, the House of Representatives followed suit. Fifteen days later, President Ronald Reagan signed the bill into law. The battered and beaten *NEW JERSEY* had contributed to a legacy of immutable merit...

It is common knowledge that many dozens of mostly wood canalboats sank from various causes in Chesapeake Bay, the Delaware River, the Raritan River, Raritan Bay, Arthur Kill, Kill Van Kull, NY Harbor, the Hudson River, Long Island Sound, Lake Champlain, Oneida Lake, the Finger Lakes, the Great Lakes, etc. Many others were purposely sunk as bulkheads and as a part of landfills such as the Morris Canal boats under Liberty State Park, etc. Surely many of these boats traveled through the D&R Canal or had some connection to New Jersey and may be rediscovered as archeological treasure troves like the *NEW JERSEY*. The reader can be assured that many thousands of additional pages of reports exist on this former New Jersey - D&R Canal vessel. Also see "Commercial Transportation Co." *Ghost Fleet of Mallows Bay And Other Tales of the Lost*

Chesapeake, by Donald G. Shomette, 1996.

The **New Jersey Delaware and Raritan Canal Company** was incorporated in 1820 to secure funding to build the canal, but were saddled with several conditions: 1. They had to get fully organized with all capital in hand within two years; 2. The state reserved the right to take over the canal after fifty years, on paying the costs of construction to the stockholders; 3. Restrictions were placed on the number of shares a stockholder could vote (the more shares they held the less was their vote...); 4. The company was required to dig a canal nine feet deep and fifty-six feet in width - impossible with the funding available; 5. And finally, the company was required to negotiate a satisfactory agreement with Pennsylvania for diversion of the necessary water from the Delaware River. They were unable to secure the required agreement, the venture failed. *Acts of the 44th General Assembly, NJ Public Acts, 2nd sitting, 2 March 1820.*

A **New Jersey and Pennsylvania Traction Co.** trolley car was used to free two canalboats which grounded in the D&R Feeder at the West Hanover St. bridge in Trenton. The two mule-drawn boats, heavily loaded with stone from the Stockton quarries got stuck in the mud at the bottom of the canal, blocking the bridge in an open position. Several trolley cars were held up at the bridge while a solution was sought. Finally a local, Andy Compton, suggested that the canalboat towrope be attached to one of the trolleys and the car was backed up, freeing the boats and Compton was applauded. *Trenton State Gazette, June 2, 1908.* NJ and PA trolley car #2, descending the Calhoun St. hill west of the D&R Feeder Canal bridge, was unable to stop at West State Street due to slippery rails and crashed into Trenton Street Railway car #176, with little damage. *Street Railways of Trenton, by Barker Gummere.*

New Jersey Department of Environmental Protection, Division of Parks and Forestry, State Park Service owns and manages the D&R Canal as a 70-mile-long state park. www.state.nj./dep/parksandforests

New Jersey Division of Fish and Game completed the first survey of fish populations in the D&R Canal in 1953. It was prepared by the State Fisheries Laboratory in Milltown for publication in *Survey Report of New Jersey Lakes and Ponds* for sportsmen. Since the current water supply for the canal comes from the Delaware River at Raven Rock, any fish in that waterway can enter the D&R at that point. Delaware River fish can also enter the isolated lower section of the canal through the open Bordentown lock at high tide. It is also possible for fish from the Raritan River to enter the lower canal levels at the New Brunswick end during times of river flooding. *New Brunswick Times, March 1, 1953.*

New Jersey Gets Canal: The association for the Preservation and Improvement of the D&R Canal and the Somerset Canal Association received the congratulations of Middle Atlantic and New England yachtsmen in their victorious fight to have the State of New Jersey acquire title of the canal. *New York Evening Sun, May 12, 1934.*

The **New Jersey Legislature** appointed a second canal survey commission in 1823 which resulted in the incorporation of the Delaware and Raritan Canal Company in 1824. Two years later the company surrendered its charter because it was unable to obtain a sanction from Pennsylvania for use of the waters of the Delaware River. The campaigns for canal-building failed in 1828 and 1829. Finally, on February 4th, 1830, the New Jersey Legislature passed a bill

empowering the fourth canal company, the second and successful Delaware and Raritan Canal Company, to undertake the construction of the long-awaited canal between the Delaware and Raritan Rivers. *Borough of South Bound Brook, H. Kells Swan, Compiler.*

New Jersey Militia, including the First, Second, Third, and Fourth Regiments under the command of Col. Jonathan Fish, were transported south through the D&R Canal in early May, 1861, in the following chartered steam canalboats: *WILLIAM WOODWARD, FANNIE CADWALADER, DELAWARE, RARITAN, TRENTON, PATROON, F.W. BRUNE, ELIZABETH, FARMER, FRANKLIN, J.B. MOLLISON, EUREKA, FANNY GARNER, and OCTORARA*. The troops were conveyed to Annapolis to defend the nation's capitol during the opening days of the Civil War. (Notes: Brig. General Theodore Runyon, commander of the NJ troops, made his headquarters on the *WOODWARD*; from Annapolis the troops were moved by train to Washington.) *Newark Evening Journal, May 2, 1861. Bordentown Register, May 10, 1861.* The fleet of twelve propellers passed Philadelphia last night at 11½ o'clock during a heavy storm. As the steamers neared Philadelphia they opened their steam whistles and in succession apprised the Philadelphians of their progress. The night was dark and stormy but some of the troops collected in groups on the deck of the transports and were faintly visible through the dim lights of the vessels. As they passed Smiths Island, sundry bells were rung on the shore. Cannon were fired from the lower decks of the transports and were responded to on the Camden side. Near the ferry slips at Camden crowds had collected. They should reach Annapolis this evening or tomorrow. *Newark Daily Advertiser, 4 May 1861. One of the propellers, the EUREKA, which conveyed the New Jersey troops to Annapolis reached this city (Trenton) last evening, being the first of the expedition that has returned. Daily True American, 9 May 1861.*

New Jersey Navigation Company, incorporated in 1804, was a venture to build what eventually became a navigable canal across the waist of New Jersey. The act stated that the corporation was "for the purpose of opening a communication by water to commerce from the tidewater of the river Raritan, at or near New Brunswick, to the tidewater of the Delaware at Lambertton." *N.J. Laws, 29th Session, 1st Sitting, pp 433-449.* Various citizens, backed by the *Trenton Federalist*, pressed the matter of the waterway so vigorously that in 1804 the Legislature granted a charter to the New Jersey Navigation Company. *From Indian Trail to Iron Horse, by Wheaton J. Lane* Adequate funds could not be raised and the company failed.

New Jersey Public Utility Commission served notice on the Pennsylvania Railroad Company on March 2, 1933 that it must continue operation of the D&R Canal pending decision by the courts as to the right of the company to close it to navigation. *New York Times, March 4, 1933.* The PUC announced that it would start action in the courts to compel the PRR to resume operation of the D&R Canal. *New York Tribune, April 19, 1933.* The PUC action was referred to Federal Court. *New York Tribune, May 3, 1933.* The Pennsylvania Railroad sent water flowing back through the D&R Canal from above Kingston to the Five-Mile lock near New Brunswick. It was filled to half its normal depth. The flow was maintained to "protect the health of people in communities along the canal route." *New York Tribune, June 15, 1933.* The Pennsylvania Railroad offered to give the D&R Canal to the State of New Jersey for a nominal consideration. *New York Tribune and New York Times, July 12, 1933.*

The New Jersey Senatorial Committee on Railroads and Canals: Senator George S.

Silzer pushed for action on the D&R Canal and succeeded in getting a resolution “to ascertain the reasons for the disuse of the D&R Canal, what interest, if any, the State has therein, the rates and tolls charged for the use thereof, whether or not there is discrimination in the supplying of boats for use thereon, and the general operation and conduct of said canal, and to investigate and report upon the utility and advisability of adopting legislation tending to revive the usefulness and development of said canal...” *Senator Silzer moves for revival of Raritan Canal, New Brunswick Times, January 21, 1908.* The accusations and posturing continued for months: “P.R.R. Blocks Canal Trade” *New Brunswick Times, February 19, 1908.* “Denies Killing Canal Traffic - P.R.R. Says Other Railroads Diverted Coal Trade and Cut Down Profits” *New Brunswick Times, March 4, 1908.* Investigation Commission, headed by Senators Bradley, Leavitt, and Silzer, made an inspection trip through the D&R on the canal company’s steam vessel *RELIEF* in July 1909. *Trenton Evening Times, July 12, 1909.* Their purpose was to probe the decrease in traffic through the canal. They found an urgent need for improvement; possible discrimination against shippers; conducted hearings; discovered claims that the railroad had killed off competition from the canal by raising canal rates and delayed boats at draw bridges; the rhetoric went on and on for months... Newspaper reports appeared almost weekly. Then there was a long silence... In March and April of 1911 there was another flurry of activity following accusations that the railroad “Bottled Up” the canal report. Then there was a proposal to lower canal toll rates to 10¢ per ton. This legislation finally died in February 1912.

New Jersey Ship Canal Commission was created in 1911 when the state pledged to appropriate \$500,000 to acquire a right-of-way for the US Government to build a ship canal across New Jersey. *New Brunswick Times, July 13, 1913.*

New Jersey State began selling water from the D&R Canal to public and industrial users along its route in 1934. This practice continues to the present day under the New Jersey Water Supply Authority. www.njwsa.org

New Jersey State Archives is the state’s official repository and research center for New Jersey public records of enduring historical value, located in the capitol complex in downtown Trenton at 225 West State Street. Their ever-expanding website provides access to their vast collections through: the Online Catalog; Imaged Collections; Documentary Treasures; and Searchable Databases. www.njarchives.org D&R Canal records include: Camden & Amboy/D&R Canal Companies, Minutes of the Joint Board of Directors and the Executive Committee 1831-1972; D&R Canal Co. Minutes of the Board of Directors and Stockholders, 1830-1872; D&R Canal Co. Land Records, Construction Contracts and Maps; D&R Canal Co. Miscellaneous Publications, 1823-1869; Pennsylvania Railroad Co., D&R Canal Agreements, 1874-1940; Delaware River Water Supply Project, Aerial Photos of the D&R Canal & Proposed Pipeline Route, 1938; Dept. of Conservation & Development, Photos of the D&R Canal (Kummel Collection), 1935-1936; D&R Canal Commissioners Reports, 1817 & 1818; D&R Canal Commission Canal Maps, 1903-1913; NJ Water Supply Authority, D&R Canal Drawings & Maps, 1909-1952; Dept. of Conservation & Development, Proposed NJ Ship Canal Publications, 1895-1938; NJ Legislature Petitions & Other Papers relating to Bridges, Canals, Dams, Ferries, and Roads, 1765-1835; Dept. of State, Secretary of State’s Office, Annual Reports of Canal & Railroad Companies, 1854-1866 (with gaps); Dept. of the Treasury, Comptroller’s Office, Annual Reports of Canal & Railroad Companies, 1872-1915; Dept. of the

Treasury, Division of Taxation, Public Utility Tax Bureau, Railroad & Canal Tax Ledgers, 1893-1972; State Board of Assessors, Records of the 1910-1911 Revaluation of Railroads and Canals in New Jersey; NJ Ship Canal Commission, Reports on the Proposed Sea-Level Canal Connecting Delaware & NY Bays, 1912; Committee on Taxation of Railroad and Canal Property, Report to the Legislature, 1934. The above collections represent 63.06 c.f. of paper records and 10 reels of microfilm.

New Jersey State Board of Education members, as well as Supt. Cleaver of the C & D Canal, Supt. Alexander P. Gest of the Belvidere-Delaware Div., and Asst. Supt. H.W. Dunn of the D&R Canal were taken from Trenton to New Brunswick on the steam yacht of J. Holmes Longstreet in Sept., 1902. *Bordentown Register, September 26, 1902.* At 10:30 o'clock yesterday morning Captain J. Holmes Longstreth (Longstreet), with his yacht *MAY* steamed away from Trenton's State Street lock, carrying a majority of the members of the state board of education and invited guests. The affair was the annual outing given by the Hon. J. Bingham Woodward of Bordentown to his colleagues and friends. It was 5 o'clock when the party reached New Brunswick, after spending the day in sightseeing, story-telling, singing, speech-making and the enjoyment of an elaborate luncheon which was served after the yacht left Kingston. At New Brunswick the party separated, the North Jersey men reaching their homes by the Pennsylvania Railroad and the South Jersey men by the (Public Service Railroad) Fast Line and Camden and Trenton trolleys. Those who were present were, as members of the state board of education, Hon. James Hayes, Newark; St. John McCutcheon, North Plainfield; Judge Francis Scott, Paterson; Colonel Sweeting Miles, Alpine; Professor Lewis Brevier, New Brunswick; George A. Frey, Camden; S. R. Morse, Atlantic City; Percival Christie, High Bridge; Charles E. Suydam, Morristown; C. J. Baxter, superintendent of public instruction. Other guests were: Dr. J. M. Green, principal of the state schools; John P. Walker, superintendent, school for deaf mutes; Herbert W. Morse, of the department of education; H. W. Dunn, superintendent of the Delaware and Raritan Canal; Francis B. Lee, health commissioner, of Trenton; A. P. Gest, superintendent Belvidere Division, Lambertville; John P. Hutchinson, Georgetown; Richard Woodward; Professor William McFarland; R. Howard Aaronson; Lanf Thompson, superintendent, Riverview Iron Works, Bordentown; Hood Gilpin, counselor at law, Philadelphia; William R. Barricklow, counselor at law, New York; William Anderson, Philadelphia; and Professor James P. Dilks, Beverly. *Trenton True American, 8 June 1904*

New Jersey State History Fair: is an annual event which has taken place at historic Washington Crossing State Park, adjacent to the D&R Canal Feeder every year since 2004. The Canal Society of New Jersey participates with an information/sales booth and by offering boat rides on the canal. www.njhistoryfair.org

New Jersey State Treasurer Daniel S. Voorhees and a party passed through the Morris Canal on their way from Trenton to Lake Hopatcong on an outing in July, 1907. They traveled on the 65-foot steam launch *UNCLE DAN*, owned by a syndicate headed by Voorhees. Members of the party included: Peter Throp, builder of the launch; his brother, Thomas Throp, former Sheriff of Mercer County (could these be the 'sons' of John E. Thropp's Sons Co. Machine and Boiler Works of Trenton?); former Sheriff George Litters of New Brunswick; A.J. Wentzel; Geo. Potter of Newark; Robert Hutchinson of Bordentown; John Riker of Trenton; Assemblyman Randolph Perkins; J.G. McMurray of Union County; and Assemblyman H.W. Buxton of Morris

County. The trip originated in Trenton on the D&R Canal and traveled through to New Brunswick, the Raritan River, the Kills, and Newark Bay. The launch presumably entered the Morris Canal from the Passaic River. *New Brunswick Daily Times, July 12, 1907.*

New Jersey Trails Association (NJTA) is a coalition of land preservation and conservation organizations spearheaded by D&R Greenway Land Trust. Their mission is to make accurate information about walking trails on preserved lands accessible to the public. At www.njtrails.org, you can find detailed information on 35 scenic trails, with more being added all the time. There are resources to make your walking and hiking experience safer and more fun such as: • Color trail maps; • Driving directions to trail heads; • Trail amenities and difficulty ratings; • Notes on plant life, wildlife, history and geology; • Walking and hiking tips. Readily accessible information is an important ingredient in promoting more active and healthy lifestyles for the residents of New Jersey.

The original **New Jersey Turnpike Company** was incorporated by an act of the legislature of NJ in 1806. This road from New Brunswick to Phillipsburg via South Bound Brook (then known as Bloomington) was completed in 1809. It followed a course much closer to the Raritan River than the present Main Street and Easton Avenue. The construction of the D&R Canal surely took much of the right-of-way of the earlier turnpike. *Borough of South Bound Brook, H. Kells Swan, Compiler.*

New Jersey Water Supply Authority: operates and maintains the water transmission complex of the D&R Canal as a 75 million gallon a day water supply resource for residential, commercial, industrial, and agricultural users in central Jersey. www.njwsa.org

New Line of Steam Propellers advertised in the Albany, NY directory for 1845-6 for their service “Between Albany and Philadelphia, via the Delaware & Raritan Canal, without transshipment of goods.”

New Rochelle to Baltimore, by Stuart Stevens Scott is the story of the delivery of a 21-foot raceabout *EDWINA* south through the D&R and C&D Canals.

New Trolley Bridges in Trenton: Trolley cars crossed the new canal bridge at South Broad Street for the first time yesterday. *Daily True American, April 20, 1899.* Orders have been issued for the letting out of the water from the D&R Canal on Monday of next week. It will require several days to get the water out. This news is ordinarily of little interest to the people of Trenton, but this year the news is more important than it ever was before, owing to the fact that two trolley companies are waiting for the passing of the waters so that they may build bridges by which their cars may be sent over the canal or its feeder and thus complete the arrangements for the running of their big interurban cars to the center of the city. These companies are the NJ and Pennsylvania Traction Co. and the Camden and Trenton Railway Co. The first named has an old bridge over the feeder at Calhoun Street that it wished to replace. The Camden and Trenton Co. has built a double track road all the way from Lalor Street to State and Warren Streets, crossing the canal at Cass Street. It is also to connect with the Trenton and New Brunswick line at Liberty and Adeline Streets and carry the New Brunswick passengers to the center of the city. (Note that the New Brunswick line was standard gauge and the Camden line was wide gauge.)

Dual gauge track was installed so that cars of both lines could get to the city center.) *Trenton Times*, August 12, 1903, and *State Gazette*, December 17, 1903. A modern iron bridge will be built across the canal at Cass Street by the D&R Canal Company, Trenton & New Brunswick trolley company and the Camden and Trenton trolley company. The present structure is not strong enough to carry the heavy cars. The bridge will be on the order of the State and Broad street iron structures and work will be started on it at once. Superintendent H.W. Dunn, of the canal company, will keep the water in the canal long enough to release the boats. As soon as the water is let out the canal locks will be given an overhauling and repairs made to the canal banks. A new bridge will also be built at Bound Brook. *Trenton Daily Gazette*, 24 December 1904

New York & Baltimore Inland Co. a/k/a Inland Line, a/k/a Inland Propeller Line. The NY and Baltimore Inland Company put a fleet of tugs on the D&R Canal to carry freight between NY and Baltimore in 1915 and put Mr. Woodward and his mules out of business. However, the company was not a success and went into the hands of a receiver in 1920. *New Brunswick Sunday Times*, March 11, 1923.

New York & Baltimore Inland Transportation Co. a/k/a NY & Baltimore Inland Co. operated tugboats and barges through the D&R ca. 1922-4 until their Delaware charter was repealed due to unpaid taxes. From a 1920 Baltimore shipping directory: "(Baltimore) TO: New York City - Barges towed every Monday, Wednesday and Friday, New York & Baltimore Inland Transportation Co."

New York & Baltimore Transportation Line, per shipping ads of the 1850's; the steam canalboats they operated included the *F.W. BRUNE* (Named after a family of Baltimore shipping agent which had four members with the same two initials.), *JOHN R. THOMPSON* (was secretary of the D&R Canal Co. and secretary & loan agent of the Joint Companies), *JOSEPHINE THOMPSON*, *JOHN S. SHRIVER*, *MARTHA STEVENS*, (named after a Civil War heroine), *TELEGRAPH*, *WILLIAM WOODWARD*, and many others. From an 1866 Baltimore directory: New York & Baltimore Transportation Line, No. 3 Light Street Wharf, Baltimore, forms an inland route via the Chesapeake & Delaware and D&R Canals. It comprises 9 propellers, having a total capacity of 3,000 tons.

New York & Baltimore Transportation Line, a/k/a Baltimore Line, incorporated in MD in 1868, operated via D&R and C&D Canals using the following steam canalboats: *F.W. BRUNE*, *JOHN W. GARRETT* (Named for the President of the B&O Railroad), *WILLIAM WOODWARD*, *VINELAND*, *OLNEY*, and many others. Firm was reported to be a subsidiary of the Ericsson Line, but many believe there was a strong connection between it and the Baltimore & Ohio Railroad.

New York Canal and Great Lakes Corp. owned reinforced concrete and steel canal vessels built by the US Government during WW I vessel shortages. They were typically 150' x 20' beam x 12' depth of hold, and could carry 350 tons. Steel cargo barges *U.S. 236*, *U.S. 237*, and *U.S. 243*, which were transferred from the New York Canal System to the Intra-coastal Division, left New York on October 16, 1920 in tow of the self-propelled steel barge *ORANGE*, temporarily withdrawn from the NY Canal Section. The *ORANGE* and tow, taking the inland D&R and C&D Canals route, arrived in Baltimore on October 21st for planned/announced

service between Baltimore, Norfolk, and New Bern, NC. The *ORANGE* was started back to New York, but as the *WAYNE* (already in service in the south), which left New Bern on October 15th with a cargo of lumber, developed serious engine trouble en route and had to undergo extensive repairs at the Norfolk Navy Yard, it was necessary to return the *ORANGE* to Baltimore to continue the service which had been announced. The *ORANGE* was accordingly intercepted at Kingston, NJ on the D&R Canal on October 25th and ordered back south. She reached Baltimore on October 28, 1920, and left the next day for New Bern on the first southbound voyage on the Intra-coastal Division. On December 11, 1920 steel reinforced concrete canalboats U.S. 108, U.S. 115, and *U.S. 118* were transferred from New York to the Intra-coastal Division. The self propelled steel canalboat *ROCKLAND* towed them south through the D&R to Bordentown and then returned to New York for concrete barge *U.S. 101* and steel cargo barges *U.S. 224* and *U.S. 228*. The concrete barges previously taken through to Bordentown were picked up at Bordentown and the four concrete and two steel barges were towed to Philadelphia. At that point steel cargo barge *U.S. 223*, which had previously been sent from NY was added to the fleet of seven with *ROCKLAND* towing. They passed through the C&D Canal and arrived at Baltimore without incident on December 30th.

New York & Delaware River Steamship Co., Inc. operated steam canal freight boats between NY (pier under Brooklyn Bridge) and Phila. (Pier 9N) ca. 1921-3 using *A.L. PAGE* and *WOODALL*. Their charter was forfeited in 1932.

New York & Delaware Transportation Co. operated through the D&R ca. 1918; service was not affected by the US RR Administration takeover.

New York Departures via D&R Canal: August, 1846: Barge *MIDDLESEX* towed by *VULCAN*; Barge *PLANET* towed by *ANTHRACITE*; Barge *GRAMPUS* towed by *VULCAN*; Barge *STAR* towed by *ANTHRACITE*; Barge *MARS* towed by *VENUS* towed by *VULCAN*. Iron steamboat *ALBEMARLE*, Capt. Low, leaves Dey St. Every Tuesday, Thursday, Saturday 5pm for Princeton, Rocky Hill, Millstone, Bound Brook, New Brunswick. *NY Courier & Enquirer*, July, 1846.

New York Yacht Club fleet numbering 200 vessels was reported to have traveled through the D&R on Aug., 24, 1907, en-route to the Jamestown Exposition. *Trenton in Bygone Days*, *Trenton Times Advertiser*, Sept. 11, 1956. The NYYC is a private yacht club based in New York City and Newport, RI. Founded in 1844, it is one of the world's most distinguished and influential yachting institutions. Membership is by invitation only and they have about 3,000 members. Their first clubhouse was established in a Gothic-revival building in Hoboken, NJ, on land donated by Commodore Stevens. The current primary NYYC clubhouse is a six-storied Beaux-Arts landmark with a nautical-themed limestone facade in midtown Manhattan. Opened in 1901, it was designed by Warren and Wetmore, architects of the exterior of Grand Central Terminal. The author/editor was permitted access to the NYYC library for research and much valuable information was found. www.en.wikipedia.org

Nitre Cake: The barge *LUKE TYRON* was on Friday beached on the Bordentown flats. The cargo was nitre cake and she was bound from Philadelphia to Sandy Hook. She sprang a leak while in tow of the tug *JAMES HERRON*. *Bordentown Register*, August 23, 1901. The beached barge *LUKE TYRON*, having been relieved of its cargo, entered the canal on Monday on its

voyage to Constable Hook. The cargo was insured for \$900. It consisted of nitre cake, which was dissolved by contact with water and had to be pumped out into the river, making the loss complete. *Bordentown Register, August 30, 1901.*

North Branch Extension Canal in PA, saw its last shipment in the fall of 1873. Captain Abnah G. Atherton took a boatload of flagstone from Black Walnut, PA, above Tunkhannock (north-west of Scranton) to New York City in 1873. The roundabout route included the North Branch Division; the Susquehanna Division; Eastern Division of the Main Line Canal; Susquehanna & Tidewater Canal to Havre de Grace, MD; Chesapeake Bay; Chesapeake and Delaware Canal; Delaware River; D&R Canal; and the Kills to NY Harbor. *Athens (PA) Gleaner, October 17, 1873.*

North Brunswick Water Company has a water filtration plant on the east side of the D&R in Franklin Township. It takes raw water from the canal and the plant was greatly expanded in 2009.

North River Iron Works at Hoboken built several boilers for Old Dominion Line steamers constructed at Delaware River Ship and Engine Building Co's yard at Chester, PA. The boilers were sent through the D&R in large open deck canalboats in 1898. *Nautical Gazette/Seaboard, New York, August 25, 1898.*

It's **Nutts**: Along the banks of the Delaware (& Raritan) Canal, the gravel parking lot makes it look like just a roadside diner/trucker stop. But inside this quaint 61-seat BYO(B), you will savor surprisingly eclectic and sophisticated cuisine, (along with some down-home comfort food favorites). *New Jersey Monthly Restaurant Review, by Emily Faherty.* It's Nutts calls themselves "The best little restaurant in town." They are located at 1382 River Road, Titusville, just north of Washington Crossing State Park and across the road from the Feeder Canal. Inside they have a lovely 15 foot-long wide angle view-mural of the canal painted by J. Romanchuck. They are open for breakfast, lunch and dinner and do catering as well. The establishment also sells home-made ice cream. Phone: 609-737-0505 www.itsnutts.com

Obstructing Navigation: Thomas Gillem, the captain of the canalboat *SIMPLICITY*, was arraigned this morning before Judge Henry in the custody of Constable Strong. Harbor Master Welsh appeared a few minutes thereafter and filed a complaint that Gillem had willfully obstructed navigation in the river below the outlet locks and refused to obey his (the Harbor Master's) order. Gillem was discharged upon his payment of a \$1.50 fine and costs for his "simplicity." *New Brunswick Daily Fredonian, December 3, 1872.*

Old Dutch Road mostly followed the Assanpink Trail from Elizabethtown to New Brunswick, Princeton, and Trenton. The latter three places were to be connected by the future D&R Canal. The road route was used by both the British and the Continentals during the Revolutionary War. It was utilized for fast movement of troops and supplies and as an easy route for couriers who were constant on the road. Also see "Assanpink Trail," "Kings Highway," "Lincoln Highway," and "Old Dutch Road."

Oldest Towpath Driver in U.S.: John Gaffney, who has driven a team on the towpath of

the D&R Canal for the past fifty-four years died at St. Luke's Hospital in New York City on March 6th. He was 70 years of age and had many friends between New Brunswick and Kingston who greatly regret his death. Mr. Gaffney first drove a canal team in 1849 and for fifty-four years continued at this business. He drove team number one until 1903 and during the past twenty years has had a number of teams in his charge. He never married, but had a sister residing in New York, with whom he spent the Winter while the canal was closed. He is believed to have been the oldest canal driver in the US... *New Brunswick Weekly Times, March 18, 1904.*

Old York Road was built from west to east to connect Philadelphia with New York. The whole road across New Jersey from Coryell's Ferry (Lambertville, where it crossed what was to become the D&R Feeder Canal) to Elizabethtown Point was not open for vehicle traffic until 1764. The Swift-Sure Stage Line operated outstanding stagecoaches on the road which was "noted for its shortness and convenience over the River Delaware," but took two full days. The route was via Ringoes, Three Bridges, Raritan, Bound Brook, Scotch Plains and Westfield and might be considered a predecessor for the D&R Canal because it served to link the two main cities served by the D&R. Parts of the route are followed by the current US Route 202 and NJ Route 27.

On The Canal: A Scribe's Voyage on the Raritan Canal - Perils of New Jersey Navigation - The Captain, the Mate, and the Manager of the Motive Power. (Copy not legible - need better scan.) *The Sunday Call, August 8, 1886.*

Opposition to the Monopoly: NJ, NY and Philadelphia interests began scheming even before the completion of the canal to find ways and means to get around the monopoly and secure a share of the passenger and freight business between America's two largest cities. Using the NJ Legislature as the great battlefield, the Philadelphia and Trenton Railroad Co., the Trenton and New Brunswick Turnpike Co., the New Brunswick Bridge Co., and the New Jersey Railroad and Transportation Co, controllers of most of the route from Philadelphia to New York, fought ceaselessly against the joint companies during the years 1833-36. By the employment of numerous lawyers, by appealing to NJ patriotism, and by sheer economic strength the monopoly won the victory, scattered the opposition, and even went so far as to buy a controlling interest in the Philadelphia and Trenton Railroad by an agreement of April 22, 1836. *The Delaware & Raritan Canal A History, by Crawford Clark Madeira, Jr.* "The Joint Companies emerged from the conflict bigger and stronger than ever; they were better prepared through the experiences gained in this turbulent period to ward off many political attacks made on them in subsequent years." *Robert T. Thompson, Transportation Combines and Pressure Politics in New Jersey.*

Joseph S. **Oram** was the proprietor of a shipyard at New Brunswick harbor (at foot of Commercial Ave.) which was established in 1841 to do repair work, primarily on canalboats. His yard had 18 experienced workmen ca. 1875.

Overboard - Hoops Useful: One evening week before last as the up train on the Belvidere-Delaware Railroad stopped before Lambertville station to take water, a lady on board, supposing that the station had been reached, stepped out of the door on one of the cars into the canal which at that point is very near the track of the railroad. Fortunately her hoops acted as an air receiver as she fell, and kept her from sinking until assistance could reach her. *Daily True*

American, December 7, 1864.

Oyster-men: Oyster-fleet men convoy barges loaded with “seedless” (seedling?) oysters, or oysters too young to eat, to be planted in beds in Princess Bay, below South Amboy, where they are allowed to grow until they are large enough for the markets. About seventy barges-full pass through (the canal) to be planted every season. *New Brunswick Sunday Times*, March 11, 1923.

The **Panic of 1893**, which brought an end to the boom of the 1880's, had its impact on the Delaware and Lehigh Canals. There was an increase in non-company boats on the two canals, and many of them were engaged in “miscellaneous trade.” Some of the commodities transported were iron ore, stone, fruits and vegetables, manure, and cement. According to the managers of the Pennsylvania canals: “This increase was probably due to the extremely bad business on the Delaware and Raritan Canal, forcing the boats to come to our canal in search of freights, and is not likely to prove permanent.” *Albright G. Zimmerman, Pennsylvania's Delaware Division Canal*.

Captain **Parker**, an inventor of MA, arrived in Trenton on the D&R in 1850 with his small steamer, *VIRGINIA*, intended for towing on canals. She had but one large paddle wheel, which was in the center of the boat. The paddles were of cast iron and curved so as to hold the water when they enter it, and prevent it from escaping sideways. They draw the water from the front and sides of the boat and throw it out at the stern. The advantage of this is alleged to be that the boat makes no swell in the water with her wheel, and does not wash the banks. *Jersey City Daily Sentinel & Advertiser*, June 19, 1850. Also see “*CAR OF COMMERCE*.”

Passenger Packets on the D&R: In 1834 Colonel James Reeside's People's Line tried one last expedient in an attempt to cope with the growing popularity of the Camden and Amboy Railroad, which now had been completed to Camden and was using their locomotive *John Bull*. It was announced that the “new and splendid barge” *NEW JERSEY* would be operated on the D & R Canal between Kingston and Bordentown, where travelers connected with the *PHILADELPHIA*. *NY Commercial Advertiser*, 2 September 1834 Although this means of transit had some elements of novelty, it was slower than staging (stagecoaches), and later the *NEW JERSEY* ran between Trenton and Bordentown only. It was obvious, however, that for passenger traffic the railroad was superior to stage or barge, and soon afterwards the People's Line abandoned the hopeless struggle. *From Indian Trail to Iron Horse*, by Wheaton J. Lane. For several years after the opening of the canal there were attempts at running packets from Bordentown to New Brunswick, but the running time (5½ hours) compared very badly with railroad and stage, and apparently the only reason that travelers chose the vessels *UNITED* and *NEW JERSEY* for the trip across the state was to observe the scenery, which was described as “diversified” and “picturesque.” *N.J. State Gazette*, November 14, 1835. The passenger business, of course, never materialized. During the first two years of operation packets plied between Trenton and New Brunswick, charging 75 cents and taking 5½ hours for the trip. *Emporium and True American*, 21 November 1835 Although this was less expensive than by stage, the time was slower, and after 1835 there was no regular passenger service.

Passenger Service on the D&R: The Camden and Amboy Railroad had a virtual monopoly on passenger traffic and the amount of travel on the waterway was insignificant. The canal's “banner year,” after Trenton and New Brunswick were connected by rail, was 1849 when

136 persons passed through. The main canal and feeder were used for pleasure boating and excursions. Occasionally a barge passed through, bound for some camp meeting or political gathering, but the receipts from such travel were small and in some years totally lacking. *From Indian Trail to Iron Horse, by Wheaton J. Lane.* When viewing photographs of the large steam powered canal freight boats with what appears to be cabins on their upper decks some uninformed “historians” have concluded that passengers were carried. This is not true as these accommodations were for the second shift crew which kept these vessels moving around the clock on their journeys between Baltimore, Philadelphia, New York, Albany, Hartford, etc.

Pathe Movie Company produced *The Perils of Pauline* starring Miss Pearl White and filmed on and about the Bel-Del as well as the D&R Feeder Canal. *Lambertville Beacon, September, 1914.* Pathe was founded in Paris, France in 1896 by three Pathe brothers and became the largest film equipment and production company in the world. It has been estimated that at one time, 60% of all films were shot with Pathe equipment. Beginning in 1914, the company’s film production studios in Fort Lee, NJ produced the extremely successful serialized episodes called *The perils of Pauline.*

Peak traffic year for the D&R was 1871, when 13,215 canalboats, 1,545 steamers, 668 sailing vessels, and 434 timber rafts transited the waterway.

Peak year for pleasure boaters was 1929 when 914 non-commercial vessels moved through the D&R Canal.

“William **Penn** and his associates commissioned an investigation in 1676 to determine whether or not a canal might be cut from the Delaware to Sandy Hook.” This was the first known move toward the construction of a canal across the state of New Jersey. *Borough of South Bound Brook, H. Kells Swan, Compiler.*

Pennsylvania and New Jersey Railway came across the Delaware river from Morrisville, PA on the Trenton Avenue - Calhoun Street Bridge; crossed the D&R Feeder Canal on the Calhoun Street Bridge; turned right and re-crossed the Feeder on the Hanover Street Bridge en-route to its terminus at Warren Street. This route was also used by the Philadelphia, Bristol & Philadelphia (later known as the Trenton, Bristol & Philadelphia) trolleys until about 1911 when the two companies had a disagreement. Interestingly, the PA & NJ went north from Morrisville to New Hope, PA and came back across the Delaware River Bridge to Lambertville, but did not cross the D&R Feeder Canal there. *Street Railways of Trenton, by Barker Gummere.*

Pennsylvania Canal Society organized a tour of the D&R Canal on October 6 & 7, 1972, making stops at Bordentown, Trenton, Lambertville, Kingston, Griggstown, Bound Brook and New Brunswick. *Canal Currents, Issue #21, Summer, 1972.* The society was founded in 1966 and is a non-profit educational organization. Their research library and archives are a part of the National Canal Museum in Easton, PA. www.pacanalsociety.org The archives of this organization are important to the D&R Canal researcher because several Pennsylvania canals were important sources of traffic, primarily anthracite coal, destined for NY/NJ Harbor. In order of importance to NJ the top three were: 1. The Schuylkill Navigation system, 2. The Delaware and Lehigh Canals, and 3. The Susquehanna River system of canals and navigations. Also see Schuylkill

Navigation and Delaware Canal.

Pennsylvania Central Transportation Company (Penn Central RR) was established in 1968 by the merger of the Pennsylvania Railroad and the New York Central Railroad. The combination went bankrupt in 1976 and became the major part of the Consolidated Railroad (Conrail) system. The Penn Central's collapse was, up until that time, the largest corporate bankruptcy in U.S. history, with tens of thousands of jobs at stake. *Railway Age, May 2009*. The Bel Del Railroad along the D&R Feeder Canal was operated by Penn Central, but was not included in the Conrail system. A track segment in the Lambertville area up to the Stockton Quarry was acquired by the Black River and Western Railroad at the inception of Conrail.

Pennsylvania Railroad Company has a large force of men at work putting in a new aqueduct (probably for Alexauken Creek) above Lambertville. *Lambertville Beacon, January 7, 1908*. Ca. 1930, the PRR built a bridge across the D&R south of the Laylor St. Lock which gave them access to the industries and freight customers on the west side of the canal north to and above Cass Street. This construction required a dual gauge, double diamond crossing for the Public Service Railroad *Fast Line* trolley from Newark and their line to Camden. "Friends" rescued that crossing and have it in storage at Phillipsburg. *New Jersey Transport Calendar (Prior name of NJ Transport Heritage), Vol. 1, No. 2, June, 1992*.

Pennsylvania Railroad Changes: have been made in the canal office at Bordentown. A considerable portion of the business heretofore done at the office will next season be transferred to New Brunswick and Philadelphia. Consequently the clerical force will be reduced. Mr. Robert Murphy, with two assistants, will hereafter perform the duties required, whilst Capt. G.M. Wright, the old Collector, and several clerks will retire. Mr. Wright has been a careful and economical officer, and withdraws from his responsible position with the proud satisfaction of knowing that he has ever fulfilled his duties ably and honorably. Mr. Murphy, his successor has had several years experience in the affairs of the office, and is fully competent to discharge the duties thereof. *Bordentown Register, January 3, 1873*.

Pennsylvania Railroad Co. leased properties of the Joint Companies (C&A and D&R) in 1871 and operated the D&R until it closed in 1932. Ca. 1905 the PRR owned 21 canalboats which were leased to the Joint Companies.

Pennsylvania Railroad may abandon canal - was a news story early in 1903, the earliest mention of closing the D&R. Their plan was to place their railroad track in the bed of the canal through Trenton. Their proposal was conditional upon the abandonment of the Morris Canal by the Lehigh Valley Railroad. *New Brunswick Home News, February 25, 1903*.

Pennsylvania Railroad President McCrea, and party traveled up the Bel Del in a special train in 1908. This gave them an excellent opportunity to inspect the parallel D&R Canal Feeder. *Lambertville Beacon, May 28, 1908*. A special train carried PRR President McCrea and General Manager Myers over the Bel-Del from Trenton to Belvidere to participate in a tour of inspection over the Lehigh & Hudson River Railway with their officials and with President Melen of the NY, NH & Hartford RR. *Lambertville Beacon, August 5, 1909*.

The **Pennsylvania Railroad**, about 1930, built a steel bridge across the D&R Canal immediately south of Lock No. 4, Laylor Street to construct track on the towpath side of the canal to access industries up to and beyond Cass Street. This required the installation of a double diamond, dual gauge crossing of the Public Service Railroad *Fast Line* and Camden-Trenton trolley lines. That heavy piece of trackwork was rescued by “Friends” of the NJ Transportation Heritage Center as Rt. 129 was being constructed and it is in storage in Phillipsburg awaiting reuse.

Pennsylvania Railroad: On June 30, 1871, the PRR leased the properties of the Joint Companies for 999 years. The purpose of the lease was to secure a rail connection with New York City and a waterfront railhead on the Hudson. *Richard F. Veit, The Old Canals of New Jersey*. The PRR completed a dam across the Delaware (River) at Bulls Island to raise the level of the Feeder Canal. (And thus to increase the supply of water for the Main Canal.) *Daily State Gazette, October 9, 1873*. (PRR) Workers were building a wing dam in the Delaware River at Bulls Island to raise the level of the river at that point and thereby place more water in the Feeder of the D&R Canal. *Lambertville Beacon, September 20, 1908*. A similar item appeared in the: *American Standard (Jersey City), October 24, 1872*. (This may have had something to do with the agreement the PRR had which required them to replace water drawn from the upper Millstone River for their track pans on their main line by taking it from the D&R Canal at the Millstone Aqueduct. Since the main water supply for the D&R was at Bulls Island this is obviously where they would have to get the replacement water from. It is likely that traffic growth on the PRR main line at this time would have required a greatly increased water supply.)

The **Pennsylvania RR** sponsored "Off the Beaten Track" trips from their Broad St., Philadelphia station, over the Pocono Mountains to Avoca/Scranton and return on 14 August 1938 utilizing two trains. The first train traveled to Trenton; up the Bel Del (along the D&R Feeder Canal) through Phillipsburg and Manunka Chunk; the DL&W through the Delaware Water Gap and their route to Scranton/Avoca; return was via the Wilkes-Barre & Eastern and Susquehanna to Jersey City and then via the PRR for the return to Philadelphia. The second train took the reverse journey from Trenton, going to Jersey City first. The two trains met and passed at Ash Gap, west of Pocono Summit and exchanged locomotives. The fare for the 400 mile figure 8 trips, which departed Philadelphia at about 6:30 AM, was \$4.

Pennsylvania RR: A special “Off the Beaten Track” excursion was operated by the PRR from Jersey City on 26 October 1947. It covered branch lines to Bonhamtown*, East Millstone*, Kingston* / Rocky Hill*, Coalport*, Trenton* to Bordentown*, and return through Jamestown and Perth Amboy with a steam locomotive, three coaches and one low side gondola. **These points were all on or along the Delaware & Raritan Canal.*

Pennsylvania Steam Towing and Navigation Co.: towed canalboats up the Delaware River with their *WM. H. ASPINWALL*. *Bordentown Register, April 2, 1875*.

Pennsylvania Steam Towing and Transportation Co. towed canalboats between the outlet of the Schuylkill Navigation and on the Delaware River and to the D&R at Bordentown ca. 1860. Also see litigation case “Ashmore v. Pennsylvania Steam Towing and Transportation Co.” 28 NJ Law (4 Dutch) 180.

Pensioners: Editorial type article lamenting the fact that the new owners, Pennsylvania Railroad, of the canal want to do away with the payments the old company had been making to widows and accident victims. *Daily State Gazette, April 29, 1872.*

Peoples Line: Advertised “New Arrangement - Safety and Expedition” for New York from Philadelphia at 6½ o’clock am, daily except Sunday in August 1834. They operated steamboat *PHILADELPHIA* from Philadelphia to Bordentown where passengers ‘will take’ a splendid barge for Kingston, from thence to New Brunswick by splendid 4 horse coaches, and from New Brunswick to New York by steamboat *NEW YORK* “arriving early same day.” *U.S. Gazette (Phila.), August, 1834.* They operated the horse-drawn boat *NEW JERSEY* initially between Kingston and Bordentown, but later only between Trenton and Bordentown only in 1834. By October 3rd they had reduced their Trenton to Philadelphia fare to 50 cents and were offered free passage to and from the canal at Trenton.

Peoples Steam Tow Boat Co. advertised their fine packet tow boat *FRANCIS AND MARIS* as available to carry freight from Trenton to New York in May, 1835.

Peoples Transportation Line established a line of freight packets between Phila. and NY per an ad dated April, 1835. *Poulsons Daily American Advertiser (Phila.), April 1835.*

Permits for boats moving through the D&R Canal were issued by the Pennsylvania Railroad Company on behalf of the D&R Canal Co. in the 1900's. They were a two-part form, one part was kept by the Collector at the point of issuance and the other part was given up at the point where the boat left the canal. Yellow permits were for coal and white was for all other cargo.

J. A. Perrine, Agent, D.& R.C. Company at Princeton Basin published a notice to canal boatmen on May 16, 1853 requesting that idle boats as listed below be removed from the basin; *MECHANIC of FREEMANSBURG; BOAT No. 34* of NY Line of Whitehaven; *NAOMIE*, of Penn Haven; *No. 925 M.C. Reg* (a Morris Canal boat); Stern box of boat *JUDGE DINGMON*, of Penn Haven; *MOUNTAINEER* of Penn Haven; Stern box of boat *GENERAL TAYLOR*, of South Easton; Boat *MARY ANN*; and two boats without name or number. *West Jerseyman (Camden), June, 1853.* A correspondent of the *Sheet Anchor* (Trenton) gives this notice to the appointment which was alluded to lately. We give it for what it is worth; but the reason for moving the office from New Brunswick strikes us as ridiculous. John A Perrine, Esq. has been appointed an Inspector of Customs to reside in Princeton. This office is in connection with the Customs House at Perth Amboy, and the inspector was formerly stationed at New Brunswick, but the collector has found that the business can be transacted with greater facility by the removal of the office to Princeton... *Princeton Whig, March 28, 1845.*

Perry Street Basin: “One feels when he is in the vicinity of Perry Street Basin as though he had been very suddenly let down into a new country. Planeing mills, saw mills, bow factories, and immense piles of lumber, stone, etc., cover most of the entire immediate space up to Perry Street. In the basin we find men employed in building boats, some unloading rafts, others carting away lumber, stone, etc.” *Excerpted from State Gazette, Spring 1854.*

Perry Street Crossing and Bridge: A collision between a Bel Del train and a trolley car took place in Trenton on 7 November 1900, not long after the Trenton Passenger Railroad Co. was electrified. On that day John Hagerty, the motorman of trolley car No. 160, approached the Perry Street Crossing, alongside the D&R Main Canal. At the same time locomotive No. 365, which was in drill service at the Coalport Yard, approached the crossing pushing a cut of cars. Hagerty, who suddenly realized that his trolley was too close to the track, attempted to reverse his car. But in the excitement of the moment, he caused his car to shoot directly ahead in the path of the moving freight cars. In an instant the trolley was struck and pushed from the track. Hagerty, who was thrown under the wheels of his car, died shortly thereafter. Three passengers in the trolley were also injured. *Down Along the Old Bel Del, Warren F. Lee* In 1908 the Pennsylvania Railroad, which operated the D&R Canal decided to replace the Perry Street swing bridge over the canal with a steel bascule lift bridge. The question of suitable overhead construction for the trolley wire of the Trenton Street Railway line was solved by Chief Engineer Thomas K. Bell of the Interstate Railways Company, which controlled the Trenton system at the time. The solution was a folding steel frame which kept the trolley wire taut. Diagrams and views demonstrated the operation in the article "Folding Overhead for Bascule Bridge." The last view shows a canal mule team passing the bridge. *Electric Railway Journal, Vol. XXII, No. 29, December 19, 1908*

Perserverence Paper Mill in Lambertville received coal and raw materials via the D&R Canal Feeder. No less than three steam fire pumpers drafted water from the canal to fight a fire in the mill in 1923.

Peter Hagan & Co., from the Philadelphia area, operated boats on the D&R ca. 1907.

Col. Sheffield **Phelps:** The houseboat *NIRODHA*, owned by Col. Sheffield Phelps of Englewood, NJ, was launched this afternoon from Marvel's shipyard in Newburg, NY this afternoon under the colors of the New York Yacht Club, and was christened by Mrs. ~~Sheffield~~ Phelps in the presence of a large party of New York friends, who came here on a special train. The boat was originally designed for Pierre Lorillard, the keel having been laid nearly two years ago. It was subsequently sold by the executors of his estate, and changes made to conform to the wishes of Col. Sheffield, who will use it on the coast of Maine in Summer and in Florida waters in Winter. The *NIRODHA* is 123 feet over all, 23 feet beam, 8½ feet deep, and will draw 3½ feet of water. She will be taken to New York for furnishings on Tuesday, and go to the college boat races at New London for her first trip. *New York Times, June 14, 1902.* Col. Sheffield Phelps passed through New Brunswick yesterday via the D&R Canal on his handsomely appointed houseboat *NIRODA* en route from his home at Teaneck, near Jersey City, to Florida where he will spend the winter. Colonel Phelps is accompanied by Mrs. Phelps and their three children. They expect to spend the winter aboard the boat, which is almost as handsomely and comfortably fitted up as their house ashore. *New Brunswick Times, October 30, 1900.* Col. Sheffield Phelps, of Englewood, NJ, stopped on the D&R in Trenton with his palatial houseboat *NIRODAH*. He entertained several groups of guests: a luncheon for Attorney General McCarter, State Treasurer Frank O. Briggs, Secretary of State Dickinson, and Col. John T. Toffey, former sheriff of Hudson County; a dinner for Judge John I. Blair, Major General Wanser, Major Lane, and Elbert Ripley, proprietor of the Jersey City Evening Journal, and a dozen friends from Hudson County; another luncheon for General Donnelly and the officers of the Interstate Fair Association;

concluding with a dinner for Col. A.R. Kuser and a party from Bergen County, in Trenton to attend the fair. *Trenton True American, October 1, 1902.*

Philadelphia and Reading Railroad Company: see Schuylkill (Coal) Field

The **Philadelphia and Trenton Railroad** was Trenton's first street railway, incorporated in 1832 and completed in 1834 to Morrisville. In order to reach Trenton, track had to be laid across the Delaware River Bridge, a covered wood structure built in 1806. Bridge company officials, fearing that the weight of steam locomotives might damage the structure, insisted that horses be used to haul cars between Morrisville, PA and Trenton, which was eventually done. East of the bridge the track made a long sweeping curve to the northeast until it reached the west bank of the D&R Canal. It continued north along the canal, then curved west on Merchant Street for one block, jogged north on Stockton Street, and turned west ?????? again along Hanover Street for two blocks to a point west of Greene (now north Broad) Street where a small depot was built. The line opened in May, 1837 with horses pulling the cars from Hanover Street to Morrisville. Early in 1838, the Camden & Amboy Railroad, which purchased control of the Philadelphia and Trenton, completed a branch line along the east bank of the D&R Canal between Trenton and Bordentown, where it joined the main line from Camden to South Amboy. Meanwhile, during 1838, the Camden and Amboy continued to build north along the east bank of the canal from Trenton to Kingston. This railroad then cut across country to New Brunswick where it joined the New Jersey Railroad, forming a continuous rail route from Camden to Jersey City. On 1 January 1839 steam locomotives began using this line in Trenton and a new railroad station, known locally as the "steam depot," was erected on the south side of East Second Street, just east of the canal. Horse-drawn cars of the Philadelphia and Trenton continued to run between Hanover Street and Morrisville. In June, 1844, the construction of a bridge across the canal, and strengthening of the Delaware River Bridge permitted connection of the two railroads and allowed Philadelphia and Trenton steam locomotives to reach the "steam depot." This completed the first continuous rail route between Philadelphia and the Hudson opposite New York City. It is believed that horse-drawn cars continued to operate between Hanover Street Station and a point across the canal from the "steam depot" until late 1846 or early 1847. By February 1847, however, the Hanover Street track had been removed and Trenton's first horse-drawn "street railway" had disappeared. *Street Railways of Trenton, by Barker Gummere* The location of the swing bridge which crossed the D&R Canal was south of Assanpink Creek and north of the future location of the canal aqueduct over the depressed "straight" line of the C&A. Also see Trenton Iron Co. Railroad.

Philadelphia, Albany, & Troy Line: Four (canal) steamships of the Philadelphia, Albany, & Troy Line, a freight line established in 1844, at first carried coal by way of the D&R Canal. *Philadelphia: A 300 year History, Russell Weigley & Nicholas Wainright.*

Philadelphia, Baltimore & N.Y. Line which appeared in a Bordentown Register news item of 12.24.1875 was obviously a mistake as it should have been the "New York & Baltimore Transportation Line."

Philadelphia Express Canal Line operated NY-Phila. per 1867 freight bill; Wm. P. Clyde agent; using steam propeller *MAYFLOWER*.

Phila. & New York Delaware & Raritan Canal Line, per 1881 freight receipt from agent Wm. P. Clyde.

Philadelphia Lighterage and Transportation Co. operated boats on the D&R ca. 1907.

Philadelphia and New York Express Steamboat Com'y. a/k/a New Express Steamboat Co. ca. 1863-4.

Philadelphia & New York Steam Navigation Co. per 1876 freight invoice. Steamboats to be Sold." A suit was being brought for dissolution of this firm which caused this advertisement to be placed for the sale of steam canalboats *ANN ELIZA*, *BEVERLY*, *BRISTOL* & *MAYFLOWER*, then in use by William P. Clyde & Co. *New York Times*, October 24, 1879.

Philadelphia & New York Steam Transportation Co. a/k/a Swiftsure Line per 1851 bill and receipt; a/k/a Despatch Line per 1852 freight bills.

Philadelphia Paper Co. president John Jacobs had built for is company's use in the 1920's, a wooden tugboat, *LOUISE*, and four specially designed barges to haul products of his Manayunk (near Philadelphia) plant to New York Harbor via the D&R Canal. *LOUISE* and the barges were designed by J. Murray Watts, a noted Philadelphia naval architect, and the tug was built by the Rancocas Construction Co. The tug was 50 feet long, with a beam of 13 feet and a draft of 4.5 feet, powered by a 60-hp Mianus three cylinder diesel engine. The 97-foot, narrow barges had a capacity of 85 tons each. The paper plant was on the Manayunk Canal section of the Schuylkill Navigation system and the route to NY was to lock down Locks 69 & 70 and out into the Schuylkill River and then down locks 71 & 72 at Fairmount Dam at Philadelphia and down to the Delaware. The tow was then north on the Delaware River to Bordentown and through the D&R to the Raritan River; the Arthur Kill, Kill Von Kull and NY Harbor. The initial tow was considered a success with passage made in 36 hours. However, the *LOUISE* disappears from US Registry by 1929 and no other information on this operation has been found. *Tugboat Enthusiasts Society of the Americas, TugBitts, Vol. 19-2, Summer/Autumn, 2008.*

Philadelphia Steam Propeller Co. a/k/a Despatch Line, a/k/a Swiftsure Line/Swiftsure Transportation Co., operating NY - Phila. 1854 to 1865 and a/k/a Hartford Line (of Phila. Steam Propeller Co.) Per freight invoices 1844-5 and 1858-60. Shipbuilding and operations of these companies can be found in the Palmer-Loper family papers (ID #MSS35410) in the Library of Congress.

Philadelphia, Wilmington, & NY Line was reported owning the *TRIPLET*, in a Bordentown Register news item of 12.24.1875.

Phoenixville Iron Co. supplied the iron rails for the Belvidere Delaware Railroad. It was brought from the works at Phoenixville, PA, where it was manufactured and was deposited in suitable parcels along the road, which utilized the original towpath of the D&R Feeder Canal. *(NJ) State Gazette, October 26, 1852.*

Picnicking: Picnic tables and grills are located at some of the canal access points and near a few of the adjacent historical sites. Informal picnicking is allowed along the canal. Open fires are not permitted. Charcoal fires are restricted to the grills in the picnic areas. *D&R Canal State Park brochure*

Pillar of Fire International is a religious community at Zarephath or Weston (a/k/a Zarephath Academy and Pentecostal Union) utilized various small yachts to transport groups of worshipers, students and missionaries to and from South Bound Brook to the campus on the D&R Canal. At Bound Brook they constructed the Pillar of Fire Temple and in 1916 an audience of 500 attended their graduation ceremonies there. For this event “boatloads of men and women clad in dark blue Puritanical costume, looking like nothing more than those people of Longfellow who wandered in the forest primeval,” were transported the three miles between the two locations. *New Brunswick Daily Times, June 14, 1916.* www.pillar.org

Pioneer - see Hungerford? (@ South Street Seaport)

Port Mercer Bridgetenders House see “Lawrence Historical Society”.

Port Mercer, before the D&R Canal was built, was on the route General George Washington marched his troops by night from Trenton to Princeton and victory on January 3, 1777.

Postal Service along the D&R Canal route was provided by the railroad, especially the Bel Del Railroad along the Feeder Canal. In 1838, President Martin Van Buren signed a bill making all railroads carriers of the mail. Route 240 was the designation of the mail route between New York and Philadelphia, and it began in 1840 shortly after the Camden & Amboy built their route between New Brunswick and Trenton, along the D&R Canal via Kingston and Princeton. The straight, high speed route via Princeton Junction continued to carry mail right up to the final day of Railway Post Office Service between New York and Washington on June 30, 1977. Route 242 was the designation of the Bel Del route and mail was carried on it from 1850 to 1953. The canal towns of Trenton, Titusville, Lambertville, and Bull’s Island all had route markings over the years. *Catalog of New Jersey Railway Postal Markings, by Frederick D. MacDonald and John L. Kay*

The **Pottery Industry:** found the Trenton area along the D&R Canal desirable and over forty establishments, such as Anchor Pottery Co., Cook Pottery Co., Empire Pottery, Enterprise Pottery Co., Greenwood Pottery Co., Lenox, Mueller Moasic Co., New Jersey Pottery Co., Ott & Brewer, Robertsen Art Tile Co., Stangl Pottery, Taylor & Speeler, Trent Tile Co., Trenton Potteries Co. (the largest producers of sanitary and general ware in the world at one time), and others manufactured and decorated vitrified and translucent china and hotelware. There is even the Potteries of Trenton Society founded to promote the study and appreciation of Trenton’s ceramic industry: They hold an annual symposium on the subject. For information check: www.potteriesoftrentonsociety.org **Prallsville Bridge** of the Bel Del Railroad spanned the Wickecheoke Creek alongside the D&R Feeder Canal on the north side of Stockton. On Saturday, 21 August 1874, minutes after the afternoon mail train passed through the covered wood railroad bridge, it was found to be engulfed in flames. Despite the fact that the Aquetong fire-fighting unit with their steam pumper and members of the Fleet Wing Hook and Ladder

Company were rushed north four miles on a special train from Lambertville to the blaze, they could not prevent the destruction of the bridge and the nearby flour mill of I.O. Keesler. This disrupted service on the Bel Del until the bridge was replaced by a huge gang of workmen over a weekend. *Down Along the Old Bel Del, Warren F. Lee*

Prallsville Mills are located on the D&R Feeder Canal on the north edge of Stockton, at the juncture of Wickeckeoke Creek and the Delaware River. Daniel Howell built a wooden grist mill here ca. 1720. It prospered under a succession of owners through the 18th Century and was sold to John Prall, Jr. in 1794. Prall built: a new stone grist mill to replace the wooden one; a mill pond; a sawmill; several stone houses; a stone store/office; opened a stone quarry; and operated two fisheries in the Delaware River, making the community a major commercial center for the rural countryside. After the Bel Del Railroad was constructed between the mill and the canal a siding was built to serve the mill. The grist mill burned in 1874 and was rebuilt and reopened by 1877. It continued to function into the 1950's and then began to deteriorate. It was put up for sale as an attractive site for townhouses. A local resident and D&R Canal Commissioner, Donald Jones, purchased the site in 1969 and held it until the State could afford to purchase it in 1973. A small wooden wagon shed north of the mill was renovated to allow the D&R Canal Commission offices to be moved there from the Calhoun Street bridgetender's house in Trenton. The Prallsville Mills were included on the National Register of Historic Places in 1973. The entire property became part of the D&R Canal State Park in 1974. In 1976, when the State of New Jersey was unable to fund the restoration of its newly acquired Prallsville Mills, local citizens formed the Delaware River Mill Society and obtained a long-term lease which gives the Mill Society the responsibility to "restore, preserve, operate, maintain and interpret" the site. The grist mill's foundation has been rebuilt and new/replacement structural posts and beams were installed. Original mill machinery is on display. A kitchen, a craft gallery and lavatories were built in a former lumber shed in 1994. The Linseed Oil mill, thought to be the best preserved oil mill in the Mid-Atlantic region, had major structural repairs and currently functions as an Art Gallery for local artists. Most recently the sawmill has been restored as gallery space and was dedicated on 30 August 2009. Recently the former home of Carl Cathers, former mayor of Stockton and a long-time Friends of the NJTHC member, between the Bel Del and the Feeder Canal has been acquired by NJ Green Acres and will become an integral part of the mill complex. It will house the offices of the Delaware River Mill Society. Prallsville Mills have become a place of cultural and environmental events attracting widespread participation. Concerts, art exhibitions, antique shows, holiday parties, school fundraiser auctions, meetings, as well as private parties, are a source of income for the continuing restoration and maintenance of the site. *Delaware River Mill Society, www.drms-stockton.org*

S. M. Prevost, General Manager of the Pennsylvania Railroad, owned the steam yacht *ANITA* which passed into the D&R Canal at Bordentown bound for New York. *Bordentown Register, July 13, 1895.*

Prime Hope Mills, flour mill and saw mill at Lambertville were owned by the canal company in 1840 and rented to others.

Princeton has always played a significant role in the history of New Jersey and the United States. Settled in the late 17th century around the Stony Brook, it was named Prince-

Town in honor of Prince William of Orange and Nassau. In 1756 it became the home of the College of New Jersey (re-named Princeton University in 1896) with the entire college housed in Nassau Hall, the largest academic building in the colonies. The Battle of Princeton, fought in a nearby field in January of 1777, proved to be a decisive victory for General George Washington and his troops. Two of Princeton's leading citizens signed the Declaration of Independence, and during the summer of 1783, the Continental Congress met in Nassau Hall, making Princeton the country's capital for four months. Located midway between New York and Philadelphia, the town was the overnight stagecoach stop on the Trenton-New Brunswick line until the mid 19th century. In the 1830's the building of the nearby D&R Canal and Camden & Amboy Railroad encouraged further commercial and real estate development. Robert F. Stockton, the president of the D&R Canal Company, lived in Princeton and the office of the company was located there also. Educational institutions, including Princeton University and the Princeton Theological Seminary have attracted prominent scholars from around the world. In 1930, the Institute for Advanced Study became the first residential institute for scholars in the country, with Albert Einstein appointed as one of its first professors. The mid-20th century has seen an influx of technologically-oriented corporations and think-tanks. *Historical Society of Princeton*

The **PRINCETON** (Schuylkill Nav. Co. v. The **PRINCETON** and Lawton v. The **PRINCETON**) Federal Case No. 11,433a which stemmed from the sinking of Schuylkill Nav. Co. scow No. 350, laden with 154 2/2000 tons of coal which was being towed by C&A Railroad & Transportation Co. steam towboat **PRINCETON** in November, 1847 from the D&R Canal to NYC. The first case was for the value of the scow and the second case was for the value of the coal owned by Lawton.

Princeton Basin, there were actually two, both on the west side of the canal, one north and one south of Canal Street (which was later named Alexander Road). The area was well situated as it was the midpoint of the canal; the town of residence of the president of the D&R Canal Company; and this became the early headquarters of the canal as well. The Basin eventually became a settlement of some forty or more buildings. About half of them were probably residences of families engaged in the operation of the canal and the principals of commercial enterprises. The other twenty buildings were connected with industries and businesses connected with the canal, including lumber and three coal yards, small factories specializing in building materials; as well as dealers in hay, marketable vegetables and fruits, fertilizers, quarried stone, bricks, and quite a variety of bulky or weighty freight suitable for canal transportation. A large general store became a necessity as well as barns and sheds for mules. The Steamboat Hotel was built and after the arrival of the railroad its name was changed to the Railroad Hotel. The Camden & Amboy Railroad built a passenger station and a freight depot at the top of the hill to the south along with a reservoir to supply water to locomotives. *Origins of the D&R Canal by Lewis B. Cuyler and Princeton Basin by Nancy Knox, both in Princeton History, Vol. 4, 1983.* The southern canal basin was filled in many years ago and is now the location of the ten-acre Turning Basin Park, complete with a picnic pavilion, benches, interpretive signage and complementary plantings. The undisturbed northern basin has returned to a natural state and is the location of Princeton Canoe and Kayak rental Phone 609.452.2403 www.canoenj.com & *Princeton History, No. 17, 2002.*

Princeton Branch Railroad: Workmen are engaged in building the bridge over the Canal over which the cars that (will) run from town to the new depot are to pass. The spur railroad is slowly nearing completion and it is thought will be finished about the first of April.

Princeton Standard, February 10, 1865. The dummy car, to run on the spur road between Princeton and the new depot, has been built in the car works of Messers. Grice and Long in Trenton, is capable of accommodating 40 or 50 passengers, is now at the Camden & Amboy shops at Bordentown. *Princeton Standard, 28 April 1865.* Ordered that the Princeton Branch R.R. train stop and send a brakeman over the Canal bridge before going over the bridge. *Minutes of the Executive Committee, Camden & Amboy RR Co., 16 May, 1865.* The “Dummy” has been sent to the company’s works at Bordentown for repairs. The locomotive “Johnny Bull,” which, by the way, is the oldest locomotive running in the United States, and the first employed by the Camden and Amboy Company, has been placed on the Branch to run during the absence of the “Dummy.” *Princeton Standard, 25 May 1866.* The Railroad Company placed on our road to meet the demand of Commencement two Dummies with a Trenton horse car between them, which enabled them to bring passengers here quite comfortably. *Princeton Standard, 30 June 1865.* The drawbridge over the canal at Princeton is being raised, and in consequence passengers to the Junction are taken in one dummy, and another takes them to their destination. (Passengers probably had to walk down to the Alexander Road bridge to cross and back up the other side of the canal. *Daily True American, 16 July 1868 & Princeton Branch: From Camden & Amboy to NJ Transit, by John R. Wilmot in Trains Magazine, June, 1987.*

Princeton - Headquarters of the D&R Canal Company: The original main office of the Canal Company was at the Princeton Basin, giving it special importance. Robert F. Stockton built Canal Street (now Alexander Street) from Morven, the family mansion, east to the basin. Robert F. Stockton, president of the canal company, moved from 1 Bayard Lane, Princeton, to Morven after the death of his father, Richard “the Duke” Stockton, Jr. Robert Stockton’s sister, Annis, married John Renshaw Thomson who was secretary of the Canal Company. They had a home built in Princeton about 1826. Princeton lawyer, James Sproat Green, son of Ashbel Green, one-time president of Princeton College, married Elizabeth Stockton. He became a director of the Canal Company, receiving 10 and 12% on his canal stock. Green Street in Princeton was named for him. Lawyer Richard Stockton Field, a D&R stockholder built a law school ca. 1848, connected with Princeton College, which was designed by architect John Notman of Philadelphia. Robert F. Stockton purchased the structure for \$5,000 when the school failed and after 1855 the Canal Company offices were moved from the basin to the Gothic-cottage-style structure at 43 Mercer Street, Princeton. This brought the offices closer to the aging canal company management in the center of Princeton. John Potter Stockton, a lawyer for the Camden and Amboy Railroad, lived at 83 Stockton Street, now called Lowrie House. Notman also designed a rural gothic farmhouse for Robert Stockton’s son Richard, who became secretary and treasurer of the Camden and Amboy Railroad. Investors in the Canal Company had been receiving a steady 10% on their stock for over three decades. Many of the Stockton relatives were, as well as shareholders, prominent lawyers and politicians, serving to promote the welfare of the Joint Companies at high levels. Their extensive wealth did much to improve Princeton’s architecture over that of nearby villages. Had there not been the sea-faring Robert Stockton to build a shipping lane through his inland home-town and gather his clan to promote it, Princeton might have grown up differently. *Passage Between Rivers, by Elizabeth G.C. Menzies*

Princeton History Project, Directed by Elric Endersby, published *The Princeton Recollector: A Monthly Journal of Local History* in the late 1970's and early 1980's. Several issues contained oral history focusing on the D&R Canal, but the Vol. VI, No. 8, May, 1981 issue was the best - concentrating on Port Mercer and the Arrowsmith family (John Arrowsmith

was the bridge-tender there).

Princeton University Library and Archives contains D&R Canal related publications and materials. Of particular interest to the serious canal and maritime researcher will be their full series of the Merchant Vessel Registries of the US. These annual volumes list commercial sailing, powered (steam, gasoline, & diesel), and unrigged (mule-drawn canalboats, barges, etc.) vessels. Information provided on each typically includes: their registry number, port of registry, name, length, width, depth, tonnage, year built, material of construction, method of propulsion, number of crew, etc. Vessels can be followed from year to year to determine changes in any of the characteristics above. For non academics a fee is charged for use of the library.

www.library.princeton.edu

Princeton University rowing crews used the D&R Canal but found it increasingly inadequate by 1900. The University created Lake Carnegie for their use - it was a gift of Andrew Carnegie, who was present at the dedication on December 6, 1906.

Princeton to New York: Wm. and Jos. Holmes announced that they had commenced running two Schooners, *PARALLAX & PRESIDENT JACKSON* to carry Freight to and from Princeton and New York beginning March 16, 1855. *Princeton Paper*.

Princeton University rowing teams first held “bumping or overlapping” races on the D&R Canal in 1876. Racing shells were stored in a boat house located immediately north of Bridge #15 (Washington Street) in Princeton. By 1900 rowing teams found the canal to be inadequate for their training and meets, so the University created a lake to fulfill the need. The lake was a gift of Andrew Carnegie for whom it was named.

Princeton Wreck: As the early train from Philadelphia arrived within two miles of Princeton, at 8½ o'clock A.M. Thursday, where the track is alongside of the D&R Canal, the switch not being in proper order, through some fault of the persons having it in charge, the locomotive was thrown into the canal, together with the mail and baggage car, and the sudden concussion causing the first passenger car to be completely gutted and broken to pieces - scarcely a person in it but what was severely bruised and mangled, or killed outright. The engineer seeing the danger, jumped off into the Canal and swam ashore. The next car became detached by the concussion, and no person in it or the remaining cars was at all injured. Those passengers who had luckily escaped, immediately set to work to extricate the rest. - Axes were procured, and those fastened in the cars by broken timbers and shattered seats, taken out as quickly as possible, and carried into the shade on the bank of the Canal. Two men were killed instantly, and a third died shortly after the accident happened. Seventeen others, all passengers, were awfully wounded - some of whom were not expected to survive but a short time... ..We shall not attempt to describe the awful and heart-rendering scene where the accident occurred. The dead and dying strewn along on the bank of the Canal, the groans of the wounded - their ghastly countenances and mangled bodies, presented a spectacle seldom witnessed. *Newark Eagle, August 3, 1849; Sentinel & Advertiser (Jersey City). August 4, 1849.* Mr. (Capt.) Conover, for many years chief carpenter on the canal, was killed in Camden & Amboy train wreck at first turnout below Princeton Station. Engine and tender into canal. Baggage car derailed throwing baggage crates into canal. Way car passed through 2nd class car. Wreck caused by improperly set switch. *Camden Democrat, August 18, 1849.*

Prison Lock was Lock No. 6 and was so called because the state prison was built adjacent to it in 1836. Lumber and stone for its construction was transported to the site by canalboats.

Proposed Extension of Delaware and Raritan Canal South on the Delaware River:

The rationale for the construction of a canal along a apparently navigable waterway had to do with the state of navigation technology. The use of steam-powered vessels was still in its infancy and navigation on rivers, particularly where channels were narrow or subjected to sand bars and snags, was difficult and hazardous for sailing vessels. Therefore, canals were viewed by many a universal cure-alls. The promoters of a Delaware and Raritan Canal in New Jersey were concerned with navigational difficulties on those portions of the navigable river from their proposed Bordentown terminus to Bristol, Pennsylvania. These concerns resulted in a feeler that never really reached the formal proposal stage. It was to carry the Delaware and Raritan Canal by aqueduct across the Delaware River at Trenton, whence it would continue south to a terminus via Pennsylvania's Delaware Division Canal, which the Jersey interests hoped would be enlarged. *Albright G. Zimmerman, Pennsylvania's Delaware Division Canal.*

Prospect Street Bridge, Trenton over the D&R Feeder Canal was used by Trenton & Mercer County Traction Co. trolleys to reach Stuyvesant Avenue, along the north side of Cadwalader Park. Although a new drawbridge had been built over the D&R Feeder at Prospect Street in 1913, the city had been unable to acquire land needed to straighten the street at that point. The Feeder was closed to navigation in 1915 and the wooden swing bridges were gradually replaced by permanent steel and concrete structures. In 1920, the city was finally able to purchase the needed land and early in 1921 a new bridge was built at Prospect Street. Double track was laid straight across the bridge to West State Street, eliminating two sharp curves. The bridge was opened to trolley traffic on 27 February 1921. *Street Railways of Trenton, by Barker Gummere*

Public Service Railroad FAST LINE was the interurban trolley line which crossed over the D&R Canal at New Brunswick and again at Cass Street in Trenton. Note: one of the double diamond, dual gauge, trolley / railroad crossings has been preserved and is in Phillipsburg at Port Morris.

Public Service Railway was the entity which owned and operated the city streetcar lines. Commander Edwin Jay **Quinby**, (USN Ret. and deceased) wrote the editor describing a "Bazaar" which boat tied up on the D&R at South Bound Brook, as at other towns along the way, to drum up a little local trade. "It was a unique family operation and their mule grazed contentedly in the shadow of some trees along the towpath, while town-folk from Bound Brook and South Bound Brook, alerted by circulars, visited the vessel to buy bargains. Below deck, a central corridor was lined with bins along port and starboard sides, each bin containing a stock of merchandise specialties such as might be found today in Woolworth's stores. The open hatch covers above were screened and admitted daylight. I recall purchasing a few novel items as I proceeded through the corridor, and at the very end, I came to a bin full of wrapped packages, each selling for 25 cents to those customers in the mood to "take a chance." I bought one, and found that it contained a pair of "hot pappas" gloves, for handling hot dishes in the kitchen, - well worth the price. Mother, father and daughter (the crew) seemed pleased that I was happy over my luck. At the end of their pause at that port, they continued on their way to New Brunswick. I

never saw them again, or heard anything about them. That was just before the canal was closed.”
Cdr. E.J.Q. letter to McKelvey dated 12.29.1975. Note: Cdr. E.J. Quinby served as an early national president of the Electric Railroader’s Association and the Branford Electric Railway Association. He was the author of *Interurban Interlude: A history of the North Jersey Rapid Transit Company*, a line on which he was employed as a motorman in his youth. Quinby became Chairman of the Board of the Greene Line, operators of the last regularly scheduled steam-powered stern wheeler on the Ohio and Mississippi Rivers: the famed *DELTA QUEEN*. It was Quinby who installed the steam calliope on the ship, often heard for miles around.

Radio Corporation of America (RCA) established the first continuously reliable transoceanic radio telegraph service with a high power station built in 1920 along the D&R Canal at New Brunswick. The General Electric Co. constructed the great 200KW Alexanderson alternators and motors at its Schenectady plant and shipped them by canalboat to New Brunswick. The tall antenna towers also arrived via canalboat. RCA was formed in 1919 when the US Navy discovered that the British Marconi Company was about to purchase the Alexanderson alternator from General Electric, thus leaving expansion of the new medium of radio under the control of a foreign company. The US Navy pressured General Electric, AT&T - and later Westinghouse and the United Fruit Company to pool their patents in a cartel. British Marconi sold its US radio interests to RCA. David Sarnoff, who eventually became president of RCA, pioneered the concept of linking radio receiver sales to organized broadcasts. The success of this concept enabled RCA to become the largest US radio manufacturer. National Broadcasting Company was formed as a radio network in 1926 by Westinghouse, General Electric, & RCA. During the 1930's, RCA spent millions on television research and patent buyouts. In 1939, their first line of consumer televisions made its appearance at the New York World’s Fair. Sarnoff reapplied his concept of linking broadcasts and set sales by simultaneously beginning regular television broadcasts through RCA’s broadcasting wing, NBC.
www.mztv.com/rca

Raftsmen George R. Watson, one of the oldest and most skilled in the trade conducted one of the biggest rafts of logs ever towed through the D&R Canal in 1903. A team of J.B. Woodward’s mules did the towing of the raft, consisting of 96 sticks ranging from 90 to 105 feet long each. They are to be used by the Lehigh Valley Railroad Co. as dock “spiles” at Jersey City (*surely for facilities on the Morris Canal Big Basin -Ed.*) *New Brunswick Daily Times, July 14, 1903.*

Railroad Car on the Rampage: Yesterday afternoon the Princeton passenger car, while standing near the depot, in some way started off on the down grade toward Princeton Basin, a mile distant, and plunged into the D&R Canal, head first, smashing up the car and closing navigation for a short time. The bridge and trestlework at that point is about 20 feet above the water. Fortunately there was no one in the car at the time. *Daily True American, July 17, 1879.*

Railroad Collision: A serious accident occurred at Princeton Station this morning in the following manner: Just as the Owl train from Philadelphia was switching off the track as it was met by the Lightning Express from New York which was under full speed. The engine of the Express train struck the side of the fourth car of the Owl train, knocking it off the track and half turning it over. It then came in contact with the fifth car and smashed nearly half of it. The engine ran down the embankment into the canal and was nearly half buried in the mud and water. Seventeen passengers on the Philadelphia train were more or less injured, most of them very

slightly; ten of them so little as to go on to New York. The other seven were taken to the Railroad Hotel and cared for by our physicians. *Princeton Standard, February 27, 1863.* In March 1904, a handcar with six laborers aboard collided with a work train on the curve at Cadwalader Park in Trenton. The workmen jumped to safety, but the car was demolished and thrown 100 feet into the Feeder Canal. *Naylor, Iris, "Footprints... in the valley", Beacon, 1984-7.*

Railroad Traffic Blocked: Steamboat and Chunker Fast in the Draw - Newspaper trains held up on each side of the river and likewise a half a dozen freights. Because Captain Van Horn of a transportation steamer, *DELAWARE*, on the D&R Canal tried to pass a chunker coming into New Brunswick on the east side of the railroad draw almost under the trestle tracks, traffic upon the railroad was completely cut off this morning. The steamer ran her bow fast in between the chunker's sides and the bridge pier. The mishap occurred about 2 am. There were a number of passengers congregated in the George Street station awaiting the arrival of the 2:25 from Trenton. At 4 o'clock the drowsy travelers were there still, some asleep on the sets and the others walking anxiously about. The steamer hands put on the full force of steam, but although Mate Jennings got the crew vigorously to work, the steamer did not budge. There will be many late newspapers both in New York and Philadelphia this morning. The fast newspaper special which goes through New Brunswick like a comet shortly after 3 o'clock was still standing on the East Brunswick tracks at 4:20 o'clock and close behind there were three freight trains on their track. The 2:25 train from Philadelphia was stopped near Suydam Street and at 4:20 o'clock the special newspaper train from Philadelphia was keeping her company. A couple of freight trains were also there. Help was sent for and a quartet of mules was summoned from the canal stables. They were attached to a rope which was fastened on the chunker and the efforts of the mule power and steam were directed to solving the difficulty, but at the hour of going to press there was no change in the situation. *Daily Press (New Brunswick), April 7, 1902.*

Rail-Trails of New Jersey, 24 Great: is a softcover book, published in 1999 which the author, Craig P. Della Penna, calls "The essential outdoor guide to the Garden State's best multi-use recreational trails." Two of these trails are along the D&R Canal. Chapter 6 focuses on the trail built on the former Bel Del division of the Pennsylvania Railroad, last operated by the Penn Central Railroad. Chapter 11 focuses on the Kingston Branch Loop Trail, which was actually known as the Rocky Hill Branch of the Pennsylvania Railroad. In its final years the branch served the Trap Rock Quarry at Kingston. The Rocky Hill Branch was on the eastern bank of the main canal between Rocky Hill and Kingston. Rails can still be seen in the pavement at the original alignment of Rt. 27 or Old York Road or Lincoln Highway at the Kingston Lock. Interesting and helpful narrative descriptions are given point by point along both trails.

Railway Land-Slip: Early Wednesday morning a Camden train for New York was halted about six miles north of Trenton where a part of the railway had been undermined by the canal, which run very close to each other for some distance. Since the injury to the line could not be repaired for some days, the passengers returned to Bordentown to get the Camden & Amboy line to South Amboy (and the steamboat for New York). *Courier & Advertiser (Jersey City), October 9, 1858.*

A. H. **Ramsey and Sons** of Miami completed a 1,600-mile endurance run of a 15-foot boat powered by two Lockwood Racing Chief outboard motors. The trip up the inter-coastal

waterway and the D&R Canal to the Battery at NYC took 24 days. *Outboard Motor Boating, June, 1929.*

John Randel, Jr. Surveyed the route of the D&R Canal in 1816 and his line was generally followed with but few changes by Chief Engineer Canvass White in 1830.

Raritan Coal Company: of New Brunswick received their coal supplies via the D&R Canal. A 1,000 ton order was received in 300 ton Erie Canal/laker canalboats. Their manager was Robert E. Ross, Commerce Square. *New Brunswick Daily Times, December 10, 1902.* “The quality of our coal is guaranteed to be the best hard Lehigh, bright, free from slate and non-clinking. A trial ton will convince one of its great superiority. The public is invited to come to our yard and inspect the coal in sheds.” Advertisement: *New Brunswick Times, April 18, 1901.*

Raritan-Millstone Heritage Alliance is a group of Middlesex, Somerset and Mercer County sites, historical and eventful along the Raritan and Millstone Rivers as well as the D&R Canal. It includes corridors which support these sites. It links Perth Amboy on the Raritan with Princeton on the Millstone. The mission of the Alliance is to promote preservation and understanding of the rich eventful and cultural heritage of significant historical, educational, and cultural sites located in the Raritan-Millstone region. www.raritanmillstone.org

Raritan River served as an important water transportation route since the days of the Lenape Native Americans. The name itself comes from an Algonquian word meaning “stream overflows.” The name is also applied to the Raritan People, an Algonquian tribe that inhabited Staten Island, near the river’s mouth. In colonial days, the river allowed the development of early industry around New Brunswick, the upper tidal/navigation limit. It was also utilized to transport agricultural product from central New Jersey. During the American Revolutionary War, the river provided a means for troop conveyance. The construction of the D&R Canal along the south bank of the river formed a key inland link for vessels using the D&R Canal and river route between Philadelphia and New York. The river forms at the confluence of the North and South Branches, just west of Somerville and flows approximately 16 miles to tidewater at New Brunswick. From there its estuary extends 14 more miles, entering the western end of Raritan Bay between Perth Amboy and South Amboy. Freshwater fish include largemouth and smallmouth bass, sunfish, catfish, trout, chain pickerel, American eels, carp, yellow perch and an occasional pike and musky. The tidal portions of the river host migratory salt water species such as striped bass, fluke, winter flounder, weakfish, and bluefish. Many nesting birds and water fowl make their homes in and along the length of the river. Crustaceans such as blue claw crab, fiddler crabs, and green crabs are also found in the tidal sections. Crayfish can be found further upstream. The river is also used for recreational boating, including use by the rowing teams of Rutgers University in New Brunswick. www.en.wikipedia.org After the D&R Canal opened the Raritan River became the third largest river in the country in respect to tonnage carried. *History of Union and Middlesex Counties, by W.W. Clayton.*

Raritan River Floods have periodically occurred and have inundated the lower end of the D&R Canal. New Brunswick, built on the flood plain, must expect floods. The worst happened on March 5, 1920. Lower Burnett Street (now Memorial Parkway) stood under almost eight feet of river water, and it didn’t return to its banks for three days. The canal was inundated to an even greater extent. . *John Hannon, Of Time and a River, Rutgers Magazine, Summer, 1990.*

Raritan River Freeze: On February 6, 1888, just weeks before that memorable blizzard, with the thermometer reading 18 degrees below zero, William H. Rice and Harry Cook skated on the Raritan from Perth Amboy to New Brunswick, completing the trip in 52 minutes. *John Hannon, Of Time and a River, Rutgers Magazine, Summer, 1990.*

Raritan Steam Boat Co. was incorporated in 1851; purchased the property of the New Brunswick Steamboat and Canal Transportation Co. that had not yet been disposed of, including real estate and the steamer *JOHN NEILSON* which the company never operated; taken over by the C&A RR in 1852 and dissolved.

Raven Rock: On 9 March 1883 and for several decades thereafter, a cable tramway equipped with two-ton platform carriers conveyed large blocks of building stone across the Delaware River and the D&R Canal from the Lumberton Quarry on the PA side, to a point just below Raven Rock, NJ (a/k/a Bull's Island). At this location there was a long Bel Del siding where the stone was loaded for shipment directly from the carriers into waiting rail cars. Five cars could be loaded in this manner in one day. *Down Along the Old Bel Del, Warren F. Lee*

Reading Railroad leased the Schuylkill Navigation for 999 years in 1870. The Pennsylvania Railroad leased the Camden and Amboy Railroad in May, 1871 and quickly refused to permit any coal from the Schuylkill mines, now under the control of the Reading Railroad, to pass through the D&R Canal. This resulted in a quick decrease of nearly a million tons in the yearly traffic of the D&R, and also a decided drop in the tonnage of the Schuylkill Navigation. With the through canal route to New York cut off, the Reading began shipping more and more coal to the markets of the north and east by rail and via the ocean route. The decline in D&R Canal traffic was reinforced when the Reading Railroad procured its own rail line across NJ to the New York Harbor area in 1876.

Red Line Transportation Co. of Easton, PA, was organized in 1836 with Capt. Jacob Able, president. They were an independent operator, on the Lehigh & Delaware Canals between White Haven and Philadelphia.. After their business had been well established they operated via the D&R canal to Jersey City carrying general merchandise. *Charles Stewart, Red Line Transportation Co., Northampton County Historical Society.* Capt. Able later formed Able Wilson & Co., which became Drake, Wilson & Co. when Able sold out. Also see Lehigh Transportation Co.

Reduction of Wages: A "Turn-out" against a reduction of wages from 87½ to 75 cts. a day was made on Thursday last by the laborers of the Delaware and Raritan Canal Company at Bool's Island. With flour at \$7 50 and potatoes at 80 cts. how can a man support himself and family at 75 cts. a day wages in Winter? *New York Tribune, January 11, 1848.*

Register from the Collector's Office at Trenton: described the boats and types of cargoes passing through the D&R Canal between May 15 and 20th, 1835. Some typical entries were as follows: Two rafts of timber fm Bordentown, fr New Brunswick; Boat *AMERICAN* of Staten Island fm Bordentown fr New Brunswick, Oysters; Boat *No. 244* of Mauch Chunk fm Bordentown to Feeder Basin, Coal; Sloop *SARAH ANN* of Rancocas fm Feeder fr Bordentown, Manure; Schooner *UNION* of Peekskill fm Bordentown fr New Brunswick, Mdze; Boat *No. 124*

of Trenton fm Bordentown fr Millstone, Lumber; Sloop *TRAVELER* of Bristol fm Bordentown fr New Brunswick, Flour; Schooner *JOHN PATTERSON* of Toms River fm New Brunswick fr Bordentown, Mdze.; Sloop *ROBERT BARCLAY* of Penns Manor fm Bordentown fr Trenton, Oats; Sloop *JAMES & ALFRED* of Philadelphia fm Bordentown fr Trenton, Ashes; Stone Boat fm Quarry fr New Penitentiary, Stone; Schooner *CAROLINE FRANCIS* fm Trenton fr New Brunswick, Corn, Flour, etc. *NJ State Gazette, May 23, 1835.*

Regular Line Steam Packets operated via D&R between Hartford and Philadelphia ca. 1845.

Regular Propellor Line ran between Phila. & Hartford via D&R ca. 1850's.

Regular Tow-Boat Line operated ca. 1838 between Phila. & Albany via D&R; C. Livingston & Co. was agent.

RELIEF: On this Saturday night, a canalboat struck a rock and sank in the Feeder Canal near the Belmont curve at the Goat Hill quarries. The next day the pumping boat, *RELIEF*, came up from Trenton, pumped out the water, and raised the boat. *Lambertville Beacon, May 31, 1873.* (Sounds like there was an earlier “*RELIEF*” per the following:) A new tugboat, built for the D&R Canal Co. by Diagogue of Camden is now in the canal basin in Trenton. *Daily True American, August 11, 1884.* Yesterday the *RELIEF* boat was engaged in pumping water from the canal boat *PRESIDENT* which had sustained a bad leak in the ice jam in the canal at the Taylor Street bridge. The boat was loaded with gas-coal consigned to the Trenton Gas Works. *Daily True American, December 10, 1885.* *RELIEF* had U.S. Registry #110706; One of the chief functions of this D&R Canal Co. tugboat (actually classified in the vessel registry as a “steam yacht”), in addition to being an ice breaker and being used to pump out sunken vessels was to distribute wages once a month to canal employees. It also functioned as the company “yacht” and was frequently used to transport VIP’s and dignitaries through the canal on inspection trips. She was built in Camden in 1884 with an iron armored wood hull, 16.22 gross tonnage, 40hp, crew of 3, 63' long, 9'6" at beam and a draft of 6'6".

Report of Commissioners Appointed to Investigate Charges Made Against the Directors of the Delaware and Raritan Canal and Camden and Amboy Railroad and Transportation Companies, Made to the Legislature, February 8, 1850 provides a wonderfully detailed documentation of the canal at that time. Particularly helpful to the historian will be: Report of the Engineer of the Canal; Officers of the Delaware and Raritan Canal Company; Method of transacting Business on the Delaware and Raritan Canal; Special Contracts and Arrangements for the Payment of Tolls; etc. A copy of the report is in the New Jersey State Library in Trenton.

Report of the Inland Waterways Commission in 1906: “The Bureau of Corporations is in possession of considerable evidence tending to show that the control of the Delaware & Raritan Canal by the Pennsylvania Railroad has bee detrimental to interstate commerce.”

Report of the Joint Board of Directors, to the Stockholders of the Delaware and Raritan Canal and Camden and Amboy Rail Road and Transportation Companies, on the

Completion of Their Works, with the Proceedings of the Stockholders, At their Meeting on the twenty-ninth of January, 1840, gives an excellent description and inventory of the properties and buildings of the canal company. At the time the company owned 1,050 acres occupied by the canal.

Senator William H. **Reynolds**, (1868-1931) of Brooklyn, NY went through the D&R Canal in the late 1920's in his 126-foot-long, 23-foot-beam, 323-gross ton wood-hull yacht, *DAYDREAM*. She was designed by John Trumpy and built by Mathis Yacht Building Co. of Camden in 1928 with two six-cylinder Winton diesel engines. Winton was acquired by Electro Motive Corp. and the Winton design was adopted by the Electro Motive Division of General Motors becoming the most widely used diesel engines in railroad locomotives. Reynolds was the developer, builder, and president of Dreamland Park, one of Coney Island's three major amusement parks. He opened it in 1904, sold it at auction in 1910 and it burned in 1911. The senator was the real estate developer of Long Beach, NY and other projects.

John **Ringling** of Ringling Brothers Circus fame, went through the D&R Canal in the late 1920's, in his 120-foot, 300-ton, steel-hull yacht *ZALOPHUS*, powered by a 360 hp diesel engine. She was built in 1922 in New York. Ringling had a predecessor 56-foot gasoline engined yacht, built two years prior, which was named *ZALOPHUS, JR.*

Riot in Trenton: It seems that several hundred Irishmen employed on the canal at 75 cents per day struck for \$1 each which the employer refused to give. A number of them returned to their work and the idlers proceeded to stop them. The police, however, arrested them and on the way to the Mayor's office an Irish shoemaker exhorted them to fight for liberty, etc. An excitement ensued among the gang, several of whom escaped, and one or two of the officers (were) severely handled. Nine of them were secured and committed to jail. ...the Mayor of Trenton swore in 30 additional police officers, who watched all night. The workmen were under arms but committed no violence. The Company has engaged a new set of men and will employ those who will return to their labor. *Sentinel of Freedom, January 27, 1852.*

RiverLINE diesel, multiple unite, light rail trains travel along a section of the watered D&R Canal north of Crosswicks Creek bridge at Bordentown. The balance of the canal route north to Trenton had been filled in and in the Trenton area proper the former canal right-of-way was used for the construction of the Rt. 129 highway on the east side of the RiverLINE. This rail line was originally a branch of the Camden & Amboy Railroad which became part of the former Pennsylvania Railroad route from New York to Atlantic City. Their famous *Nellie Bly* express trains plied the route.

John Roach, of Chester (PA): A long vessel similar to the canal boats, named the *ANNIE E. CLARK*, is blockaded with a valuable cargo for John Roach, Chester. Her cargo consists of six large boilers on deck, and a large lot of machinery in the hold. *Winter at the Canal Locks, Bordentown Register, December 17, 1880.*

The **ROBERT F. STOCKTON** was built in Birkenhead, England in 1839 as a steam towing vessel for the D&R Canal Company. Because it could not carry enough coal for the voyage it was rigged as a sailing vessel. It was the first iron-hull vessel to cross the Atlantic and

the first commercially successful vessel utilizing the screw propeller. Although it was built for use on the canal, its draft was too deep and it was relegated to towing canalboats on the Delaware River between Bordentown and Philadelphia. *Camden Mail*, 10 July 1839 and *NJ State Gazette*, 12 July 1839 The extraordinary strength and remarkable speed of the small iron steamboat *ROBERT F. STOCKTON* is worthy of record. On the first of the present week she left this city, taking in tow eleven barges loaded with eight hundred and eighty four tons of freight, all of which she towed to Bordentown, a distance of thirty miles in the short space of five hours and forty minutes... ..Such power and speed united in so small a craft are seldom to be met with. *Camden Mail*, November, 1839. “A Forgotten Voyage: The *Robert F. Stockton*, Designed by John Ericsson, Made the Atlantic Passage Nearly a Hundred Years Ago” by Alexander Crosby Brown, published in “Yachting” in July, 1937 is an excellent documentary history of this pioneering vessel. Additional documentation of the *ROBERT F. STOCKTON* ocean voyage can be found in *Queens of the Western Ocean*, by Cutler. On July 3, 1982 the Canal Society of New Jersey on their third UK canal study tour presented a plaque on the *ROBERT F. STOCKTON* to Lairds and Company the builder of the vessel in 1838. The presentation was made in the board room of Cammell Laird Shipbuilders, Ltd., (member of British Shipbuilders) in the Maritime England year 1982.

***ROBERT F. STOCKTON* IRON, SCREW CANAL TUG, 1838, Rigged Model, USNM (Smithsonian Institution) 160404** “This model is a reconstruction of the iron, screw, steam canal tug *ROBERT F. STOCKTON* built at the Birkenhead Iron Works in England in 1838 and fitted with Ericsson’s screw propeller, to serve as a canal tug on the Raritan Canal, in the construction of which Lt. Stockton was interested. When the vessel was completed she was schooner rigged, the propeller unshipped, and the voyage from Liverpool to New York was made under canvas. The vessel was owned by the Delaware and Raritan Canal Company and she was built under the supervision of F.B. Ogden, American consul at Liverpool. The *STOCKTON* was 40 days in making the Atlantic crossing, leaving Liverpool on April 11 and arriving at New York May 21, 1839. Her crew consisted of Captain Crane, four men, and a boy. On arrival her propeller was shipped and she was employed in towing canal boats and vessels. She was renamed *NEW JERSEY* when an Act of Congress, May 8, 1840, admitted her to American registry. The model does not agree with contemporary pictures of the *STOCKTON* in many respects and the information employed to construct this model has not been found. It shows an iron, single-screw steamer having straight keel, nearly straight raking stem with angular forefoot, slightly raking post, round fantail counter with vertical bulwarks, sharp entrance full run, slightly rising straight floor, full round bilge, and vertical topside amidships. A high stack of small diameter is shown. The *STOCKTON* was 63 feet 5 inches overall, 10 feet beam, 7 feet depth, 33 tons register, and 30 horsepower. The model is 1/10 full size. Model built in the Museum.

***ROBERT F. STOCKTON* test in England:** “January 29, 1839 - The Screw Steamer *ROBERT F. STOCKTON* towed the American packet-ship *TORONTO*, 650 tons, and drawing 16¾ feet water, from Blackwall to the lower points of Woolwich, 3¼ miles, in 40 minutes, against a flood-tide running 2 to 2½ miles an hour. “The fact of this ship having been moved at the rate of upwards of six miles an hour, by a propeller measuring only 6 feet 4 inches in diameter and occupying less than 3 feet in length, is one which, scientifically considered, as well as in a practical and commercial point of view, is of immense importance.” *Timbs, in the Year Book of Facts for 1840*

Rockingham General George Washington and his wife, Martha, traveled from Newburgh, NY to Rocky Hill in August 1783. The vacant 315-acre Berrien farmstead called *Rockingham* was offered to Washington as his last military headquarters and he accepted. Here, Washington wrote his *Farewell Orders to the Armies of the United States* and he was present when the Treaty of Paris, America's birth certificate, arrived in Princeton on October 31, 1783. On November 10, 1783 Washington left Rockingham for West Point to await the evacuation of New York by the British. The original two rooms of the farmhouse were built between 1702 and 1710. Enlarged into a grander home in the 1760's by Judge John Berrien, the house and grounds are preserved and interpreted as the temporary residence of George and Martha Washington. The structure has been physically relocated three times since 1896 as the adjacent quarry has expanded, it has returned to a site closer to its original location, near the D&R Canal and Millstone River. Rockingham Historic Site maintains a fine collection of 18th century furnishings, a Children's Museum and Colonial kitchen garden. *Rocky Hill Heritage Project*, www.rockingham.net

Rocky Hill was settled in 1701 and incorporated as a separate municipality in 1890. It is the most centrally located town on the D&R Canal, being 21.57 miles from Bordentown and 22.39 miles from New Brunswick. The original terminus and station of the Rocky Hill Railroad was at the bridge where the Georgetown and Franklin Turnpike (Rt. 518) crossed the D&R Canal and the Millstone River. The town center was and still is on the west side of the canal and river. The railroad was extended northward to serve the Excelsior Terra Cotta plant, which later became the Atlantic Terra Cotta Co.

Rocky Hill Railroad which was commenced in June last under the management of its energetic and worthy President, Mr. D.H. Mount, has been completed and travel on it commenced on Monday, the 21st inst. This road runs from Rocky Hill (along the east bank of the D&R Canal) to Kingston where it connects with the Camden and Amboy road. Three trains run both north and south every day besides a freight train. The fare is ten cents and it takes about twelve minutes to run between the two places. The engine on the road is known as Engine No. 1, or better known as "*Johnny Bull*." It was shipped from England in 1831 and has been in constant use ever since on the Camden and Amboy Railroad - it being the oldest one on the road. As soon as the old track along the canal bank is taken up (as it is expected will shortly be) the Rocky Hill Railroad will be continued to connect with the new straight track of the Camden and Amboy Railroad at Deans Pond. *Princeton Standard*, 2 December 1864 & *Daily State Gazette*, 6 December, 1864. "A little off the beaten track excursion" was operated from Philadelphia by the Pennsylvania Railroad on Sunday, June 6, 1937. Included was the Rocky Hill Branch, the Trenton Cut-off, and the Pemberton & Heightstown R.R. - all for the round trip fare of \$1.50. *Collection of Robert E. Farrell* (Also see "Bull, John")

John A. **Roebling** was born in Muhlhausen, Germany in 1806 and immigrated to the US in 1831. He first produced wire rope in his small factory at Saxonburg, near Pittsburgh. The difficulties of transportation from that site to the Delaware and Hudson Canal were described by his son, Colonel Washington Roebling: "A typical journey was as follows: First load the reel on the big wagon; then haul into Freeport (a distance of eleven miles) and load on a canal boat; then the long trip to Philadelphia; (then up the Delaware River to Bordentown); then by the D&R Canal to New York; then up the Hudson to Kingston and Rondout; then transfer to a smaller canal boat and finally to the point of destination at Carbondale." *The Roebblings, A Century of Bridge-*

builders and Industrialists, by Hamilton Schuyler, Princeton University Press, 1931. John Roebling has purchased a site for a wire rope factory between the White Horse Road and the canal in Trenton. Mr. Roebling is now very largely engaged in the manufacture of wire rope and desires to remove to this city on account of its superior advantages for his business, so far as large eastern markets are concerned. *Trenton State Gazette, August 21, 1848* Roebling's plant commenced production in 1849 and his wire supported aqueducts on the Pennsylvania Main Line Canal and the Delaware & Hudson Canal across the Lackawaxen, Delaware (which survives and has been restored), and Neversink Rivers. Inclined planes of New Jersey's Morris Canal operated with comparative safety only after being equipped with Roebling wire rope. In 1866 Roebling got the contract to build the Brooklyn Bridge and it was completed in 1883. In 1893 an eighty-ton wire rope machine, the largest in the world, was erected in Roebling's Trenton plant. By 1903 the Trenton plant employed 5,000 workers and covered 35 acres. Six years later Roebling employed 10,000. Other bridges completed by John A. Roebling's Sons Co. included: Williamsburg Bridge - East River in 1903; Manhattan Bridge - East River in 1909; Bear Mountain Bridge - Hudson River in 1924; George Washington Bridge - Hudson River in 1931; Golden Gate Bridge - San Francisco, CA in 1937; and after sale to Colorado Fuel and Iron in 1952, cable was supplied for the Verrazano-Narrows Bridge, Brooklyn-Staten Island completed in 1964. The eighty-ton wire rope machine was converted to produce 5" wire rope, the world's largest, in 1968 and in 1989 the machine was designated a National Mechanical Engineering Landmark. The Roebling plants closed down in 1974 with later adaptive reuse and revitalization of many of the Trenton buildings. www.inventionfactory.com/history/RHAgen/rtimeh.html

Washington **Roebling**, the eldest son of John A. Roebling who took over supervision of Brooklyn Bridge construction after his father's death in 1869, became physically and emotionally ill during the construction. His condition was so precarious that he was unable to make the trip to see the bridge by train, his nervous state being such that he could not endure that much speed or vibration or the crowds of people. So it was arranged for him to go the whole way by canalboat and tug from Trenton where he resided. As he came up the bay and into the East River, he saw the bridge in October, 1876 for the first time in three years. *The Great Bridge, by David McCullough*

President Theodore "Teddy" **Roosevelt**, on a two-car special train came up the Bel-Del en-route to Groton, MA on Monday around 10:30pm. On the return trip the presidential special went south (again along the Feeder Canal) on Wednesday morning. *Belvidere Apollo, May 27, 1904.* The special campaign train of Teddy Roosevelt traveled south along the D&R Feeder Canal making several stops including Lambertville and Trenton, where he spoke to large crowds. *Easton Daily Express, May 27, 1912.*

George David **Rosengarten** was the owner of the 80' x 17'3" beam yacht *MARIPOSA*, built in 1923 by Mathis Yacht Building Co. in Camden. It was based in Philadelphia as the owner lived in Malvern, PA. Rosengarten was a chemist with the following degrees: B.S., Ph.D., and Sc.D. He was V.P. of Rosengarten & Sons, Inc. & Powers, Weightman-Rosengarten Co.; later a director of successors Merck & Co., and was president of the American Institute of Chemical Engineers.

Rowed Through Canal: Some eccentric individual from Boston, MA, took it into his head some days ago to perform the novel feat of going to Washington in a row boat. He came

through the D&R Canal and passed the outlet lock last Wednesday evening about 7 o'clock. The boat is a small skeleton one and he has rowed it all the way from Boston and by this time is in Washington. *Bordentown Register, June 7, 1861.*

Ruberoid Co. was originally known as Standard Paint Co., was established in 1886, in a remodeled sawmill between the canal and the river at Bloomington as it was then called. Later they built a large plant on the south side of the D&R at South Bound Brook. In 1892 the firm created the first ready-to-lay rolled sheet asphalt roofing material which they called Ruberoid. The product was so successful that in 1921 the corporate name was changed to the Ruberoid Co. and they became one of the nations largest manufacturers of asphalt roofing and asbestos cement siding materials. Tar, a main raw material was brought to the site in Standard Oil Company of New York tankers until the canal closed. In 1928 the Reading Railroad constructed a long steel trestle across the Raritan River and a moveable steel swing span bridge over the canal just to serve this one customer! By the mid-1960's the plant employed more than 400 workers. It was later taken over by GAF, the plant was closed, and buildings were demolished in 2004 to make way for a multi-use development. The portion of the bridge over the Raritan River was removed in 2007, but the section over the D&R Canal remains.

Rules And Regulations to be observed on the Delaware and Raritan Canal and feeder issued by John G. Stevens, Superintendent and Engineer, March 25, 1867 included a total of 75 items. They were broken down by the following headings: I. Requisites for Vessels and Boats; II. Toll Regulations; III. Regulations While Under Way; IV. Lying To; V. Regulations at the Locks; VI. Precedence at the Locks; VII. Teams; VIII. Rafts; IX. Penalties; X. General Prohibitions; XI. Definitions; and XII. Complaints. They provide great incite into the operations of the canal as they were supposed to be performed.

Runyon, Phillips & Runyon was established about 1854 to do general ship-right, spar manufacturing, and calking business. Their yard was at Burnett St. and the canal in New Brunswick.

The **Russian Navy** battleship *RETVIZAN* was under construction at Cramps (shipyard at Phila.) in 1901 and Nixon's yard at Elizabethport built several large launches (two steam pinnaces and two cutters, the largest measuring 60' x 15') for her. Capt. James Cox of Elizabethport towed three of the vessels in single file with one of the steam pinnaces south through the D&R. *Nautical Gazette, August 22 & 29, 1901.*

Rutgers University Libraries, Special Collections and University Archives has a great volume of D&R Canal materials, including documents and photos as well as extensive newspaper collections. They are located at 169 College Avenue, New Brunswick, about a block from the canal. www.libraries.rutgers.edu

Rutgers University, Bloustein School of Planning and Public Policy at New Brunswick, a few blocks from the D&R Canal, aided the New Jersey Transportation Heritage Center in completing a Feasibility Study for Rail Access to Liberty State Park in 2008 and 2009. www.policy.rutgers.edu

Sailboat: The sail boat *RUNAWAY* of Philadelphia which was beaten at a match race by

the sail boat *GEORGE CLARK* of New York at Hoboken on Tuesday passed through the canal today. The *RUNAWAY* is a beautiful affair, but the owners return to Philadelphia minus \$500 lost by the race. *Daily True American, August 5, 1853.*

Sales of D&R Canalboats: were completed by the Pennsylvania Railroad Co. and approved by the board of directors of the UNJRR&C Co. as follows;

<i>Date</i>	<i>Description</i>	<i>Name of vessel</i>	<i>Sale price</i>
1873	Barge	<i>AMBOY</i>	\$400
1877	Barge	<i>MORRIS</i>	\$200
1880	5 Towboats	see 1883	not sold
1883	Towboat machinery	<i>PRINCETON</i>	(hulls, machinery, joiner work
		<i>NEW PHILADELPHIA</i>	sold separately as they were
		<i>NEW BRUNSWICK</i>	unsold in complete condition)
		<i>WEEHAWKEN</i>	"
		<i>DELAWARE</i>	"
1884	5 Towboat hulls	probably same as above	\$200 ea. To F.A. Miller
1884	UNJRR&C interest in 37 Lehigh coal boats		
1885	Canal Barge	<i>CAMDEN</i>	\$75 to Nicholas Quinn
		<i>SOMERSET</i>	\$75 to Nicholas Quinn
1885	Canal Barge	<i>PEQUEST</i>	\$75 to John Gillen
1885	Canal Boat	<i>ALAMUCHY</i>	\$1,000
1885	Canal Boat	<i>MONMOUTH</i>	\$1,000
1886	Canal Boat	<i>GRAPESHOT</i>	\$175 to G. Malon
1886	Canal Barge	<i>ESSEX</i>	Paid P&R RR for sinking by D&R
1889	Canal Boat	<i>HUNTERDON</i>	\$75 to Bernard Tucker
1892	D&R Tugboat	<i>RARITAN</i>	\$650 to D.H. Gregory
1892	D&R Scow	<i>NORTH STAR</i>	\$25 to B. Lamson

Samuel Newbold & Co. advertised under 'Freighting' that they had just commenced running a regular line of packets from Trenton to New York City. "Their vessels are new, strong and well built, and fast sailers; well calculated to carry a large freight, say from six to seven hundred barrels of flour, and about twenty-five hundred bushels of grain under decks." *N.J. State Gazette, May 19, 1837.*

Sand Trade: The new Baltimore canal propeller *ADONIS* berthed at Pier 2, East River, on Monday. She will run between Albany, Philadelphia, and Baltimore, via the canals, in the sand trade. *Nautical Gazette/Seaboard, New York, November 10, 1898.*

Captain J. G. **Sanders, Esq.** was the owner of a very pretty steam yacht which came through the D&R Canal on Tuesday, June 14th, and was safely moored to the Company's wharf until Wednesday morning. Her length was about fifty feet, breadth of beam about nine feet, and she has accommodations for about twenty persons. She was commanded by J. G. Sanders, Esq.,

with a crew consisting of four men. Captain Sanders belongs at Albany, NY, but had the good taste to select a Burlington County young lady for his wife, and was on his way from Albany to Mount Holly, to visit his father-in-law, Hon. John C. Ten Eyck. The yacht bore the simple name of *SPRAY*, and during her stay here attracted considerable attention. The owner took a general view of our city, under the guidance of Captain Thomas, for whom he had a strong attachment. Commodore Molyneux and one or two others were invited aboard to inspect the *SPRAY*, and the Commodore says she is a perfect gem. A young Bordentonian, named George Dickson, an experienced waterman on the river Delaware, was engaged to go with *SPRAY*, and if George appreciates his position he may not be sorry for his first trip with Commander Sanders. The yacht, we are informed, was built especially for Mr. Sanders, who uses it altogether for pleasure and comfort during the summer months. Mr. S. Is a gentleman of large means, and evidently understands what constitutes rational enjoyment. *Bordentown Register, July 2, 1875.*

Sank in the Feeder: Yesterday afternoon, about half past five o'clock, a canal boat, of the kind known as chunkers, laden with coal for Whittaker & Skirm's chain factory, suddenly filled with water and went down near the Montgomery Street bridge. Workmen will be set to work without delay to unload the craft and raise it. The cause of the foundering was that the boat was too heavily laden. *Daily True American, July 24, 1883.*

S.C. Loveland Co. operated through both the D&R and C&D canals in the early 1900's per Capt John Wright.

Scenic Byways Program of New Jersey includes Rt. 29 from Scudders Falls to Frenchtown and the D&R Canal between Scudders Falls and Bulls Island is in this designated area.

Schooners: The depth of water appears to be sufficient to pass coasting vessels from the Delaware to the Raritan. The New York papers mention the arrival of the Schooner *SARAH ANN*, loaded with dry goods, in 48 hours from Philadelphia, via D&R Canal. The business on the Canal appears to be rapidly increasing - and the novel scene of masted vessels gliding through the corn fields and woods, or lying in the basin or the eastern side of the town, or at that on the feeder on the west, (north of Quarry Street) is presented to our view. We trust and hope, that this great enterprise will soon prove profitable to those who have adventured their property in it. From 60 to 70 vessels passed the lock in Trenton this week. *New Jersey State Gazette, September 20, 1834.* While the coal schooner *GALE* of Trenton, was being lowered into the Ten-Mile lock on the D&R Canal Monday night, John Montgomery, of Trenton, Captain of the vessel, fell between the boat and the canal bank (lock wall). He was badly crushed between the schooner and the lock. The deckhands quickly rescued him, and he was sent to his home in Trenton. It is believed he will recover. *Bound Brook Chronicle, August 27, 1897.*

Schooner and locomotive collision: The Philadelphia mail train met with an accident opposite the locomotive works of Van Cleve, McKean & Dripps in Trenton. The schooner was coming into the D&R Canal from the basin and a sudden gust of wind sent the bowsprit across the railroad track just as the train was approaching. The train, which was running at speed could not stop. The bowsprit of the vessel carried away the smoke stack and the upper works of the engine--then demolished the gig top and little house used by the brakeman and carried a mail

crate into the canal. *Daily True American, December 20, 1858. Daily State Gazette & Republican, December 20, 1858.* A near-identical accident was reported a year earlier. *Daily True American, December 28, 1857.*

Schuylkill (Coal) Field: Most of the coal carried by the D&R Canal was anthracite mined in the Schuylkill Field, which lies between Mauch Chunk on the Lehigh River and Dauphin on the Susquehanna River. The most obvious route for getting this coal to market was the Schuylkill Canal or “Navigation,” as it was called, which tapped the field at Pottstown, PA. The D&R Canal found on its completion a steady stream of anthracite coal entering its western or southern terminus. In 1839 sixty-ton boats equipped with covered hatches and fitted for coastal navigation were placed in operation by the Schuylkill Company. These were towed by steam in strings of fifteen or twenty from Philadelphia to Bordentown, whence they went through singly to New York Harbor. Soon several hundred thousand tons of anthracite were moving eastward annually. *Old Towpaths, by A.F. Harlow, p. 209 & From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 263* In 1842 another route was opened between the Schuylkill Field and the Delaware River. This was the Philadelphia and Reading Railroad, which connected Pottsville and Philadelphia. They built a branch to Port Richmond, just north of Philadelphia, where five piers and intermediate basins were constructed for the ready transfer of coal from cars to boats. *The Anthracite Railroads, by J.I. Bogan, p. 28 & From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 264* The Schuylkill Canal and the Philadelphia and Reading Railroad both proved to be highly important feeders for the D&R Canal, and the struggle between the two for the carrying of anthracite to tidewater (on the Delaware River) did not lower the total volume of coal entering the D&R Canal at Bordentown. The only competition that the D&R Canal feared was that of coastwise vessels which sometimes cut rates so sharply as to reduce seriously the coal received from the Schuylkill and Port Richmond. During the three years beginning in 1848 price-cutting was severe, and considerable tonnage was lost to the coastal trade. In 1851, however, conditions were more normal with 277,665 tons entering the D&R from the Schuylkill and 312,202 from Port Richmond – an increase of 35 per cent over 1849. It was in order to meet this competition that the D&R encouraged establishment of freight lines, charging rates based upon their receipts rather than regular tolls. For almost thirty years the Schuylkill Canal was able to compete effectively with the Philadelphia and Reading Railroad, and between 1852 and 1869 it supplied about half of the tonnage of coal carried by the D&R. *Old Towpaths, by A.F. Harlow, p. 210 & From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 264* In 1869 Schuylkill Canal traffic was greatly reduced by a miners strike and the worst flood ever known. In 1870 the waterway was leased to the P&R Railroad and repairs were made. However, the volume of Schuylkill coal entering the D&R never reached its former peak and steadily declined after 1872. The rivalry between the P&R, which now had control of many of the mines as well as the Schuylkill Canal, and the Pennsylvania Railroad, which had leased the Joint Companies, was largely responsible for this. The P&R preferred to forward anthracite by rail or else by large barges towed at sea along the outside route. The PRR favored shipments by rail rather than by canal, and apparently viewed with equanimity the decline in traffic on its waterway. The raising of toll rates in 1882 (by the PRR) was probably designed to encourage the trend from canal to railroad. *Report of the Committee Appointed to Investigate the D&R Canal (Trenton 1911) & From Indian Trail to Iron Horse, by Wheaton J. Lane*

Schuylkill Navigation Boat Builders constructed many canal vessels with a beam of 17.5' and about 100' in length, which were later used and based on the D&R at Coalport, Trenton. Canalboats built at Hamburg, PA between 1872 and 1874 with a Trenton Home Port after 1870 included: *BLAST, BREEZE, GALE, MIST, RIPPLE, SPARKLE, SPRAY, STORM,*

SURF, SURGE, TEMPEST, TWILIGHT, VAPOR, and there were probably others. The above data confirms the strong connection and coordinated operation between the two inland waterways.

Schuylkill Navigation Co. offered a premium to the boater who made the fastest trips. Capt. Connelly made a trip from Port Carbon, PA to New York in seven days and twenty hours. In July he loaded his boat in thirty-one minutes and was off on his tenth trip of the season. *Village Record, West Chester, PA, July 13, 1852.* Later the time for loading boats was reduced to eighteen minutes. The rivalry finally became so bitter that the company discontinued the contests.

Schuylkill Navigation canalboats commonly used the D&R Canal as NY harbor was a major destination of coal traffic from the Schuylkill valley. The two canals formed an important through route. The D&R Canal offered a great opportunity to the Schuylkill Canal boatmen to enlarge their field of operation. In 1839 boats with covered hatches and fitted for coastal use began operating on the Schuylkill. These boats, carrying 60 tons each, came down to Philadelphia, were towed thence by steam in flotillas of fifteen or twenty to Bordentown where they entered the D&R Canal and were towed singly to New York Harbor. There were 800 boats in service on the Schuylkill in 1843, including 278 covered boats adopted to through traffic to New York. Lime-burning was becoming a great industry in the Schuylkill Valley, and most of the product was going down the canal. In 1843 119,972 tons of it went by boat through the Schuylkill and the D&D to New York. In 1860, out of more than 1,200,000 tons of coal alone (to say nothing of other freight) passing through the D&R, nearly 900,000 tons came from the Schuylkill and 314,237 tons came from the Lehigh. *Alvin Harlow, Old Towpaths*

Scudders Falls Bridge I-295? Rebuilding will trigger mitigation in the form of the construction of a vintage wooden swing bridge on the D&R Feeder Canal

Senators Thompson of NJ and Fish of NY had their horses and carriages shipped aboard a steamer for Washington which passed through Trenton on Thanksgiving Day. *Daily True American, December 1, 1855.*

Sequoia - presidential yacht

Shad have made a considerable comeback in recent times and offer good sport fishing in the Delaware River. Freshwater fishing for American Shad begins when these fish move from the ocean, where they spend most of their lives, into the Delaware River to spawn. The timing of the runs varies due to river temperature and conditions, but the months of April, May and June are sure bets. The run often lasts only 6 to 8 weeks, and the fish tend to move in waves. The American Shad may reach 30 inches in length and all are plankton feeders.

www.delawareriver.net/shad It is possible that Shad enter the isolated lower end of the D&R Canal at Bordentown as the canal and river communicate at high tide. Also see "Canal Fish." Each year a Shad festival is held in Lambertville during the run.

Shad Fishermen: An annual migratory group of thirty-odd fishermen from Highlands, NJ passed down the D&R Canal in April in their sputtering gasoline yawls to capture shad in the Delaware River. They returned through the canal when the fishing season was over. *New*

Brunswick Sunday Times, March 11, 1923.

Sharp Practice: A man named John Sharp, keeping a store at the junction of the Canal and Feeder, had trusted a (canalboat)man to a bill of goods in 1868, amounting to thirty-four dollars. He went away to Lockport, New York, and had not been heard of until yesterday, when he was seen going through the canal with a boat. Mr. Sharp took out a writ of attachment, seized the boat, and got his thirty-four dollars. *Daily State Gazette, August 9, 1872.*

Shawnee Mines: Coal Eight Dollars per Ton: The first boat load of coal, from the celebrated Shawnee Mines, reached here on Saturday, and will be ready for delivery from and after today. The quality is far superior to the "Hazleton" or any other kind usually brought to this market, while the price at which it is obtained (viz: \$8.00 per ton to shareholders) is much lower than coal can be obtained in any other way. By a recent arrangement the Company only requires five dollars, instead of ten, to be paid down on each share of stock, leaving the balance (five dollars) to be paid next October. For the purchase of stock call at Freese's Real Estate and Stock Exchange office, and for the delivery of coal upon Daniel Peters, at the yard, or at his bakery, Green Street above Academy. *Daily State Gazette, 21 November, 1865.*

Ship Canal: Senators Kean and Dryden and the delegation of ten members of the House of Representatives will be asked to push the enterprise of a ship canal across this state. The route, after leaving Bordentown and Trenton, follows a line nearly parallel to the Pennsylvania Railroad, and on the southeasterly side thereof to a point near Monmouth Junction, where it deflects easterly to avoid a trap dike; passes down the valley a Lawrence Brook to Parson's dam, which forms a long pool or lake, constituting a link in the canal; thence northeasterly, on higher ground, but avoiding the outcroppings of red shale, to the Raritan River at Sayreville... ..The commercial and industrial possibilities that lurk in the scheme are almost limitless. *Constitution (Woodbury, NJ), September 10, 1902.* (Ship) Canal would make price of coal cheaper. *New Brunswick Times, July 13, 1913.* "Construction of a ship canal across New Jersey at a cost of \$173,000,000, which would give employment to thousands of men, was advanced in Washington by New Jersey members of Congress for a place in the administration's public works program." *New York Times, August 24, 1933.* A US Army Engineers report estimated the cost a the Jersey Ship Canal at \$210,000,000. *New York Tribune, January 11, 1934.*

Ship Canal Locks Calculated For Operation By Steam: Was the title of a paper by Ashbel Welch, Jr. a member of the American Society of Civil Engineers, read by him at the twelfth annual convention on May 25, 1880 and published in the ASCE Transactions, Vol. IX, August, 1880. A key excerpt is as follows: " A dozen years ago, in 1868, the (D&R) Canal having reached the limits of its locking capacity (though I had then no special charge of the canal, more than all the other works between New York and Philadelphia), I applied steam power at the locks, thirteen in number, and at once increased their capacity, and, therefore, that of the canal, fifty per cent. Accidents, not infrequent before, are, so far as I know, unheard of since. It is still in operation, and its success is complete. The apparatus is so safe and so strong, that I never heard of anything getting out of order or breaking during the dozen years it has been in use. The engine has two cylinders, each 6" x 12", turning a drum 3 ft. in diameter, which moves an inch (a one inch diameter) wire rope 2,200 ft. long, passing around sheaves above and below the lock, and passing over rollers along the face of the lock. The vessels are attached to

this by short lines. The rope moves half as fast as the piston. The greatest strain ever put on the rope is rather under 6,000 pounds. The weight of the two boats, hauled in together, sometimes reaches 2,000,000 pounds. The engine also opens and shuts the gates, and works the valves by which the lock is filled. It also, in one case, turns a swinging bridge near the lock, on a much traveled road in a city (State Street Lock and Bridge in Trenton), in a quarter of the time it previously took to turn it by hand. I carefully calculated all the powers, resistances, strains, and strength beforehand. Though much thought was expended upon it, the whole apparatus when done is “ridiculously simple.” (The engine and machinery were made by Mr. William Cowin, at the Lambertville Iron Works. The ropes were made and advice given as to their strength and management by Mr. John A. Roebling.) Also: “Operating Canal Locks by Steam” by Bill McKelvey in PA Canal Society *Canal Currents* No. 69, Winter 1985.

Ship Timber Raft: We are gratified to see that our friends up the river, are becoming alive to the advantages afforded them by the Feeder for transporting the products of their industry to market. A very valuable raft of ship timber, consisting of knees, breasts, and planking, came down from near Milford, last week, and has been lying since in the canal at the junction. The raft is 500 feet in length, and bears upwards of 500 pieces of timber for ship building, destined for the New York market. (Note: the raft would have had to have been broken up into 100-foot sections in order to pass through D&R locks at the time.) *New Jersey State Gazette*, May 15, 1843.

Admiral Edward **Shippen:** reminiscences ca. 1835: “...we went (from Bordentown) to New Brunswick in a passenger boat, which was a cabin built upon two cigar-shaped cylinders with which the horses trotted along briskly. As one was (not) much in a hurry then, it was a very pleasant and favorite way of travel, although we were eight or ten hours in reaching New Brunswick...” *The Pennsylvania Magazine of History and Bibliography Index*, Vol. LXXVII (78), 1954.

Shriver and Co. of Baltimore established a transportation line in 1847 through the Chesapeake and Delaware and D&R Canals between NY and Baltimore, but it was short lived. Monopoly arrangements were made with this firm to encourage trade between Baltimore and New York, by which the Chesapeake & Delaware Canal received 6% of the freight charge for the entire distance and the D&R Canal 9%. The 1849 successor operation was owned by Shriver and William H. Thompson of New York and had the same contract arrangements.

Jacob **Shurts**, of Bound Brook, owner of Franklin Transportation Co., operated the steam canalboats *FANNY GARNER* and *FRANKLIN*, which he later sold to the Merchants Transportation Co. The *GARNER* was built at Rondout, NY in 1849 and *FRANKLIN* was built in (So.) Bound Brook in 1866.

William S. **Skirm**, and his guests and crew made a trip on his steam yacht *THE HELEN* S. June 15 and 16, 1892, up the D&R Feeder to Lambertville; across the Delaware River via the cable ferry; and then up the Delaware Canal to Easton. An overnight stop was made at Stover’s Riverside Farm near Erwinna, PA and the same route was retraced back to Trenton. *Trenton in Bygone Days*, column by Harry J. Podmore in the *Sunday Times Advertiser* (date not available)

Clayton F. **Smith**, the late, was the founder of the Canal Society of New Jersey in 1969. He was prodded to do this the counter the vigorous pursuit of Morris Canal historic materials by

the Pennsylvania Canal Society in Easton. Clayton became the first president and held that position for many years. Under Smith's leadership the society opened a museum at Waterloo Village in 1975 and he led the first two canal study trips of the society to the UK. The replica canalboat which the Canal Society of New Jersey entered in the festivities at New Brunswick for the D&R sesquicentennial celebration was named in honor of Clayton F. Smith.

By **Sneakbox to Florida**, by F. Slade Dale was published in the March, 1926 issue of *Yachting Magazine*. It describes the cruise of two 12-foot Barnegat "Boxes," *CRAB* and *SHELDRAKE*, from New York to Miami, including their passage through the D&R Canal. "Certainly we never expected to spend three days and a part of a fourth within its banks; but eager as we were to reach the Chesapeake we soon became fascinated by the (D&R Canal) and welcomed every excuse to linger awhile along the way... It was a novelty to be lifted up into a beautiful countryside where farmlands, pastures, and little townships slipped past in endless procession; where ducks and wild birds enjoyed the seclusion of the wooded stretches and hesitated to take flight as we intruded upon them. Once in a while a dirty coal barge, a tug, or a busy factory served as a reminder that the canal was built for some useful purpose, but these interruptions only made the next stretch of woods or farmland more enjoyable. Here and there a leaky old punt served someone as a ferry, or a crudely built raft represented the craftsmanship of two barefoot boys. The old wooden swing bridges at the country roads were operated by the draw-tenders with a promptness and efficiency all out of keeping with such ancient structures..." There is much more to this story...

Snubbing Posts were used to "snub" or slow the forward motion of mule-hauled boats at canal locks by making a few loops of a line around the post with the other end of the line attached to the canalboat. A comparatively light effort to pull the line tight around the post by the mule driver was all that was required to slow the vessel. The original posts at the locks on the D&R Canal were undoubtedly originally wood. Wood snubbing posts survived at the New Brunswick and Bordentown outlet locks for many years after the canal closed. However the heavy D&R vessels could put destructive strain on the wood posts. The solution which probably was "engineered" by the railroad side of the Joint Companies was to drive a cluster of several scrap pieces of light railroad rail into the ground and cap them with post-shaped concrete. Powered vessel would simply reverse to slow their forward motion.

Somerset County Park Commission owns and operates Colonial Park along the east side of the D&R Canal at East Millstone. The Canal Society of New Jersey held their 25th Anniversary Celebration at the park in 1994. See "Canal Society of New Jersey 25th Anniversary Celebration." www.scparks.org

Somerset Rubber Co. fire along the D&R Canal at East millstone which occurred at about 2am on October 28, 1912 has produced some fictional versions of flaming alcohol running into the canal and burning on the surface of the water which are not true. The building had formerly belonged to Gaff, Fleischman(n) & Co., distillers, but they had moved two years prior to the fire. The spectacular fire destroyed most of the industry, the Railroad Hotel, the residence and store of G. Gerhardt, and two vacant homes. A Pennsylvania Railroad wreck train with fire-fighting apparatus, dispatched from Monmouth Junction, was credited with saving two nearby homes which had caught fire. Horse-drawn fire fighting apparatus from Somerville and New Brunswick pumped water from the canal brought the conflagration under control. *Unionist-Gazette, October 31, 1912; Somerset County 1688-1938: A Chronology with Tales from the Past, by G. Clark, J. Havens, & S.*

Hoagland, January, 1976; Somerset Spectator, December 22, 1982.

Southward in ROAMER, by H.C. Roome is the story of his journey south through the D&R in 1903, published by Rudder Magazine in 1907 - a hardcover version of the story which appeared in the magazine in Feb., 1904. *ROAMER* is a 68' x 12' schooner yacht, sleeping accommodations for six persons forward and three for crew aft. She is powered by a four cylinder, 40 hp Globe gasoline engine (gas tank held 600 gallons), with a crew consisting of mate, engineer, and steward, who also acts as cook. Cost of running the yacht, including wages, living expenses, fuel and necessary repairs during the year was about \$400 per month.

Southward Under Power and Sail by the Inside Route is a story by A.M. Farrell describing an April, 1910 trip in his auxiliary yawl *ALGA* which appeared in Yachting Magazine Feb., 1911 issue.

Southward in the Yawl LOTUS from New York to Southport, NC, by C.D. Mower, published in The Rudder, Vol. XIV, No. 1, January, 1903. The narrative describes the trip through the D&R near the end of the boating season of 1902 plus encounters with ice, and includes three photos.

Ex-Spanish Navy vessels (two), were captured by the U.S. Navy when Santiago, Cuba fell during the Spanish-American war. The *U.S.S. SANDOVAL* and the *U.S.S. ALVARADO* were towed north through the D&R Canal in 1899 en-route to Portsmouth, NH.

Special Policeman: Francis Deacon, watchman of the Pennsylvania Ship Yard at the canal (in Bordentown), has been commissioned by Governor Ludlow as a Special Policeman. Disorderly parties around the locks can now be arrested without sending away for an officer. *Bordentown Register, August 18, 1882.*

Friends of the Abraham **Staats House** supports the ongoing restoration and preservation of properties directly related to the history of South Bound Brook with a primary focus on the preservation of the ca. 1740 Abraham Staats house, adjacent to the D&R Canal. sbbhistory@aol.com

Stable Fires: The alarm of fire on Saturday night about 11 o'clock was occasioned by the burning of Mr. Buckalew's stables at the canal junction (in Trenton). The building was entirely consumed, the fire department being unable to check the flames. The stables were used for the purpose of keeping mules during the canal season. Nothing of value was in the stable at the time except about a ton of hay and a cart. The loss will perhaps be covered by \$3,000. There is no insurance as far as we can ascertain. It was supposed to be the work of an incendiary; adjoining are the pottery works of Young & Son, which were set on fire some weeks ago. The Union Fire Co. was the only company in service, and worked faithfully for over an hour. In consideration of their labors Mr. Wm. Young gave the members a collation at his house after the fire was extinguished.... *Daily State Gazette, March 6, 1866.* About one o'clock on Sunday morning a disastrous fire occurred in the canal stables of Mr. Jacob Schaaf at the Junction. A number of mule teams were in the stable, and owing to the rapid spread of the flames twenty mules and two horses were burned. These animals were owned by various boatmen, upon whom the loss falls heavily. The Fire Department were promptly on the spot, but the flames had gained such an

ascendancy that nothing could be done to save the building. The whole loss is estimated at \$5,000. Mr. Schaaf's building was insured. *Daily State Gazette, September 11, 1866.*

Stables owned by the canal company in 1840 included five large and one smaller, for tow horses. (Mules came into use on the canal in the 1850's)

Stage Road - New York to Philadelphia, The First: The authorization for the first approved section of the stage road was by the New Jersey Proprietors in 1665 between Elizabeth-towne Point and the ferry across the Raritan River at what is now Highland Park. The easiest way to build the first section, via Rahway, Woodbridge and Piscataway was to clear and widen the Assunpink Indian path and build the road over it. The Indian paths took advantage of the easiest grades, avoiding marshy places, and crossing streams at fording places least likely to become flooded. John Inian and associates began building an extension of the road from the Raritan River, where the D&R Canal was later to be built, to the Millstone River at Kingston, where it would again cross the future D&R Canal. They planed to continue the road to Trenton, where it would again cross the path of the future D&R. When the above improvements were completed during the early 18th century it became possible for four-wheeled vehicles, including stage wagons (which were at the time glorified farm wagons - also known as "Jersey Wagons"), to travel over the road in comparative comfort, depending on the weather... One of the first stage lines to offer regular service between Trenton and New Brunswick (along the route of the future D&R Canal) advertised as follows: "To Accommodate the Public there will be a stage wagon that will set out from Trenton to New Brunswick over the King's Highway twice a week and back again during the summer. It will be fitted with benches covered over, so that passengers may sit easy and dry, and care will be taken to deliver goods and messages safe....every passenger to pay two shillings and six pence. Goods and parcels carried at the lowest rates." *American Weekly Mercury, 31 January 1738; The First New York - Philadelphia Stage Road, by James and Margaret Cawley.* By the third quarter of the 18th century larger and more comfortable Concord coaches came into use. Also at this time the more robust Conestoga wagons began to be used for heavy freight service. Interestingly, the "monopoly" created by the combination of the D&R Canal and the Camden & Amboy Railroad did away with the competing stage routes.

Standard Oil Co. of NY (SOCONY) oil and tar barges were towed into the D&R to Johnson & Johnson and the Ruberoid plant at South Bound Brook. "John P. Joyce, Edward Culver, John Smith, and George Compton were crossing the Canal on a raft yesterday when a Standard Oil tug collided with them and they all tumbled overboard." *Trenton Times, November 13, 1902.* The US Supreme Court ruled in 1911 that antitrust law required the giant Standard Oil Company be broken up into smaller individual companies. One of the smaller companies created was SOCONY, which later merges with Vacuum Oil Co. and was renamed Exxon, which is now a part of ExxonMobil. In the final years of canal operation the Wager family towed the SOCONY barges to and from the Ruberoid and Johnson & Johnson plants.

State Street Canal Bridge: A change in the schedule of the Trenton Street Railway Co. will be made Sunday morning, January 6 to accommodate the PRR in the rebuilding of the canal bridge on East State Street. Passengers will be transferred at the bridge. *Daily True American, January 5, 1901.* The State Street canal bridge will be thrown open to traffic today and once again patrons of the street car lines will be enabled to make a continuous journey across town without being transferred at that point. *Trenton Times, March 22, 1901.*

State Street Railroad Depot was along the D&R Canal near the Lock of the same name in Trenton. An early two-train accident occurred at this location at 10:30am on 26 May 1853 between a Bel Del passenger train and a Camden and Amboy passenger train. One of the two trains which were backing out of the station at the same time, ran over a defective switch and ran into the rear of the other train. A car from the C&A train, crowded with passengers, was only prevented from falling into the D&R Canal, which paralleled the track, by a heavy post. The last car of the Bel Del train was slightly damaged. *Down Along the Old Bel Del, & A Chronology of the Belvidere Delaware Railroad, Warren F. Lee*

The **Steam barge ESTELLE**, which has plied for some years between Baltimore and New York via the canals, is having her machinery removed and will henceforth be used as a freight boat, towed by the new steam barge **BELLE MILLER**. *Nautical Gazette/Seaboard, New York, December 19, 1895.*

The **Steamboat BURLINGTON** towed down from Bordentown to Philadelphia on Monday morning, thirty-five canal barges, thirty-two of which were laden with coal and three with other merchandise. *NJ State Gazette, July 26, 1843.*

Steamboat or Railroad Hotel was built along the D&R Canal at the Alexander Street bridge soon after the canal opened. Across the canal were the two Princeton basins and much commercial activity. At first it served canal passengers and then railroad passengers, after it reached Princeton in 1839 and passed right in front of the building. Use of the structure declined after the railroad was moved west to Princeton Junction in 1864; it became a residence and gradually deteriorated. On July 25, 1992 the structure was demolished by the daughter of the last owner who died in 1991. *Princeton Packet, July 29, 1992.* Subsequently a new dwelling has been built on the historic site, but it is well set back from both the canal and the road.

Steam Canalboats on Canal: On Saturday last, two of three boats, the **BLACK DIAMOND**, and **VULCAN** owned by Captain Stockton, passed through the canal on the way to Philadelphia. They have commenced running regularly between Philadelphia and New York freighted with coal. The dimensions of these boats are - length 95 feet, breadth of beam 23 feet, depth of hold 7 feet. Each has two of Ericsson's screw propellers driven by an engine of 20 horsepower. They are also provided with sails to be used when circumstances are favorable. *Princeton Whig, July 1, 1842* A line of steamboats has been established between Hartford and Philadelphia. The **IRONSIDES**, the first of the line, arrived in Hartford in 56 hours from Philadelphia. She is 100 feet long, 23 feet wide, draws 5½ feet, and carries 180 tons. She is moved by Erickson's (Ericsson's) propellers, and has a speed of 7 miles an hour. *New York Tribune, July 28, 1842.* Two new steamboats, the **NOVELTY** and **ERIE**, the Trenton Gazette says, have been put on the canal to run New York to Philadelphia. They are finished (furnished) with Lopers propellers. Both are of superior speed; the **ERIE** made th last run from New York in 19½ hours including 42 miles of canal transportation. The Commercial Transportation Co. of Trenton has also converted another one of their boats into a propellor. *Sentinel of Freedom, 30 July 1850.* It was found that the use of steam power to obtain higher speed created a wash that damaged the banks of the D&R Canal. In 1853 the locks on the main canal were lengthened from 110 feet to 220 feet to accommodate steamboats towing an equally-sized canalboat as well as larger steam canalboats. At the same time the vulnerable banks of the D&R were rip-rapped with stone which

extended 3½ feet below the surface of the water. This lining permitted steamers to pass at a moderate rate without abrasion of the banks. The improvements were covered by a \$700,000 loan that was charged to capital stock. Freight lines soon placed “steam propellers” on regular schedules, and it became possible to make the through trip in less than twenty hours of actual travel. Another improvement was the widening of the bridge-ways to permit the passing of two boats at the same time. Previously numerous collisions, some of them serious, had occurred in these narrow passages *Newark Daily Advertiser*, 27 July 1859, & *From Indian Trail to Iron Horse*, by Wheaton J. Lane, p. 266

Steam Ferryboat WILLIAM WRAY which for many years plied between Camden and Philadelphia, passed through the D&R Canal on Sept. 6, 1853 en-route to New York where it is to run between that city and Hoboken. The guards and paddle wheels of the boat were removed to admit of its passage through the locks of the canal. *Daily True American (Trenton)* Sept. 7, 1853.

Steam Operated Locks: The D&R Canal Co. are putting up a machine to be operated by steam, to open and shut the locks and gates of the canal in Trenton, and propose if it operates well, to put them at every important lock on the canal. One of them is said to “operate like a charm,” and very greatly facilitates the operation of opening and shutting the locks. *NJ Courier, Toms River*, 8-17-1870. This D&R Canal improvement is credited to Ashbel Welch and years later his ideas were adopted by the Panama Canal.

Steam Packet Line operated ca. 1848 from Albany (S. Flannagan, agent) to Philadelphia via the D&R.

Steam Propeller Line ran between Hartford, CT and Wilmington, DE.

Steamship Historical Society of America was established in 1935 “to record, preserve, and disseminate the history of engine powered vessels.” They are a non-profit organization with over 2,000 members worldwide. SSHSA has an online image porthole with over 60,000 photos of ships, ports, and people. Their office, library and archives are located in East Providence, RI. www.sshsa.org

Steam Tow-Boat Co., a/k/a Merchant’s Transportation Line per 1837 & 8 freight bills.

Steam Tow-Boat Co., a/k/a Swiftshure Transportation Line per 1841-3 freight bills.

Steam Towing Line was owned by the Joint Companies between 1835 and 1846; Napoleon Co. was their agent; performed towing on the D&R and on the Delaware and Raritan rivers and adjacent waters.

Thomas **Stockham**, then mayor of Morrisville, PA wrote of his memories of the D&R Canal and the tugboat *RELIEF* which his father, Captain Thomas B. Stockham had full charge as he was supervisor of the canal. Provides wonderful historic information from the 1870's era! *Trenton Sunday Times Advertiser, Trenton in Bygone Days* column by John J. Cleary, September 20, 1936.

Stockholders Owning More Than 250 Shares of D&R Canal Company stock (In various years 1830 - 1851) included: J. Andrews (Cashier); John Jacob Astor (New York); Thomas Biddle & Co., (Phila.); Thomas Biddle & Co. (In Trust); John A. Brown & Co.; William

Gaston (Savannah); Charles Goldsborough; Gowan and Marx; A. G. Jaudon; Samuel Jaudon; Samuel Jaudon (In Trust); Charles Macalester; Joseph McIlvain (Phila.); John L. McKnight (Bordentown); James Neilson; James Potter (Son of John); John Potter (Charleston, SC and Princeton, NJ); Thomas F. Potter (Son of John); Robert F. Stockton (Princeton); The Bank of North America; The State of New Jersey The Trenton Banking Company; and Canvass White. *Colonel James Neilson: A Business Man of the Early Machine Age in New Jersey, 1784 - 1862.*

Captain, later Commodore, Robert Field **Stockton**, (1795 - 1866) became president of the D&R Canal Co. when officers were elected after the charter was granted. He traveled extensively to promote the canal, invested his private fortune, and pioneered in bringing steam power to the waterway. Stockton a letter to the people of New Jersey explaining the need for the monopoly created by the 'Joint Companies'. An extract was published in the NJ State Gazette of January 3, 1835. Stockton remained president until he died in 1866. His home was Morven, near the center of Princeton, which for many years was the mansion of the governor of the state of New Jersey. Commodore Stockton died in 1866 at age 71. Besides his interest in the canal and railroad, he had been a brilliant lawyer, a US Senator, a distinguished Naval officer, a great sportsman,, and an investor in several ventures. Stockton is interred in the Princeton Cemetery, Greenview Avenue, Princeton.

Captain R. F **Stockton**: By a resolution of the executive committee of the Joint Board of Directors, passed November 9th, 1841, Stockton was authorized to employ not exceeding four barges, in carrying coal through the D&R Canal to Albany, and placed east of New York, free from tolls for three years; and after three years, at one half of the tolls charged to other persons; and if those barges were employed in carrying other articles, the rates charged to other persons were to be charged; Captain Stockton, in all cases paying the transit duties to the state. If the barges were employed in carrying coal to New York, they were to be placed on the most favored footing. "Four iron boats with steam engines aboard, capable of carrying 230 tons each, are now constructing at New York, for the purpose of carrying coal directly from the Delaware to that city (New York) through the Raritan Canal. The directors expect to divert a vast quantity of the eastern trade from the Schuylkill to their conveyance through this channel." *Burlington Gazette, April 1, 1842.* Four iron steam propellers (they were the self-propelled steam canalboats named *ANTHRACITE*, *BLACK DIAMOND*, *IRONSIDES*, and *VULCAN*) were employed under this contract, in 1842 and 1843, when the business was discontinued. However, although the business was discontinued by Stockton, the vessels were obviously sold to others; continued in service; appear to have been lengthened after 1853 when the length D&R locks were doubled; and most served until the 1880's. The object of the executive committee in making this arrangement, appears to have been the introduction of the use of coal, carried through the Canal, to distant places, where but little or none had been previously used, and thereby to increase the trade through the Canal. And, the arrangement obviously also spurred Stockton to make the investment to build the steam vessels to accomplish the task. Commodore Robert Stockton died at age 71 in 1866, the canal's most prosperous year. He was replaced as president of the Canal Company by his third son, Robert, who was also secretary and treasurer of Ashbel Welch's Belvidere and Delaware Railroad.. As the Stockton dynasty continued, Bayard Stockton, son of the Commodore's son Richard, became president.

Stockton Borough was originally known as Howell's Ferry for the man who owned the

means of crossing the Delaware River. The construction and opening of the D&R Canal Feeder brought an increase in local business and the completion of the Bel Del Railroad did even more for the town. In 1859 the town was renamed Stockton in honor of Robert F. Stockton, the president of the D&R Canal who was associated with the Bel Del Railroad as well. Stockton Borough was established in 1898.

Stockton Inn, the most prominent inn and restaurant in the town of Stockton was built as a residence with locally quarried stone in 1710. The inn and local ferry were both owned by Mr. Howell and the town was originally known as Howell's Ferry. The construction and opening of the D&R Canal Feeder brought an increase in local business and the need for a tavern and later an inn. In 1914 the Stockton Inn was purchased by the Weiss family and in 1922 Elizabeth Weiss, who had earlier married Joe Colligan purchased the Inn from her mother. Between 1929 and 1935 local artists painted murals on the walls depicting local events and scenes such as the canal. The Inn inspired a song "There's a small hotel with a wishing well" which appeared in the Richard Rogers and Lorenz Hart's 1936 Broadway hit, "On Your Toes." Colligan's Stockton Inn became a mecca for writers, artists, and other famous celebrities. The Colligan's and their and their five sons ran the establishment until 1983 when it was sold to Frank P. Smeal and was extensively renovated, and 11 guest rooms were added. In subsequent years the ownership changed hands several times and has been owned and operated by the Stackhouse family since 2006. The Garden, a protected dining terrace with waterfalls, trout pond and garden bar have been refurbished; tables are now set up on the front porch; the murals have been restored; and the long standing history of fine dining at the inn continues. Located at 1 Main Street, (on Rt. 29, River Road) in the center of Stockton, phone 609.397.1250 www.stocktoninn.com

Capt. **Stockton's Letter**: was written to the people of New Jersey defending the "monopoly" of the joint companies. Some excerpts: "The (construction of the) canal was about to be abandoned, and you will please bear in mind one of the main causes, namely, the fear of a rail road through the same district of country. In this state of things the Legislature declared that they considered the canal of such immense importance to the whole union, as well as to the state, that although they would not give us a grant for the road, yet they would pass an act to secure the canal from the rivalry of any rail road within five miles, if that would be sufficient consideration for us to make the canal 75 feet in width and 7 feet deep; hereby imposing upon us an additional expense of a million dollars more than was required by the original charter... ..Thus was a solemn contract entered into between the state and the company; under that contract, under the protection of the plighted faith of my native state, I embarked all I was worth for the accomplishment of a great National and State object, which had so often been abandoned, by both state and individuals as impossible to be constructed; and have devoted every day of four of the best years of my life to the fulfillment of our obligations. - Trusting with perfect confidence to the protection thus tendered, and to the covenant thus solemnly made, I was induced amidst the embarrassments of the money concerns of this country, to visit England to effect a loan, to enable the companies to fulfil their contracts, and to redeem their promises; and on the same security upon which the company trusted was that loan effected. And now, fellow citizens, before the last spade of earth is taken from the canal, and before receipt of one dollar in return for what has been expended, an attempt is making by persons (in the name of the New Brunswick Turnpike Company) to violate the law of the land, and the plighted faith of the state... ..Having shown that earnest and repeated efforts were made by our directors, to induce the state

to construct the Delaware and R. Canal, on her own responsibility; that she declined to do so, solely on the ground of its great expense and hazard; that she has always been anxious to protect it in the hands of individuals, and that in so doing she has acted on old and well settled principles; I will here refer you to all the canal and bridge charters in the state, and merely observe that one of the original and best designs of the canal company was to take their feeder up to Easton, and that it was prevented by a provision in the charter of the Morris Canal prohibiting the construction of any canal within ten miles of that work; when that protection was made known to them, the Delaware and Raritan Canal Company immediately relinquished that favorite and much desired object; because they held that it would be as unprincipled in them to attempt to violate the law, as it would be to rob that company of any other right guaranteed to them by law... ..I have given my best views on the subject and now once more repeat that in my humble judgement it is not possible to deliver a better system of Internal Improvement than the one now in operation in New Jersey, which brings to the Treasury a large revenue, more than enough to defray the current expenses of the state government, without the hazard of one cent. The state will have received from these (Joint) companies in January, the sum of seventy-three thousand two hundred dollars... ..It is very apparent that all the monopoly contained in our charter, was put there for the purpose of securing the construction of the canal; now if the inducement offered by the state to individuals for that object is to be relinquished, then surely (in common honesty) the expenses incurred by the offer of that protection should be borne by the party wishing to get rid of the contract. I propose then that the state of New Jersey should purchase the canal at cost, with the interest added; return to the companies what has already been paid to the state; and relieve the Camden and Amboy Rail Road hereafter of their obligations to the state; that in five years the monopoly shall be given up and the right of way restored to the state... A lengthy extract from this letter appeared in the January 3, 1835 issue of the New Jersey State Gazette.

Capt. S. D. **Stockwell**, with steam tug *JACOB HINDS* and four barges (canalboats) of 80 tons burthen each arrived in Baltimore after having made the 720-mile trip from Buffalo via the Erie Canal, Hudson River, D&R and Chesapeake & Delaware Canals in 1852. She left a few days later with a load of 320 tons of railroad rails for the Erie Railroad at Buffalo. She returned to NYC with an enormous quantity of staves, unloaded them and returned to Baltimore to load 300 tons of Cumberland coal for Buffalo. *New York Daily Times, July 24, 1852.*

Stony Brook Millstone Watershed Association was central New Jersey's first environmental group. Since 1949 they have been protecting water and the environment in the 265 square-mile region drained by the Stony Brook and Millstone River. www.thewatershed.org

Storehouses owned by the canal company in 1840 included one at Princeton, one at Trenton, and one at New Brunswick; the first two containing collectors' offices.

Strange Craft: Two veterans from the Soldiers Home at Hampton, VA, passed through the D&R Canal this morning in a dugout, a vessel built sharp at both ends and sloop rigged. The old soldiers were on their way to New York City and points on the Hudson River where they will visit some of their old comrades. The yacht *LIBERDAD*, a similarly built craft, passed through last Friday having come from Bermuda. *New Brunswick Daily Times, May 13, 1889.*

Street Blocked by Earth: Recently (Trenton) Street Commissioner Higgins served a

notice on the Pennsylvania Railroad Company directing them forthwith to remove the earth recently thrown by them from the canal on to North Feeder Street, between Rose and Montgomery. Yesterday Commissioner Higgins received a courteous reply from Superintendent J.A. Anderson, which questioned, however, the city's right over the land on which the earth was thrown. Till the question is investigated, Superintendent Anderson asks the street authorities' indulgence. He promises to take immediate steps to clear away enough of the obstruction to facilitate traffic on North Feeder Street. *Daily True American, June 2, 1885.*

Strike on the Canal: We are informed that the drivers on the canal recently struck for higher wages. A German who had engaged himself at the old rates was most shamefully beaten yesterday by several Irishmen between Trenton and Bordentown. Information was communicated to Marshal Carman, who proceeded to arrest the offenders, but it was ascertained that the boat they were towing reached the Trenton lock and they had deserted same fearing, no doubt, the consequences that were likely to ensue for their conduct. *Daily True American, June 13, 1854.*

Submarine chasers: "During the World War (I) a continual procession of submarine chasers bound for the Brooklyn Navy Yard from the Annapolis Navy Yard, or vice versa, went through the canal. In fact, herein lies one of its chief strategic advantages. For, in times of uncertain weather, it is possible for a boat of none to excellent navigating qualities to leave Baltimore in the morning and by going through the canal(s) arrive in New York not later than the evening of the next day. This obviates the necessity of making the dangerous trip up the coast and around Sandy Hook. (During wartime the inside route avoided the perils of enemy submarines off the Jersey coast.) *The Sunday Times, New Brunswick, July 3, 1927.*

Success of the D&R Canal: Although paralleled by the main line of the Camden and Amboy Railroad and later by their Trenton and New Brunswick branch, the D&R Canal greatly (and positively) influenced the economic life of New Jersey. The fact that in the pre-Civil War period the canal carried almost all the heavy freight makes it possible to distinguish between the effects of the two forms of transportation. Of all New Jersey cities, Trenton gained most from the canal... ..the industrial development that began in 1834 overshadowed all other considerations. In the two decades before the Civil War the population of Trenton increased fourfold. Undoubtedly the city would have enjoyed industrial growth without the canal, but it added ease and cheapness of transportation to the other advantages. The Princeton Basin became a scene of constant activity... ..and the town experienced a mild boom. Local agriculture as well as industry was stimulated by the canal. New Jersey agriculture was helped by low too rates on lime and fertilizer. The national significance of the D&R Canal can be seen from the great volume of through traffic which it carried. Although one of the shortest canals, there were some years in which it surpassed in tonnage such a great waterway as the Erie. The fact that the D&R Canal remained in operation until well into the twentieth century is clear evidence of its value as a commercial route. The D&R Canal was one of the largest and most efficient in the country. Despite the loss of much of the Schuylkill coal, the D&R Canal struggled on bravely. Even in 1889 it carried more than 1,200,000 tons of freight, and it remained a profitable enterprise for many years more. *From Indian Trail to Iron Horse, by Wheaton J. Lane.*

Sunday Canal Operation: A petition was introduced to the D&R Canal Co. Executive

Committee meeting at Bordentown on November 7, 1836 by Mr. Green, signed by some of the land owners on the line of the canal praying that the locks might be closed on the Sabbath and that traveling on that day be discontinued - which was referred to Mr. Green with instructions to reply to them and say that as a Public Highway the Company had no authority to prevent its use by the public at any time or any day. Note: An Act of the Legislature of the State of New Jersey was passed on March 16, 1854 providing "That no transportation of freight, excepting milk, on any public highway, railroad, or canal shall be done or allowed by any person or persons within this state, on the first day of the week, commonly called the Christian Sabbath..." Sunday traffic began on the D&R Canal yesterday for the first time in half a century. The residents in the rural districts of Somerset county along the line of the canal, who were unaware that the Sunday laws, which have been rigidly enforced against the canal company since 1850 (actually 1854), were about to be violated, were astounded when the quiet of the day was broken by the whistles of the steamboats and the cries of the canal boatman. Several river steamers which use the canal as a waterway between the Delaware River and the Raritan Bay passed through the canal yesterday morning and were followed during the day by small steam craft and canal boats. The innovation created a sensation in the towns of Millstone, Rocky Hill, and Bound Brook, through which the canal passes, and it was the subject of much unfavorable comment at the village churches. Once before in the history of the canal an attempt was made to operate it on Sunday, but the residents of Somerset County enforced the law and tied it up tighter than a logjam at the county line. The canal is now operated by the Belvidere division of the Pennsylvania Railroad. It was opened for the season last Monday and orders were subsequently received by the lockmen that hereafter it would be operated on Sunday. *New Brunswick Times, April 1, 1901*. "Why canal is kept open - Freight cannot be delayed over Sunday - Much of it is Perishable - If canal is to compete with the railroad freight must move every day of the week." *New Brunswick Times, April 2, 1901*. Also see "American Bethel Society".

Sunk in Canal: On Saturday, about 1 o'clock, a boat loaded with coal sunk in the Feeder, near the Waste-weir. Owing to the suction of the gates. Yesterday, the pump-boat of the Canal Company was on the spot to pump out the water, and thereby raise the boat, both of which were accomplished in due time. This pump-boat, by the way, is a great institution, and works to a charm. Without this the entire boat load of coal would have had to be unloaded, and the water bailed out, or pumped out, by hand, which would have taken some two or three days, instead of as many hours with the boat pump. *Gazette & Republican, September 19, 1859*. A large Baltimore steamer laden with valuable merchandise was sunk in the canal above Bordentown by the ice on Tuesday afternoon. *Bordentown Register, December 18, 1868*. Numbers of people walked down the canal bank yesterday to view the sunken barge *GEORGETOWN*, of Philadelphia, Captain William A. Robertson. It went down Saturday morning just below Hamilton Avenue bridge. The barge was in tow of the propellor *MAYFLOWER*, also of Philadelphia, and being struck by a swell from the Prison basin was forced against the opposite bank with such a force as to stave a hole in her hull. The cargo consisted of a hundred and fifty hogsheads of sugar, consigned to New York parties. The cargo is very nearly a total loss. *Daily True American, September 14, 1885*.

Supervisor of Canal: 1899: Supt.: Harry Dunn; Asst. Supt.: Robert Stewart; Supt. of Barges: J.G. Garretson. *Bordentown Register, June 29, 1899*. Superintendent James Dougherty of the local branch of the D&R Canal Co. has been promoted to the office of supervisor of the entire canal by Superintendent H.W. Dunn. The promotion meets with general satisfaction among the

employees of the company. Supervisor Dougherty, heretofore has been in charge of the canal from New Brunswick to Kingston. The late Captain Stockham was superintendent of the Trenton division which takes in that section of canal from Kingston to Bordentown, and also the part of the feeder that is within the city limits of Trenton. Dougherty will have the supervision of all the locks, bridges, carpenter shops, repair shops, dredgers and pumping engines and look after the raising of all sunken vessels. *New Brunswick Daily Times, March 17, 1904.* Captain John M. South of Trenton, formerly captain of the P.R.R. tug *RELIEF* and general foreman of the canal, has been appointed supervisor of carpenter work. He will now have charge of new work and all repairs to locks, bridges, wharfs, waste weirs, houses and the like. He remains captain of the wrecking tug and will supervise the raising of sunken vessels. Theodore Van Camp of Lambertville, formerly supervisor of the feeder, has been appointed supervisor of the banks of the main canal from Bordentown to New Brunswick. James Dougherty, who has had charge of this work, has been retired on pension. Both Captain South and Mr. Van Camp have been in the employ of the canal company for years. *Trenton Evening Times, August 10, 1909.* The Pennsylvania Railroad, New Jersey Division, Office of the Superintendent published a notice on the opening of the canal to navigation on March 21, 1910. Listed were: Alex. P. Gest, Supt. Belvidere Division; H.W. Dunn, Asst. Supt. Del. & Rar. Canal; and F.L. Sheppard, General Superintendent. *Nautical Gazette, 1910.* Theodore Van Camp, supervisor on the D&R Canal, died at Lambertville this morning. He was 60 years of age and had been ill with stomach trouble. He succeeded James Dougherty, of New Brunswick. *New Brunswick Daily Times, March 25, 1911.*

Swiftsure Line, a/k/a Swiftsure Transportation Co.

Swiftsure Steam Transportation Line was established in April, 1840 to operate a line of barges between New York and Philadelphia via the D&R Canal. The agents were J.& N. Briggs, 34 Old Slip, New York, and Armer Patton, 46 & 47 South Wharves, Philadelphia. *Queens of the Western Ocean, by Cutler.*

Swiftsure Transportation Co, a/k/a Swiftsure Line, a division of Canal Freight Barge Lines, was formed in 1838 by the Merchant's Line and paid the D&R Canal Co. 25% of it's receipts in lieu of fixed tolls; sold to Philadelphia interests (Capt. Loper) in 1850.

Swiftsure Transportation Co. a/k/a Despatch Line per 1866 freight bill.

Swiftsure Transportation Line, a/k/a Steam Tow-Boat Co. per shipping bills of 1841-1843.

President William Howard **Taft** went north on the Bel-Del in a special campaign train. He made enthusiastic speeches from the rear car at Lambertville along the D&R Feeder and at other towns. *Easton Daily Express, May 24, 1912.*

Tax on Canal Boat Refunded: The Collector of the port of Philadelphia charged "hospital dues" (one dollar) and "marine hospital tax" (80 cents) upon a canalboat, 123 tons, without masts or steam power, engaged in the coal trade between Port Carbon, in Schuylkill County, Pennsylvania, and the city of New York, by way of the Schuylkill Navigation and the Delaware and Raritan Canal. The whole distance from Port Carbon to New York by the said

route is 128 miles, of which 51 are by canal, 108 on Schuylkill Navigation, and 43 on the Delaware and Raritan Canal, and 77 on tide water. In 1857 Justice Grier, of the US Circuit Court, Philadelphia, rendered the important decision: The fees extracted from the plaintiff were illegally extracted, and he is entitled to recover according to the conditions of the case stated. *Hunt's Merchant's Magazine, Vol. XXXVI (1957), p. 376-377; recapped in Pennsylvania Canal Society's Canal Currents, Vol. 91, Spring 1993*

Taylor & Anderson, a marine operator from Philadelphia used the D&R Canal ca. the 1920's. The firm is no longer in business.

Telegraph Cables: "The telegraphic cable under the Raritan Canal at New Brunswick, was so badly injured on Saturday by being caught in the wheel (screw propellor) of a passing propellor that a new cable will have to be laid." *Weekly State Gazette, December 3, 1874* A steam propellor got its screw entangled with the cables under the Delaware and Raritan Canal when going through the draw of the railroad bridge at New Brunswick Thursday night and broke seven of the cables. *Newark Daily Advertiser, April 9, 1875.* Note per Ed Francis: "Must have been telegraph circuits as neither the electric nor the telephone companies were yet in business."

Telegraph War: See "American Union Telegraph Company."

Grif **Teller**, the artist who painted the great scenes depicted on the Pennsylvania Railroad annual calendars was commissioned by Bill McKelvey in 1982 to paint a scene showing the D&R tug *ROBERT F. STOCKTON* approaching the Camden & Amboy locomotive *John Bull* at the steamboat/railroad hotel on Alexander Road in Princeton.

John Renshaw **Thomson** (1800 - 1862) was a democratic US Senator from New Jersey (from 1853 to 1862), elected to fill the vacancy caused by the resignation of Robert F. Stockton. He was born in Philadelphia, attended the common schools in Princeton, and the College of New Jersey (now Princeton University); went to China in 1817 and became a merchant in Canton; US consul at that port 1823-1825; returned to the US and settled in Princeton. He was a founding director and secretary of the D&R Canal Company for many years; connected with the Philadelphia and Trenton Railroad as president and later as treasurer; member of the State constitutional convention in 1844; unsuccessful Democratic candidate for Governor of New Jersey in 1844. www.en.wikipedia.org Thomson is interred in the Princeton Cemetery, Greenview Avenue, Princeton.

A Thousand Miles With DOROTHY Q, by Hollis Burgess describes the passage of this racing sloop, "Q 34," through the D&R in the summer of 1907. They departed the races at Provincetown early and were headed for the Jamestown Exposition. *The Rudder, January, 1908.*

Through Trains Along the Feeder: The *Boston Flyer*, northbound to its namesake city and the *Colonial Express*, southbound to Washington, D.C., were placed in service. *Belvidere Apollo, December 10, 1894.* The crack *Federal Express* trains, running between Boston and Washington, began operating along the Bel-Del route while the Hellgate Bridge in New York was under construction. The *Boston Flyer* and the *Colonial Express* trains were discontinued for the next four years while the *Federal Expresses* were in service. *Warren Journal, October 25, 1912.*

Tice Towing Co. (of NYC) towed vessels between the D&R Canal @ New Brunswick

and NYC ca. the 1920's.

Tidal Wave in Canal: At 2:07pm on August 10, 1884, an earthquake was felt in Trenton. The vibrations were quite violent and lasted for about half a minute. A small tidal wave was noticed on the canal and feeder. *New York Times, August 11, 1884.*

Timber Rafts on the Delaware: (A significant volume of these rafts entered either the D&R Feeder Canal at Bulls Island or the D&R Main Canal at Bordentown.) Since New Year's Day 1,400 rafts containing 70 million feet of lumber floated down the Delaware River. *Easton Daily Argus, July 5, 1876.* The nobby little tug *JAMES*, owned by Daniel Molyneux, started her fires on Saturday, preparatory to engaging in towing of rafts. *JAMES* was repainted while lying in the Creek. *Bordentown Register, 12 March 1880.* From 13 March to 28 April, 1,565 rafts passed through the Delaware Water Gap; from 9 May to 28 May, 1,450 rafts passed through the Gap. *Warren Journal, June 1, 1882.* The ten rafts recently levied upon by U.S. Marshall T.J. Alcott as they were about to enter the canal, on account of the failure of the tugboat to pay the required amount of towage will probably reach their destination in the Eastern States about springtime. *Bordentown Register, January 22, 1901.* In mid-Nov., 1902 there were 24 lockings of piling rafts from VA. The length of piles were from 60 to 85 feet. They were destined for NY and were to be used for wharf purposes on the Hudson River. In 1913 a 210' x 50' raft of timber was floated down the Delaware from Callicoon, NY for Bordentown, NJ (the entrance to the Delaware & Raritan Canal, but it would have to have been reduced in width to less than 24 feet to get towed through the D&R). This was one of the last revenue timber rafts seen on the river. Unfortunately, the raft, comprised of heavy toggle timber, struck the dam at Wells Falls near the Union Mill and broke up. *Lambertville Beacon, April 17, 1913.* In 1917, a single raft appeared on the Delaware River en-route to Bordentown, and the D&R Canal with logs to be used for pilings.

Titusville wreck: A train of empty coal cars was wrecked at Titusville by a broken axle caused 20 of them to leave the track. Half of them fell into the D&R Feeder Canal that ran parallel to the Bel Del Railroad. The conductor was John Reaser, and the engineer was Abe Vanatta, both of Phillipsburg. *Belvidere Apollo, May 26, 1894.*

Toll Offices: were established at Lambertville, Trenton, Princeton, Kingston, Rocky Hill, and Bound Brook, Princeton being the main office. Harbor masters were stationed at the termini at Bordentown and New Brunswick. An entering boat was examined by the harbor master and a rough estimate made of her cargo. The boat would then pass on to Princeton where the captain presented a manifest of the goods and might be required to swear to its correctness. The tolls were then paid and a clearance given the captain, permitting him to leave the canal. Vessels not going as far as Princeton could clear at any other office. *From Indian Trail to Iron Horse, by Wheaton J. Lane*

Tolls: Transportation rates on the D&R Canal were very flexible, closely approximating what the traffic would bear. Despite the publication of toll schedules, it was no secret that a large proportion of its tonnage was carried according to special contracts made between the company and the shipper or freight line. The official tolls did not vary greatly from the list of 1846; coal 1 cent per ton mile; pig iron 1 cent; lime, sand, and iron ore, 4 mills; "superior" merchandise, 4 cents; and timber 1½ cents per mile per 100 cubic feet. *Hunt's Merchant's Magazine, Vol. Xvi, p. 115, & From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 266* To compete more effectively

with the coastwise trade, a distinction was made in coal shipments: those destined for New York paid 30 cents a ton to pass through the canal, while those going to the east of Hell Gate paid 20 cents. These charges were, of course, exclusive of transportation costs. The D&R Canal Company, however, supplied towing service on the canal at reasonable rates, as on the rivers. In 1842, for example, vessels were towed through at a cost of \$6 for a two-horse team, while those which required four horses were charged \$10.50. The practice of granting rebates or “drawbacks” to large shippers was quite common when they had other means of sending goods. *NJ State Gazette, 19 March 1842, & From Indian Trail to Iron Horse, by Wheaton J. Lane, p. 266-7* Various other lines also made agreements with the canal, some of them highly favorable to themselves. In 1841 an authorization was made by the executive committee of the Joint Companies for R.F. Stockton to employ four steam canalboats in carrying coal to points east of New York. Passage through the canal was to be toll-free for three years, after which half the regular rate was to be charged, Stockton at all times to pay the transit duties. This line ran for two years operating four iron steam propellers. To an investigating commission of the Legislature it was explained that the purpose of the grant was to encourage the consumption of anthracite in places where it had not yet come into general use. *Report of Commissioners, 1850, appendix, p. 22, & From Indian Trail to Iron Horse, by Wheaton J. Lane.* Other lines with termini in Baltimore, Philadelphia, Easton, Trenton, Princeton, New Brunswick, New York, Albany and Hartford also used the canal on a percentage basis. In 1850 their payments constituted about one-sixth of the revenue of the canal. *Neilson Papers, & From Indian Trail to Iron Horse, by Wheaton J. Lane.*

Towing on the Raritan River: The steamboat *BLANCHE PAGE* agreed to tow two Schuylkill canalboats, *CORNELIUS HAGGERTY* and *JOHN HAYS* loaded with anthracite coal, from New Brunswick on the morning of July 5, 1867, to New York, by way of the Raritan River and the Kills. On reaching the mouth of the river, inside of which there was good anchorage and a safe harbor, there was found outside a high wind and a heavy sea. The steamer, however, went out, and, not being able to cross the flats, the tide being ebb, took a circuitous route by the channel, going by South Amboy and down around the buoy at the tail of the flats, and so around to Perth Amboy. While making this passage, two of the canalboats were sunk by the violence of the sea and the dashing of the boats against each other. *Held*, that it showed a want of ordinary care for the steamboat to venture out with such a tow when she did. Note: the *HAGGERTY* was never raised. *Federal Cases Nos. 1,523 & 4, The BLANCHE PAGE, District Court, S.D. New York, May Term, 1870.* On Wednesday evening the tugboat *RED JACKET* took in tow two coal-barges at New Brunswick, and during the night proceeded toward New York. At 2 o'clock, while opposite Perth Amboy, the boiler of the tug exploded, tearing the boat to pieces and killing three men. Robert Brown, the pilot, was hurled into the air, and his body torn to pieces. The engineer, Daniel Thomas, of South Amboy, and a fireman named Strong, were almost instantly killed by flying fragments of the iron and woodwork. Three of the deck hands, though not known to have been killed, have not been seen, and it is supposed that they also are lost. The cause assigned for the accident is that the boiler was almost entirely empty, and upon its being filled with water exploded. The loss to the owners of the boat (tug) will probably be about \$25,000 or \$30,000. *New York Times, 9 September 1870.* On December 16, 1876, the *EXCHANGE* was one of 36 canalboats forming a tow which was made up in New Brunswick, on the Raritan River for New York. The tow started with the tug *BORDENTOWN*, a large and powerful side-wheel steamer, in advance, followed by two smaller tugs, *HARRY* and *WILLIE*, which were connected to the tow by four hawser lines. The *EXCHANGE* was the starboard boat on the hawser tier, which was formed of four large canalboats. The tow started out at seven in the morning. The day was fine, but cold.

During the forenoon the wind increased, and at ten o'clock it blew a violent gale. About that time the *BLUE BONNET*, a powerful propeller tug also belonging to the Pennsylvania Railroad, which had arrived at New Brunswick from New York after the *BORDENTOWN*'s tow started, and had been sent down river to assist it, overtook the tow, and took the place of the *BORDENTOWN*, being better able to keep the tow in the channel, because she presented less surface to the wind. The tow proceeded without accident till about eleven o'clock, when in turning at a bend in the river at a place called "Middle Grounds" one of the port hawsers broke, the tow sheered to port, and four of the boats and the tug *HARRY* got aground on the north bank of the river. The tow was completely broken up. The tug *WILLIE* got separated from the *HARRY*, and lay helpless in the river for want of a rudder, which she had lost a few days before. The wind and the tide carried the boats, which were still afloat, down stream, and the *EXCHANGE* broke away from the other boats in the hawser tier, and drifted down against *WILLIE*, and received an injury by the collision on her starboard side at and below the water line, the planks being broken and forced in. She was laden with coal. By the assistance of men from the tugs she was listed to port by shoveling the coal to that side, and the injury was temporarily repaired with oakum and tallow, and covered over. A board was afterwards nailed over the place, and in this condition, so far as that injury was concerned, she remained till her arrival at South Amboy. Meanwhile the *BORDENTOWN* had gone down the river to a place called "Crow's Mills." The *BLUE BONNET* took hold of the boats afloat as they drifted down, and reformed the tow, the *EXCHANGE* being still the starboard boat in the hawser tier; and the tow came down tail first to Crow's Mills without further accident. There they tied up at a pier, and waited for the flood tide, not thinking it prudent to attempt to go through the bridge below Crow's Mills till the change in the tide. Except near New Brunswick, where the new ice had formed, about an inch or two in thickness, the tow had met with no obstruction from the ice up to this point; but from a short distance below Crow's Mills to the bridge drift ice had become packed in so as to make the navigation with the tow difficult and dangerous. It was after dark when the tow left Crow's Mills. The *EXCHANGE* was still the starboard boat of the hawser tier. They started out with the *BLUE BONNET* and *WILLIE* lashed together, ahead, followed by the *BORDENTOWN* and the tow, now consisting of thirty-two boats. Most of the boats were what are called "chunkers," smaller than ordinary canalboats, and less strongly built. They had only got a few hundred yards from Crow's Mills when they got into the ice, and the *BLUE BONNET* found it impossible to push through incumbered with the *WILLIE* by her side and the tow behind. The *BORDENTOWN* therefore was cast off. The *WILLIE* was put astern of the *BLUE BONNET*, and these two tugs made their way through the ice to South Amboy, where the *WILLIE* was left. The objective of this movement was to get *WILLIE* out of the way. The *BORDENTOWN* then undertook to draw the tow through the ice alone, but had not proceeded far when the ice and the tide turned her around to starboard, and drove her against the starboard side of the tow. She struck violently against the starboard side of the *EXCHANGE*, and inflicted a serious injury to her near the stern and three or four feet from the bottom, partly forcing in the planks, and causing her to leak. The testimony of those who examined the *EXCHANGE* after she was raised shows clearly that this injury, which was the principal cause of the leaking of the *EXCHANGE*, was not caused by the ice, but by some blunt point or projection violently pressed and moved along her side, and it cannot be accounted for except as having been caused by this collision; and the evidence I think shows that it was caused by this collision with the *BORDENTOWN*. The tow was rescued from this immediate peril by the *BORDENTOWN*'s coming to anchor, and waiting for the return of the *BLUE BONNET*. After a while the *BLUE BONNET* returned, and she and

the *BORDENTOWN* succeeded in drawing the tow through the ice, and they arrived at South Amboy between eleven and twelve o'clock that night, without other accident, except that one or more of the hawsers broke while going through the ice. During this passage the *EXCHANGE* leaked, and the libellant was frequently pumping. At South Amboy the tow was brought around to be moored at a pier, and to be held there by the *BORDENTOWN*, the *BLUE BONNET* having cast off; and the tow swung round, heading towards New Brunswick, with the tide. The *BORDENTOWN* had just got her lines on the pier and made fast, when the captain of the *BLUE BONNET* called to the captain of the *BORDENTOWN* to know if he was all right. The captain of the *BORDENTOWN* replied that he was. The *BLUE BONNET* then started to go up river again to bring off the boats left aground, the intention being to leave the tow at South Amboy for the night, and proceed to New York in the morning. The *BLUE BONNET* left without any inquiry being made by anybody connected with the tugs as to the condition of the *EXCHANGE* or the other boats. About the time the *BLUE BONNET* left, the libellant, finding that his boat was taking water, hailed the *BORDENTOWN* and called for help. He continued to pump, but the water gained on him. He shouted again to the *BORDENTOWN* that his boat was sinking. They answered that they could not help him, and ordered him to cast off the lines, which was done, and they were fastened to the other boats in the tow. In twenty minutes to half an hour the *EXCHANGE* sank. Various acts of negligence are alleged and relied on by the libellant, – that the tow was too large; that the hawser lines were insufficient; that the *WILLIE* had no rudder; that the *EXCHANGE* was not fit to leave Crow's Mills that night, with so much ice in the river; that she was especially unfit, in her injured condition, to be put on the starboard side of the hawser tier, the most exposed place in the tow; that the *BORDENTOWN* improperly attempted alone to draw the tow through the ice; that the injuries to the *EXCHANGE*, from the effect of which she was lost, were caused by these and other acts of negligence in the management of the tow, and not by the ice; and that the *BLUE BONNET* was allowed to leave, and no inquiry made as to the condition of the tow, nor any attempt made to save the *EXCHANGE* by beaching her. The decree was for the libellant, with costs, and reference to compute damages. *Federal Case Nos. 5,448a and 5,448b, Gilooley v. Pennsylvania Railroad Co., District Court, S.D. New York, March 26, 1879.* (Federal Case No. 5,448b details the circumstances and conditions affecting the value of the claimed losses of the boat, contents of the cabin, and the cargo. As the saying goes, they made a Federal Case out of it!) In a later case in Admiralty, again involving the *BORDENTOWN*, Judge J. Brown writes: The libel in this case was filed to recover damages for the loss of the canalboat *J. H. GILLINGHAM*, with a cargo of 214 tons of coal. She was one of a fleet of 18 boats, in five tiers, in tow of the *BORDENTOWN*, from New Brunswick to the Stakes, near Jersey City, by way of the Raritan River and Kill Van Kull. She was in the head tier, the second boat from the starboard side. The tow was considerably belated, and passed New Brighton, in leaving the Kills, about half-past 6, on March 27, 1877. On coming out into the bay she encountered an ebb tide, and shortly afterwards a high wind from the north-west, which made the water considerably rough, so as to break over the bows of the head tier, and shortly before arriving at Jersey City the *GILLINGHAM* sank, bows first, from filling with water. Without entering into the details of the testimony the conclusions to which I have come are as follows: 1. The weight of evidence does not show that the time of passing New Brighton and coming out into the bay there was any such high wind or sign of rough weather as should charge the *BORDENTOWN* with negligence or carelessness in proceeding on her way, but that the high wind arose suddenly, and increased rapidly some time after she had got out into the bay, being at 9pm 23 miles per hour. 2. The progress of the *BORDENTOWN* was slow, –only about one mile an hour; and the evidence does

not satisfy me that after the high north-west wind arose there was anything she could have done better than to keep her course as she did. 3. The *GILLINGHAM* was an old boat; not stout or staunch, but weakened from age, and loaded within 15 to 18 inches of the water's edge, –several inches deeper than the other boats. 4. Prior to reaching Perth Amboy, she had been in the second tier. Upon some other boats being there left behind she was placed by those having charge of the tow in the head tier, against the protest of the libelant, but without any express notice that he regarded her as unfit to encounter the hazards of a trip across the bay in the head tier, or any objection to going on in that position. 5. The captain of the *BORDENTOWN* knew that she was an old and comparatively weak boat. 6. The immediate cause of her sinking was the chafing of the boats against each other in the rough water, starting and lifting her sheer-plank, causing her to leak and take in water, which came over her bows and on her decks faster than she could be kept clear by her pumps. 7. No other boat was injured among the 18 in tow of the *BORDENTOWN*, and none of the 12 others that were in tow of the tug *CAHILL*, which followed shortly behind, and arrived at the same station an hour later. From these principal facts, and others not necessary to be enumerated, I find that the defendants, knowing that she was an old and weak boat and more deeply laden than the others, in transferring the *GILLINGHAM* from the second to the head tier of boats, did not act with that reasonable and ordinary care which a prudent man exercises for the preservation of his own property, and which they were bound to bestow upon the libelant's boat, and were therefore chargeable with negligence in so doing. ...It is an ancient practice of admiralty to scrutinize closely claims resting on the loss of old or weak vessels. ...the owner of a barge, unfit for the trip or for the position assigned her on the tow, must be held required to show at least that he dissented to proceeding upon the voyage, in order to absolve him from his share of the responsibility in case of subsequent loss. Nor can it be suffered that old barges be run until they sink, and the whole loss be then charged upon the tug. Judgment may be entered for the libelant for one-half his damages, with costs, with a reference to compute the amount. *The BORDENTOWN, etc., District Court, S. D. New York, April 14, 1883.*

Towing Suspension: Several tugboats belonging to the Pennsylvania Railroad and employed in towing boats from the outlet lock through the Raritan River to New York, or towing freight floats from Jersey City, have been compelled to suspend operation for want of coal, the scarcity being caused by the strike at the mines. *Newark Daily Advertiser, May 12, 1875.*

Trackworkers Wreck occurred on 17 October 1903 about one-half mile south of the Washington Crossing Station on the Bel Del, alongside the D&R Feeder Canal. This rear-end collision of two work trains took more lives than any other on this line. In a heavy early-morning fog, the conductor of the standing train did not display a red lantern and the following train did not stop in time, causing a workmen's car to get telescoped. Twenty-two men were reported killed and 35 other received moderate to serious injuries. Four months to the day after the Trackworkers Wreck and only a few feet from the prior wreck, two coal trains collided head-on. A northbound train of empties failed to take the siding and a southbound loaded train hit it at nearly full speed. The engineer and fireman of the loaded train were killed. *Down Along the Old Bel Del, Warren F. Lee*

Trade through the D&R in 1866;

Coal from Schuylkill in boats	897,036 tons
Coal from Richmond (Phila.) In boats	716,955 tons
Coal from Richmond in sloops and schooners	37,139 tons

Coal from Feeder (via Lambertville ferry)	503,112 tons
Coal from Cumberland	127,958 tons
Timber	2,864,915 cubic feet
Lumber	16,362,237 feet b. m.
Grain & feed	3,379,088 bushels
Flour & corn meal	185,694 barrels
Iron	55,291 tons
Other merchandise	354,341 tons

Traffic Tie-up by Canal: Twelve trolley cars, six on each side of the State Street lock in Trenton were blocked by the passing of a canalboat today. *Sunday Advertiser, September 8, 1907.*

Train Hijacking Attempt: An attempt was made at Trenton about 11 o'clock on Friday night by a band of 30 tramps to take possession of a freight train on the Belvidere Delaware Railroad - they planned to run the train to Easton (actually Phillipsburg). The arrangements were overheard by a watchman of the railroad and information was communicated to the police. The marshal summoned a posse of police and went to Green Street, where the train was boarded. The gang of men were on board, and when they saw the officers all except five jumped off and swam across the feeder canal. They were pursued and fired upon, but escaped. The five men on the train were arrested and committed to jail. This was the only known attempt to hijack a Bel Del train. *Daily State Gazette, July 17, 1876; Belvidere Apollo, July 21, 1876.*

Trans-Jersey Ship Canal - Proposed: In 1894, A survey party of 17 Corps of Engineers personnel ran lines for a proposed deep water canal from Bordentown, on the Delaware, east of Trenton, Princeton and New Brunswick, to Sayreville on the Raritan River. The 59-mile feeder and main line route was designed with six locks, three near each end and a proposed lake south west of New Brunswick. Total mean lift was 56 feet and alternate designs were for 20 and 28-foot depths. Estimated costs at the time were \$14,264,600 and \$23,894,700 respectively. It generally ignored the old D&R route which was 11½ miles longer and meandered considerably. Its undeniable merits were offset by obstacles of logistics and ecology and by opponents in the power struggle which was shaping the transportation patterns of the period. *The District: A History of the Philadelphia District, U.S. Army Corps of Engineers - 1866 - 1971.* Also see "Atlantic Deeper Waterways Association."

Trap Rock Industries acquired the Kingston quarry in 1966. Quarrying along the D&R Canal at the Kingston site in southern Franklin Township had begun before the 1850's. During the 1860's paving blocks and dimension stones were produced for street and sidewalk paving and construction. Miles of streets in Newark and Jersey City were paved with blocks from this quarry. In the early days much of this product was moved by canalboat, but the railroad later took over and now all transport is by road. After the Civil War the site became Howell's Quarries and later was known as the Delaware River Quarry Company with 300 employees, including 250 Italian immigrants. At this time a narrow gauge railroad was utilized to move product on the site and an 0-4-0 tank type steam locomotive was employed. In the 1950's it was known as Kingston Trap Rock, which was taken over by the Stavola family in 1966. The headquarters of the family-owned Trap Rock Industries remains at Kingston and today they have several locations. They are the largest producers of crushed stone and hot-mix asphalt in the

northeast. *The Delaware and Raritan Canal at Work*, by Linda Barth; *Franklin Township*, by William Brahma and *The Franklin Township Library*; & www.traprock.com

Trenton was established at the Falls of the Delaware River or upper limit of tides and navigation. The first settlement was by Quakers in 1679. By 1719, the town adopted the name "Trent-towne," after William Trent, one of its leading landholders. This name was later shortened to "Trenton." During the American Revolutionary War, the city was the site of George Washington's first military victory. On December 26, 1776, Washington and his army, after crossing the icy Delaware River north of Trenton, defeated the Hessian troops garrisoned there in the Battle of Trenton. After the war, Trenton was briefly the national capital of the US in 1784. It was considered the permanent capital, but the southern states favored a location south of the Mason-Dixon line. Trenton became the state capital in 1790 and was incorporated in 1792. During the 1812 War, the preliminary hospital facility for the US Army was at a temporary location on Broad Street. The city witnessed an industrial boom shortly after the canal was opened; her population increased fourfold within a few years, and iron works, ceramic factories, and many other businesses developed during this period. Trenton was a manufacturing center in the late 1800's and early 1900's. As built, there were only two canal basins in Trenton: Blackfan's on the feeder and one at State Street on the main canal. As many as ten canal basins were built to serve Trenton industries by the 1850's and the Feeder Canal delivered much coal after the connection was made to the Delaware Canal in 1847. The arrival of railroads shortly after the canal added fuel to the growth. One relic of the era is the slogan developed in 1917, "Trenton Makes The World Takes," which is displayed on the Lower Free Bridge (just north of the Trenton-Morrisville toll bridge). The city became a hub of trolley lines connecting it with the north and south parts of the state as well as Pennsylvania. It had one of the two "Grand Union" street car junctions (the intersection of State and Broad Streets, where a trolley traveling from any one of the four compass directions could be switched any one of the other three) in the state. Interestingly, Trenton had four separate trolley track gauges: www.en.wikipedia.org Also see "Coalport" and "First New Jersey Brigade."

Trenton and Lehigh Transportation Co. ...Was incorporated to transport goods, wares, and merchandise from White House (Haven?), PA, to Philadelphia and New York. Capital consists of eleven barges. *Daily True American, February 28, 1849* ...Was chartered by the last legislature with the canalboats *BUENA VISTA*, *GENERAL SCOTT*, *GENERAL TAYLOR*, and *ROUGH AND READY*, to provide service between points on the PA Canal and Trenton as well as NY and Phila. *Newark Daily Advertiser, May 1, 1849*.

Trenton & Mercer County Traction Co. car #256 ran into the Feeder Canal at the Prospect St. Bridge which was open at the time. Cause of the accident was said to be due to slippery rails on the inclined track and no sand to help the car stop. Seventeen passengers departed by the rear door. Motorman Chester T. Irons was slightly injured but he managed to free himself from the front vestibule by breaking the glass door and swimming up to the embankment. *Daily State Gazette, September 22, 1911*. The Trenton Passenger Railway was formed when the Trenton Horse Railroad and City Railway were merged in 1891. In 1898 the Trenton Passenger Railway was merged with other local companies to become the Trenton Street Railway. In 1910 the Trenton Street Railway Co. and its various subsidiaries were leased by the Trenton and Mercer County Traction Co and that became their new name. This consolidated streetcar operator in the Trenton area reached its peak in 1928. At this time their various lines

crossed the D&R Main Canal at Perry Street, East State Street, and South Broad Street. Their lines crossed the Feeder Canal at Warren Street, Prospect Street, and went under it at Sullivan Way. *Street Railways of Trenton, by Barker Gummere.*

Trenton & New Brunswick Railroad Co.: Sixty horses and mules with nearly a score of men came to this city last night to be used in building the new road of the T & NB RR Co. between this city and the State Capital. The outfit belongs to general contractor J.J. Strang of New York City who has been given the contract for making the roadbed. The animals were taken to John F. Boyce's stables at the Outlet Lock, and it was suspected that they would be commenced near this city at once if the weather would permit, and it is possible that under favorable conditions it will be commenced within the next week. There are 23 mules of road to be built and 600 men will be engaged on the work. Men from this vicinity as well as from other places will be employed. It is necessary to have the work completed by July 1 as the road is to be in operation by that time. *New Brunswick Daily Times, 11 February, 1902.*

Trenton Aqueduct over Railroad (or Tunnel Under): We learn that the Railroad Company have secured all the land necessary for the alteration of the grade and direction of their track, from the Delaware Bridge to the site of the proposed new depot, on the Assanpink, east of the canal, and that the work on the new buildings will be commenced shortly. The new track will be carried under the canal at a point near Field's foundry, rendering necessary a lowering of the grade from the South Trenton depot to that point. The new passenger depot will be on the north, and the freight depot on the south side of the creek... *Gazette and Republican, May 20, 1859.* We learn that the railroad company intend, besides carrying the railroad track under the canal, to construct a tunnel for a street, by which wagons can also get from one side of the canal to the other by going under the instead of over. This will be a great convenience and relief, as by the frequent passage of vessels, the bridges now cause considerable delay and loss of time - to say nothing of loss of temper and consequent profanity. *Gazette & Republican, May 31, 1859.* Workmen are engaged in raising the tow-path bank of the canal, below State Street lock. It is intended to raise the bank on the whole level two feet higher, in order to make room for the culvert underneath the canal for the passage of the railroad. The gravel used in this work is dug from the proposed route of the new track, east of the canal. *Gazette & Republican, June 29, 1859.* Captain Mulford informs us that the tunnel under the canal will be completed by the first of March. The weather has been against them so much that the last day or two the operation was suspended. This is probably one of the most extensive undertakings we have had in Trenton for a number of years, and will offer work for a number of men most of the summer season. *Daily True American, February 4, 1860.*

Trenton City Museum is located in Ellarslie Mansion, an Italianate villa built in 1848. The mansion is the centerpiece of Cadwalader Park, which was designed by the famed architect Frederick Law Olmsted, whose most famous work is New York City's Central Park. Both the mansion and the park are along the east side of the Feeder Canal where at one time visitors could swim in its waters. The museum houses a fine collection of art and artifacts related to Trenton's historical and cultural past and present. Permanently on display in the second-floor galleries is a highly regarded collection of tableware, sanitary ware and art-ware produced in the 19th and 20th centuries by Trenton's prolific ceramics industry. www.ellarslie.org

Trenton Freeway or US Route 1 Bypass was built mostly in the bed of the abandoned canal in the Trenton area. The canal in that area was initially filled in under a Works Projects Administration effort. Later it was all dug out and made much deeper than the original canal so traffic could go under important city streets. North of Feeder Junction the new highway was built over the canal and the canal water was placed in a concrete culvert to carry the flow to the balance of the canal north of that point.

The **Trenton Horse Railroad Co.** was organized and incorporated in 1859. Construction was authorized on 28 July 1863; the directors of the Camden & Amboy Railroad agreed to buy a majority of the stock offering; streets were to be paved with “good boulders”; and motive power was to be by either horses or mules. They began operations on October 27th of the same year with two horsecars. The main line of the horse railroad crossed the D&R Canal on the East State Street bridge. Timothy Field, president of the Trenton Horse Railroad from its beginning, resigned in June 1878 because of ill health. He was succeeded by Clifford B. Rossell, Superintendent of the D&R Canal. By this time most of the directors were also connected with the Pennsylvania Railroad which owned a majority of the capital stock. Horse cars were rehabilitated, one at a time, in the Jersey City shops of the Pennsylvania Railroad in 1879 and again in 1883. Trenton Horse Railroad Co. was purchased in 1886 from the Pennsylvania Railroad by General Lewis Perrine through gradual stock purchases. The company later became part of the Trenton Passenger Railway. *Barker Gummere, Street Railways of Trenton.*

Trenton iron and steel industries included: American Bridge Co., American Steel & Wire Co., Bird and Weld Foundry, Field’s Foundry, New Jersey Steel and Iron Company, Phoenix Iron Co., John A. Roeblings’ Sons Co., Trenton Malleable Iron Co., Trenton Iron Co., United States Steel Co., and others.

Trenton Iron Company (originally called the South Trenton Iron Co.) Took advantage of the D & R Canal and the water power which it offered. A large wire and rod mill was set up first, and a rolling mill for rails immediately afterward. Machinery was delivered by canalboat from New York. Trenton Iron Co. had a related firm, Cooper, Hewitt & Co. (Cooper's Furnace) which was built along the Morris Canal in Phillipsburg in 1848. The two furnaces erected there were the largest in America at the time. The anthracite coal for the furnaces came from the Lehigh Coal & Navigation Co. by canalboat. The iron was brought via the Morris Canal from their mines near Andover. The pig iron produced was moved to their Trenton Iron Works rolling mills by canalboat, for a few years, until 1854, when the Belvidere-Delaware RR was extended to Phillipsburg. The furnace output traveled a very short distance on the Morris Canal, the boats then crossed the Delaware River on a cable ferry, and entered the Delaware Division Canal. They were then hauled down to the outlet lock at New Hope, PA where they re-crossed the Delaware on another cable ferry to enter the D&R Feeder Canal, and completed the trip to Trenton on the latter waterway and the D&R main canal. Parts of three canals and two river crossings were needed for this short trip, but it would have been impossible by horse and wagon. The Trenton Iron Co. was the first American producer of structural iron beams and girders for architectural use and one of the earliest US producers of railroad rails. Their plant was enlarged and by 1848 also produced railroad spikes and rivets. The partners could pride themselves on having the best-rounded ironworks in America. One of their buildings survives in Trenton. *Iron Traffic on the Morris Canal I, by Kenneth R. Hanson in Canal Soc. of NJ Towpath Post, Vol. 5, No. 2, Winter 1974-5.*

The works of the Trenton Iron Company were originally built in 1845. Until 1905 they were equipped with 3 heating furnaces, one 3-ton hammer, one 12" train of rolls, and one wire-rod mill containing 2-12" and 2-10" trains of rolls. This equipment was dismantled in 1905. The works in 1908 were equipped with 700 wire drawing blocks and 100 trains of 6 to 12" cold rolls, the latter for manufacturing flat wire; product, all sizes of common and high-grade iron and steel wire; also liquor finished, tinned, and galvanized wire; also rope wire and piano wire. A department for the manufacture of wire rope and steel cable is also connected with the works. Total capacity of the works: 17,000 tons of wire, 3,400 tons of wire rope and wire cable; and 2,700 tons of cold rolled flat wire. *Directory of Iron and Steel Works of the US and Canada, 1908.* The Trenton Iron Co. developed a large facility at the east ends of Federal and Cass Streets, near the Delaware River in the late 1850's. This site is now the location of the Trenton baseball stadium. The Trenton Iron Co. Railroad was built to serve their facility. The Trenton Iron Co. later became American Steel and Wire Co. then American Bridge Co. and eventually a part of United States Steel Corporation. Also see Trenton Iron Co. Railroad.

The **Trenton Iron Co. Railroad** connected the Trenton-Bordentown Branch of the Camden & Amboy Railroad with the iron company's plant near the Delaware River. This railroad crossed the D&R Canal on the bridge originally built to allow the Philadelphia and Trenton Railroad to access the C&A's "Steam Depot" near East State Street. The canal bridge was located south of Assanpink Creek and north of the later location of the canal aqueduct over the depressed C&A main line. The line went south through the original Trenton Iron Company plant and crossed Hamilton Avenue, then crossed South Broad Street, curved west and paralleled but to the north of Federal Street towards the Delaware River and the TIC plant. Also see Philadelphia and Trenton Railroad.

The **Trenton Passenger Railway** was formed when the Trenton Horse Railroad and City Railway were merged in 1891. In 1898 the Trenton Passenger Railway was merged with other local companies to become the Trenton Street Railway. In 1910 the Trenton Street Railway Co. and its various subsidiaries were leased by the Trenton and Mercer County Traction Co and that became their new name. *Street Railways of Trenton, by Barker Gummere.*

The **Trenton - Princeton Traction Co.** was one small leg of the triangular "Johnson Lines" system planned in the early 1900's. The grandiose planned system would have connected Allentown, PA with New York (not built) and Philadelphia (which was built and survived as Lehigh Valley Transit's *Liberty Bell Route* until 1951), as well as a Philadelphia to New York leg (of which the Trenton - Princeton would have been a part). Their trolleys crossed the D&R Feeder Canal on the North Willow Street, Trenton bridge on their way north to their Princeton terminus on Witherspoon Street at Nassau Street. The Trenton - Princeton continued to operate cars to the West Hanover Street, Trenton until 31 July 1939 when the line was cut back to North Willow Street at Pennington Avenue. Trolleys were abandoned on 1 November 1940 but the Reading Railroad continued to service on-line freight customers for many more years. *Street Railways of Trenton, by Barker Gummere.*

The **Trenton Public Library**, the first public library in New Jersey and one of the oldest library systems in America, witnessed both the American and the Industrial Revolution. Dr. Thomas Cadwallader, a friend of Benjamin Franklin and co-founder of the Philadelphia Library,

gave 500 pounds to establish the library in 1750. The library was initially a subscription library - gentlemen of good character bought stock and paid a yearly fee to join; stockholders could check out books and vote on library policies. The Trenton Library Company was largely destroyed by the British Army during the Revolutionary War, but was reorganized a couple of years later and going through many changes. In 1900, the Trenton Library became a tax supported free public library and the present building was constructed two years later. The size and staggering diversity of their Trentoniana Collection has earned a reputation among researchers and genealogists as the premier collection devoted exclusively to Trenton's rich past. The Academy Street location of the present building is two blocks west of the former location of the D&R Canal. www.trentonlib.org

The **Trenton Sea Scouts** made frequent trips through the D&R Canal in their 60-foot yacht *BALLANTRAE* which was powered by a two cycle Fairbanks-Morse semi-diesel engine. The yacht was donated to the group by Robert C. Roebling. After the canal closed the yacht operated on the Delaware River.

Trenton Street Railway Company (TSR) was formed by the merger of the Mulberry Street Passenger Railway, the Pennington Avenue Passenger Railway, the Ewing Passenger Railway and the Trenton Passenger Railway on June 29, 1898. They were the major trolley operator in the Trenton area and their lines crossed the D&R Canal at many points. Ca. 1908 TSR was controlled by the Interstate Railways Company. The successor to TSR was the Trenton and Mercer County Traction Co.

Trenton Transit Co. was the successor to the Trenton and Mercer County Traction Co., which operated the streetcars, and Central Transportation Co., which operated buses in the Trenton area. The merger was facilitated when the New Jersey law prohibiting street railways from operating was changed in 1929. The last streetcars of the Trenton Transit Co., operating over D&R Canal bridges, were abandoned on 9 December 1934, just one year after the canal closed. One Trenton Transit trolley survives: it was double truck snow sweeper #51; sold to Third Avenue Railway (NY, as their #82) in December, 1934; resold to the Toronto Transportation Commission and renumbered S-39; became Transport of New Jersey #5246 in 1973; and is the last surviving Trenton car in electric railway service. Interestingly, #5246 operated on the Newark City Subway, which was built on the right-of-way of the former Morris Canal. It remains in the ownership of NJ Transit at this writing. *Street Railways of Trenton, by Barker Gummere*

Trenton Transportation Co. a/k/a Dolphin Line, successor to the Merchants Transportation Co. after 1914 and final operator of the following vessels which frequented the D&R Canal for decades: *F.W. BRUNE, JOHN W. GARRETT, MARTHA STEVENS, TRENTON, SPRINGFIELD*, and others. The firm's NJ charter was forfeited in 1929. "At half-past twelve o'clock this morning, the engineer at the State-Street lock discovered a fire among some crates at the freight depot of the Trenton Transportation Company. He promptly gave the alarm, and the firemen were quick to respond, but before their arrival, he, with the assistance of the watchman on the premises, succeeded in quenching the flames, although the fire had already communicated to the building. The timely discovery prevented what might have been a serious conflagration." *Weekly State Gazette, May 28, 1874.* The Trenton Transportation Company has three freight steamers plying between Philadelphia and Trenton. Merchandise purchased in either Trenton or

Philadelphia can be delivered the same day it is bought. These steamers enter and leave the canal at Bordentown. Two years ago this same line had three steamers plying between Trenton and New York. Some of their steamers were condemned, others sunk and have never been replaced. Roebing Sons Company, of Trenton control this line and for the last two years they send a steamer loaded with wire through to New York about once a week, but no way freight is accepted and the steamer makes no stop between Trenton and New York. There is a good opening for a line of freight and passenger steamers that would run between Trenton and New York daily or connect with the Johnson Line at New Brunswick and stop at all way points for the receipt and discharge of shipments, viz: Trenton, Port Mercer, Princeton, Kingston, Rocky Hill, Griggstown, Vanduyn's Bridge (Blackwells Mills), Millstone, Weston, Ten-Mile Lock, Bound Brook, Four-Mile Bridge, New Brunswick, New York. A line of steamers that would do this would get more freight than they could carry. The freight rate need not be less than the railroad rate. The satisfaction and convenience of getting shipments the same day as bought or even the next day, would be all the public would ask. I am of the opinion that if the right parties would take hold of this that it would be a success financially and a great accommodation to all town and villages along the line of the canal. It might be asked why the Trenton Transportation Company steamers do not do as suggested above. Well I do not know, but Roebings control the present line and the Pennsylvania Railroad is very accommodating to them, putting in sidings, switches, etc., and rushing their shipments through to destination by rail. *A letter to the Editor of New Brunswick Daily Times, February 27, 1911, by "ONE WHO KNOWS".* A syndicate of Trenton men, headed by W.C. Mattlack, General Manager of the Potteries Selling Co., took over the Trenton Transportation Co., operating boat lines on the (D&R) canal and Delaware River between here (Trenton), Philadelphia and New York. The service has for years been w=owned by the John A. Roebing Sons Co. *New York Times, 13 February 1914.*

Trenton Transportation Co. difficulties in D&R Canal operations were experienced as follows: Early in October, 1903, navigation was closed for several weeks on account of damage done to the feeder above Lambertville, by the freshet in the Delaware River. Cold weather set in unexpectedly in December, 1904, and the barges were caught in the ice and could not be freed for several weeks. In 1905, the city of New York acquired ownership and tore down all of the old piers, and the company was obliged to move a number of times before it could find a permanent location. This all meant additional expense (and inconvenience for customers). On November 24th, 1906, navigation was closed for a time because of a break in the canal at Clarkville, NJ. The bridge of the NY & Long Branch Railroad Company, across the Raritan Bay broke down on September 11th, 1907, and the firm was obliged to discontinue their service between Trenton and NY for nearly three weeks on account thereof. The company was put to an unusual expense during the year 1909, and suffered severe loss because of the sinking of their barges, *MARTHA STEVENS*, on July 20th, and the *DELAWARE*, on July 28th, 1909. Navigation on the canal was closed on November 20th, 1909, or a month earlier than usual. And so it has been, year, after year. Terminal charges and general expenses continued, and (there was) no revenue from the barges to act as an offset. The company owned the steam barges *MARTHA STEVENS*, *F.W. BRUNE*, *JOHN W. GARRETT* and *RARITAN* and the iron-hull barge *IANTHE*. It is proposed to operate the *BRUNE* and *GARRETT* between Trenton and Philadelphia, by running a daily boat to each city; the *RARITAN* will be held in reserve as a spare; *STEVENS* will be used for bulk cargoes; the *IANTHE* sold, and the regular service between Trenton and NY will not be resumed because of the tolls, high terminal charges, and the excessively high rate

demanded by laborers for handling freight in NY. As an example: Freight receipts during 1908, to NY, were \$32,960.19; from NY, \$24,962.78; total \$57,922.97; and labor charges for NY labor necessary to handle this freight, were \$8,991.43.

Trenton Water Supply Canal had no connection with the D&R Canal and was not used for navigation purposes. It supplied water power to Trenton mills and industries via a canal which took water from the Delaware River at Scudders Falls. It has been abandoned and eradicated.

Trinity Cathedral, Princeton is the owner of Ivy Hall, the former office building which the D&R Canal Company used about 1855. It was designed by John Notman and built in 1846 for Princeton's abortive attempt to create a law school. The canal company moved out after the United New Jersey Railroad and Canal Company properties were leased to the Pennsylvania Railroad in 1871.

Trolley Cable Cut: Trenton Street Railway's entire system thrown out this morning and all walked. Big Iron Propeller boat was the cause. Main power cables that cross the bed of the D&R Canal at Perry Street bridge were severed by the propeller of the boat at 5am. Since this is the hour for the commencement of daily operations no cars could be sent out. A big force of men was sent to the scene hastened by Superintendent Hurley and service was resumed by noon. *Trenton Evening Times, November 3, 1902.*

A Trolley - Train Collision occurred at the Perry Street crossing, adjacent to the D&R Canal in Trenton. As a result of this wreck, which took place when the rear end of a string of cars pushed by a locomotive struck the trolley car, the motorman, John Hagerty, was thrown out of his car upon the rails and killed. *Daily State Gazette, November 20, 1900.*

Trolley Trouble: Two summer cars got fast on the Perry Street canal bridge on Saturday afternoon and delayed travel for nearly half an hour. One of the cars becoming derailed caused the trouble. *Daily True American, April 14, 1884.*

Troy and Philadelphia Iron Steam-Boat Line operated "to Philadelphia direct from Troy, via D&R Canal. (No Transhipments.)" in 1846. Geo. W. Aspinwall, foot of Dock Street, Philadelphia was the chief agent.

Troy and Western Line: John Moore, Captain of the boat *C. SMITH*, belonging to the Troy and Western Line, and his wife were drowned on Monday night by falling off the boat. The captain was intoxicated and was wrestling with his wife trying to force her into the cabin when they fell over. Three small children were with them on the boat, who have been properly taken care of. *Daily True American, December 22, 1858.*

Tub Race: The Lambertville Tub Race with eight contestants took place in the canal along the Bel Del from Delaware to Coryell Streets. Michael Coombes won the contest; he received \$100 worth of cigars. Another tub race, also with eight contestants, was held in the canal several days later on June 9th. In the second race William Hammer, the winner, received 100 cigars. *Lambertville Beacon, June 5, 1880, Looking Backward, June 17, 1909.*

Tucker, William, of Bound Brook purchased the 100 ton sailing schooner *HARRIET ANN*, Captain William Ashmore, which he advertised for freight service between Bound Brook and New York weekly late in 1836.

Tugboats Replacing Mules: The canal has a number of tugboats which take the place of horses (mules?). Look for steam road carriages before long. *Daily State Gazette, November 13, 1872.*

Union Forge: Three boats consigned to the Union Forge have been interfered with by the cold weather. One boat loaded with coal is caught somewhere in the Chesapeake canal or bay; another lies at Bound Brook, loaded with old iron, while a third, also containing iron, is now unloading at South Amboy. The last named was loaded at Hunters Point, NY and beside trouble with the ice had the misfortune to collide with another boat, and had to be abandoned in a sinking condition. Wreckers, however, saved her, and after being rewarded for their trouble, the Pennsylvania R.R. Co., took charge of the boat, and landed it at South Amboy, from which the iron will be shipped by rail. Mr. Willard thinks the other two cargoes will also reach their destination. *Winter at the Locks, Bordentown Register, December 17, 1880.*

Union Line a/k/a Union Steamboat Line, founded by James Alexander Stevens and Thomas Gibbons in the 1830's.

Union Steamboat Line a/k/a Union Line.

Union Transportation Line, New Brunswick Canal & Steamboat Transportation Co., Proprietors, "by Railroad Across New Jersey" per several freight bills 1837 to 1841. This operation used the C&A RR across NJ and utilized steamboats to connect with NYC and Philadelphia.

U.S. Army: The entire 42nd (Rainbow) Division, including the 168th Iowa Regiment that gave a concert on Bridge Street in Lambertville while waiting for their train to move on, was transported over the full length of the Bel-Del. The 10,000 men that comprised the division were carried in seven sections of 20 cars each. They were en-route to a staging area on Long Island where they trained briefly before embarking for the battlefields of France. *Lambertville Beacon, September 5, 1917.*

U.S. Army Corps of Engineers, Philadelphia District: The Corps of Engineers was established in 1776. At first their work was focused on the construction of defense forts. The Philadelphia District was established in 1866, based on the watershed system of the Delaware River and oriented toward water resources planning. This included aids to navigation and channel dredging. From 1836 to 1897 total expenditures of federal funds for improvement of the section of the Delaware River from Trenton to Philadelphia were \$119,479.21. This primarily benefitted traffic to and from the D&R Canal as it's goal was a river channel depth of seven to 8½ feet above Philadelphia. *The District: A History of the Philadelphia District, U.S. Army Corps of Engineers - 1866 - 1971.*

U.S. Coast Guard operated patrol boats, gunboats, section patrol boats, etc. through the

D&R Canal. Circa 1930 the U.S.C.G. apprehended a rum runner was stopped at D&R lock #13 and the liquor was confiscated. In the process, quite a bit of the cargo mysteriously disappeared as canal workers “unloaded” the vessel. *J. Seward Johnson, letter to editor dated April 18, 1974 and John B. Peach.*

U.S. Lighthouse Service was documented (photographed at Griggstown) operating through the D&R with their steam tender *ALTHEA*.

U.S. Marshals apprehended a pile driver vessel just as it was about to exit the D&R at New Brunswick in 1907. It was involved in a “hit-and-run” accident at Trenton in which it damaged a canalboat owned by Charles E. Gallagher.

U.S. Naval Academy racing shells and participants were transported to Princeton on U.S. Navy Submarine Chaser (*S.C. No. 440*) for crew competition with Princeton University in 1923.

U.S. Navy operated submarine chasers, torpedo boats and at least one submarine was towed through the D&R: Professor John Holland’s sixth vessel, which became the *USS HOLLAND*, the first submarine in the U.S. Navy. U.S. Navy *PICKET BOAT NO. 6* accompanied the tugboat *JOHN T. JENKINS* towing the new Navy torpedo boat *STROMBOLI* through the D&R to Hampton Roads on 11/19/1864. *Daily State Gazette*. The U.S. torpedo boat *CUSHING* arrived at the outlet of the D&R Canal about 7 o’clock Monday evening, and remained there until 7 o’clock next day. She was on a test of speed from the Brooklyn Navy Yard to Washington. The *CUSHING* had to contend with ice but her sharp prow cut through it without difficulty. *Bordentown Register, 20 December 1895*. Other torpedo boats which traveled through the D&R in 1898 included the *GWIN*, *TALBOT*, and *WINSLOW* a/k/a torpedo boat No. 5. “The United States (Navy) torpedo boat *GWYN*, en route from the Brooklyn Navy Yard to the coast of Cuba, passed through the canal on Sunday morning. It was on its way to join Sampson’s fleet and was manned by a crew of eighteen men. Two eight-inch rapid fire guns were mounted upon her, one at the bow and the other at the stern. The journey is being made inland as far as possible, and will take about seven days to complete.” *Bound Brook Chronicle, July 1, 1898*. “Two torpedo boats have passed through the canal during the past week. The *GWIN* west east on Saturday and the *TALBOT* attracted attention on Tuesday.” *Bound Brook Chronicle, Sept. 9, 1898*.

U.S. Quartermaster Corps. took over many vessels during the Civil War and many operated through the D&R. In 1861 a flotilla of fourteen steam canalboats were employed to transport 3,000 New Jersey troops and supplies south to the defense of the Capital at Washington, D.C. During the conflict, vessels from the Erie, Champlain, and other canals carried wartime supplies south to the battlefield. The steam canalboat *F.W. BRUNE* had a splendid Civil War record carrying troops south from NYC and injured soldiers north. Another steam canalboat with Civil War service was the *ELLEN S. TERRY*, which had all the improvements of the day and was looked upon as advanced inland freighting vessel. She proved to be a good investment for the owner O.G. Terry of Hartford.

U.S. Railroad Administration took over operation of the D&R canal in 1918 including the steam tug *WEST JERSEY* and four gasoline tugs. “Government Will Run Delaware and Raritan: Control of Jersey Waterway to Be Assumed for (by) U.S. Railroad Administration July 15, 1918. *Newark Evening News, July 11, 1918*. Note that the Railroad War Board operated the nation’s

railroads between December 26, 1917 and February 29, 1920, under the direction of William G. McAdoo, President Wilson's son-in-law.

U.S. Route 1 crossing of the D&R Canal at Baker's Basin, necessitated a new bridge in 1931. Since the angle of intersection of the canal and the highway is 24°, the bridge required 110-foot steel girders. It was only used two years before the canal was abandoned.

U.S.S. SAFFRON: The tug-of-war *SAFFRON*, on her way from Norfolk to New York, passed through the D&R Canal yesterday and stopped at Trenton until daylight. She is under the command of Ensign Daniel Merrill and has a crew of two engineers - Samuel D. Edwards and James Boyd - and sixteen men. She has lately been engaged in clearing the James River of torpedoes and carries a twelve pound howitzer. This tug was the first that went up the Dutch Gap Canal and returned. *Daily True American, June 8, 1865.* Note: *SAFFRON* was built on the D&R Canal at New Brunswick in 1863 as the *JOHN T. JENKINS*, a wood hull, steam powered, screw propelled, vessel of 73 gross tons. After her Civil War service she was re-documented as the *CLIFTON* and worked around New York Harbor until she was lost in 1885.

U.S. Steamboat Inspection Service *SIWASH*, a wood hull, gasoline engined, 56-gross ton, 70-foot vessel with a crew of 2 officers and 4 crew members passed through the D&R in 1929.

Albert **Vail** developed the telegraph in Morristown, NJ in collaboration with Samuel F.B. Morse, and one of its earliest commercial applications was on the D&R Canal in 1846, where it was used to expedite boat traffic, control water levels, and to catch canal vessels speeding over the 4.5-mile-per-hour limit. "Instructions Respecting Expresses on the D&R Canal" was published by the D&R Office of the Superintendent at Trenton on March 1, 1888. "Expresses" apparently referred to priority telegrams and the instructions directed to whom these messages would be sent in event of various canal stoppages or other disruptions. It ordered: "The express must be started without a moment's delay, whether *day or night, rain or shine.*" At the time, Frank Ellmaker was Superintendent and Mr. H.W. Dunn was Ass't Sup't.

William Kissam **Vanderbilt, Jr.** with his wife and their guest William Barton, all of New York, visited Trenton in 1907 while passing through on the D&R Canal in his famous steam yacht *TARANTULA*. The 28-knot craft had a captain and a crew of eighteen. They were on their way to Jamestown and the Exposition. *Trenton Times, May 17, 1907.* This "palatial" yacht passed through the D&R again on July 10, 1911 en-route to Philadelphia. "This was one of the speediest water craft that ever passed through Trenton. One hundred feet long, built entirely of steel, painted a battleship grey, it attracted many persons to the State Street Canal lock. Some were of the opinion that it was a (former?) U.S. torpedo destroyer. Mr. Vanderbilt, the famous millionaire, was not aboard." *A Trenton Newspaper.* It surely passed through the canal on many other occasions as well. Vanderbilt was vice president, a director, and chairman of the board of New York Central Railroad for many years.

Voyage of The Paper Canoe, by Nathaniel H. Bishop describes the 2,500-mile trip he paddled from Quebec to the Gulf of Mexico during 1874 & 5. Six pages are devoted to his passage through the D&R.

Charles E. **Wager** owned and operated the tugboats *HERBERT WAGER*, and *TENA WAGER* between New Brunswick and So. Bound Brook in the final years of the D&R.

“Waist” of New Jersey: is defined as the broad, shallow strip of land between Trenton and New Brunswick. It has always been a prime avenue of communication in America between New York and Philadelphia. First there were the stagecoach lines operating on the early turnpikes including the Kings Highway and the Lincoln Highway. Next came the D&R Canal and the Camden and Amboy Railroad. The C&A became the great Pennsylvania Railroad and is currently known as the Northeast Corridor, primarily used by NJ Transit and Amtrak, with up to 500 trains per day. For a few decades the Trenton and New Brunswick Railroad, which became the Public Service Railroad *Fast Line* was a less-than successful interurban trolley route across the “waist.” Freight moves in great volumes on the West Trenton Line, now operated by the CSX Railroad system, formerly the Reading Railroad which operated their *Crusader* trains and hosted the Baltimore & Ohio Railroad trains (famously known as the *Royal Blue* route) “Linking thirteen great states east and west via Washington, D.C.” U.S. Route One and the NJ very busy Turnpike also use this corridor. Today the D&R Canal route is a key link in the National Recreational Trails system.

Wales Hard Coal (about 1,200 tons) went through the D&R Canal bound for New York in Nov., 1902. The coal was brought to Philadelphia on a big ship and trans-loaded into canalboats. One of the boats, the *GEORGE B. ROBERTS*, when she arrived at Bordentown carried 275 tons, 35 of which had to be unloaded as the *ROBERTS* drew 8 feet of water and the canal admits only vessels of 7 feet draft. *Bordentown Register, November 7, 1902.*

John Wannamaker and family: owned the twin-screw yacht, *NIRVANA*, which went through the D&R Canal in the final years. This 112-foot, 22.3-beam steel vessel was built in 1924 by George Lawley & Son Corp. at Neponset, MA. She was powered by twin Winton, 6 cylinder (8" bore x 11" stroke) gasoline engines similar to those installed in the Erie RR self-propelled doodlebugs. *NIRVANA* had a crew of 11 and weighed in at 236 gross tons.

Washington Crossing on the D&R Feeder Canal was so-named because it was there that General George Washington, with 2,400 troops, crossed an ice-choked Delaware River on Christmas night, 1776, to begin a desperate venture. Their mission was to march over eight miles through freezing rain and snow on the gamble that they could surprise and defeat a garrison of 1,400 well-equipped and trained Hessian mercenaries in Trenton. That they succeeded is one of the great feats in the history of America. Tired, ill, poorly equipped and trained, they had little to look forward to except the expiration of their brief enlistments on New Year's Day, 1777. Their astonishing victories at Trenton and Princeton during the subsequent ten days are known world-wide as the first, and perhaps greatest, military turning-point of the entire Revolutionary struggle. *NJ Division of Travel and Tourism.* Nearby is a gray stone monument marking the location of the historic event.

Washington to Lake George in a Power Dory, *BUNNY*, by Percy E. Budlong in summer of 1911, published in Vol. XXVII, No. 6, June, 1912 issue of *The Rudder*.

Water Supply / Power: The commissioners of Pennsylvania and New Jersey signed an inter-state agreement on December 5, 1829, that permitted each state to construct the dams necessary on the Delaware River to feed their respective canals. Neither state should at any time draw more than one-quarter of the water in the current between the two riverbanks. One article of the agreement permitted Pennsylvania to erect a dam “at the head of Warford’s Falls, at Eagle Island, or at Bull’s Island” to supply a feeder for the contemplated Delaware and Raritan Canal. The other provisions of the agreement either implemented or restricted other uses of the river.

Albright G. Zimmerman, Pennsylvania’s Delaware Division Canal. Water power was supplied from the D&R Canal and Feeder to mills and factories along the waterway especially at Lambertville, Trenton, and New Brunswick. A major water power customer were the mills which became Johnson & Johnson plants at New Brunswick. In 1840 water power sold included: that to W.L. Hoppock, John Coryell, Amos Wilson, John Titus, William Potter, and Miles C. Smith, is in payment of land and damages. About 300 square inches (in addition to Mr. Coryell’s), under three feet head, is applied for in Lambertville, for which the lessees are to pay \$3 per inch per year, or \$900 in all. John Davisson, at Trenton takes 64 inches, under four feet head, at \$4 per inch, making \$256 per year. The New Brunswick Manufacturing Co. have agreed for all the surplus water at that place. *D&R Canal Company Annual Report* New Jersey was reaping rewards for sale of waterpower – both by the Water Power Company of Trenton and the Delaware and Raritan Canal, which that winter (1845-1846) were expending thirty thousand dollars to enlarge their feeder for the purpose of supplying water to heavy manufacturing companies at Trenton and New Brunswick.

Albright G. Zimmerman, Pennsylvania’s Delaware Division Canal. “The water in the Feeder of the D&R Canal was so low last week that the grist mills at Lambertville, which derive their power from it, were stopped.” *State Gazette & Republican, August 9, 1859.* The State of New Jersey is taking more water from the Delaware River at Bull’s Island and is receiving more income selling water from their Delaware and Raritan Canal than they did from tolls when America’s busiest towpath canal was at the height of its operation. In recent years they have constructed a new, higher wing dam to provide a more reliable flow into the D & R. *Albright G. Zimmerman, Pennsylvania’s Delaware Division Canal.*

Water Supplies for the D&R are primarily taken from the Delaware River at Bulls Island, but additional water is taken in on the upper feeder from Lockatong Creek, Wickecheoke Creek, and Duck Pond Run. In the past additional water was taken in below Lock 12, Franklin Township, from the Raritan River at Fieldville Dam. This last supply was to supplement the needs of local industry via the New Brunswick Raceway.

Water Wheel: The Canal Co. have put in the tank at the State Street Depot, an iron wheel called the “Morgan Current Water Wheel,” adapted to low water and rapid currents. We saw it in operation, and found it performing well. It will run entirely submerged without any resistance from back water. It is exciting some interest among men who are in business requiring water. *Daily State Gazette, August 2, 1872.*

Ashbel **Welch, Jr.**, (1809 - 1882) of Lambertville was a canal and railroad builder, corporate manager, industrial designer, inventor, marine architect and he had an incredible career as a most proficient and innovative engineer. In his youth, from 1827 to 1830, he served first as a rodman and later as a surveyor for the company of Canvass White, who was the designer/builder of the Lehigh and Delaware Division Canals of Pennsylvania (as well as a

number of other canals). In the fall of 1830, Welch was appointed as an engineer by White and was given the assignment to build the 22.5-mile Feeder Canal of the D & R Canal from Trenton to Bulls Island. In 1835, after the completion of the Feeder Canal, Welch was appointed to the position of chief engineer of the recently formed Joint Companies, which consisted of the D&R Canal and the C&A Railroad. He held this position for the next 36 years. In 1836 he was appointed chief engineer of the Philadelphia and Trenton Railroad. Welch also became the engineer of the chartered Belvidere Delaware Railroad Company and released his *Report of the Location of the Belvidere Delaware Railroad, with the Estimate*, in January, 1849. This report, printed in Trenton by Phillips & Boswell, outlined the importance of the railroad to the region; the location and elevations of the projected right-of-way; the cost of construction; and the cost of motive power, rolling stock and buildings. The Bel Del was constructed mainly on the original towpath of the Feeder Canal under Welch. While Welch was building the Bel-Del, in 1852-3 he was also involved in the lengthening of D&R locks on the main canal from 110 to 220 feet which was accomplished in 111 days. During the following winter he was in charge of the same work done for the Chesapeake & Delaware Canal. During 1863 Welch designed and placed into operation on the Camden and Amboy the earliest railroad safety block system in the United States. In 1868 he designed and supervised the installation of steam powered winches and steam activated valves and gates for all locks on the main D&R Canal to greatly speed the passage of vessels through the locks, and designed and built the efficient freight terminal at Harsimus Cove in Jersey City. Welch negotiated the 999-year lease of the properties of the United NJ Railroad and Canal Companies to the Pennsylvania Railroad in July 1871. *Down Along the Old Bel-Del*, by Warren F. Lee “At a meeting of the Board of Directors of the United Companies, held at Trenton on the prior Wednesday, Ashbel Welch resigned as the president to accept the position as superintendent of the Bel-Del under the management of the PRR. Colonel John G. Stevens, who was at the time chief engineer and superintendent of the Delaware and Raritan Canal, succeeded to the directorship of the United Companies. Welch, however continued in the capacity of chief engineer of the corporation, a position to which he had recently been appointed by the PRR.” *Easton Daily Express*, January 27, 1872. On the prior Monday during a meeting in Trenton of the Boards of Directors of Bel-Del and the Flemington Railroads and the Mercer and Somerset Railway, Ashbel Welch was selected president and Hugh B. Ely was selected treasurer of all three roads. *Hunterdon Republican*, February 5, 1874; *Hunterdon Republican*, February 2, 1875. Welch completed the short lived Mercer and Somerset Railroad in 1874. The crowning achievement of his career came in January, 1882, when he was elected to the presidency of the American Society of Civil Engineers. From the Lambertville Beacon, September, 25, 1882: Ashbel Welch, builder of the Bel-Del and the Feeder Canal, nationally prominent civil engineer and railroad official, passed away at his home in Lambertville. More than 4,000 people attended his funeral in the Presbyterian Church. He was laid to rest above the town of Lambertville in the Mount Hope Cemetery. (His gravestone is one of the most prominent in the old section of the cemetery.)
FIRST INTERLOCKING INSTALLATION UNDER HIS COMMAND????

Ashbel **Welch residence** is located at 21 York Street, at the southeast corner of the intersection of North Union Street, Lambertville. It was built by or for him in 1832 and is now the Van Horn Funeral Home and is in the Lambertville Historic District. A plaque has been installed on the North Union Street side which reads: “Ashbel Welch lived in this house from 1832 to his death in 1882. His accomplishment as designer of the Delaware (“and” omitted) Raritan Canal, the Belvidere Raritan (the correct name is Belvidere Delaware) Railroad and other

public works, made him a national leader in canal and rail construction.”

George H. **Weller**, (son of Hiram Weller) at age 14, in 1875, hired on as a cook on the canalboat of Joseph Obert at \$12 a month. The canalboat hauled coal from Coalport to eastern ports and George was the cook for three trips during his summer school vacation. The following year George hired on with Captain Isaac Updike. *Trenton in Bygone Days, in Sunday Times Advertiser, June 6, 1943.*

Hiram **Weller& Sons**, later k/a Hiram Weller's Sons' Co. - operated a boat yard in a basin near Southard St., Trenton where they had a fleet of canalboats and built many yachts and pleasure craft. In 1891 they rebuilt Colonel A.R. Kuser's former yacht the *A.R. KUSER* into a mostly new (above the water line) vessel named the *CHELSEA* in honor of the Chelsea plantation owned by Col. Kuser in So. Carolina. "...She is schooner rigged and is fitted with a thirty-horsepower condensing engine built by John E. Thropp" (of Trenton). "The pilot house is 15 x 9 feet and back of this is the main cabin, sleeping apartments and dining room, covering a space 20 x 10 feet. The engine room is large and well-equipped, and back of it is the kitchen and toilet rooms. All of the woodwork is of old oak, the finishings are of brass, and the main cabin is very tastefully furnished., the carpet being of light moquette, the draperies of blue china silk and the upholstery of drab corduroy. This apartment also contains a china closet filled with the choice and delicately decorated ware..." *Town Topics issue of the local Trenton paper of July 3, 1891.* Note: Col. Kuser gave Walter Scott Lennox backing to establish Lennox China in Trenton and you can be sure that *CHELSEA's* china closet was full of Lennox.

Hiram **Weller, Jr.** with a party of friends took a trip up the D&R Feeder in July, 1903 on his steam launch *X-RAY*. *Trenton True American, July 21, 1903.*

Western Union Telegraph Co. tugboat *WILLIAM ORTON*, was the first steamer through the canal upon opening in 1877. She is employed exclusively in laying cables for her owner. *Bordentown Register, March 23, 1877.*

Canvass **White**, (1790 - 1834), was born in Whitestown, NY and studied mathematics, surveying and engineering. He was troubled by poor health. In 1814 he organized a company of volunteers in the second War with Great Britain, was commissioned a Lieutenant, participated in the capture of Fort Erie, during which he was severely injured. In 1816 he was engaged by Benjamin Wright to assist in the final survey work along the route of the Erie Canal. Wright and later De Witt Clinton were so impressed with the enthusiasm and natural ability of the young engineer that they suggested he make a trip to England to collect information there which would help with some of the troublesome details of the Erie. This he did, at his own expense. "I have traveled 400 miles (he later covered a full 2,000 miles), passed through a number of tunnels and over several aqueducts... One aqueduct which I have examined (the Pontcysyllte) conducts a canal (the Llangollen) across the River Dee in North Wales, and consists of 19 arches of cast iron... I shall now make a tour through the North of England." *Canvass White letter to his father from Liverpool, January, 1818* He returned to the States in the Spring of 1818, with the latest surveying instruments, detailed drawings of English canal structures, and much information on the use of hydraulic cement in construction of English canal locks. It was Canvass White who solved the problem of an inexpensive supply of hydraulic cement for the Erie Canal. It was not without

considerable searching and researching on the part of this young engineer for a good American natural cement that would harden under water – that led him to a deposit of stone near Chittenango, NY. When burned and pulverized, this stone produced the desired results. White obtained a patent for his new cement (valid in 1820) and a cement processing plant was set up, under the supervision of his brother Hugh White, to produce this much needed material for the locks, aqueducts and bridge foundations for the Erie Canal, and later – many others. As work on the Erie progressed, Canvass White became the chief expert in designing its locks and other appurtenances, which earned him the title of “Principal Engineer.” Before the Erie was complete, White was approached by a number of other canal companies to assist them in their planning and design work. He became a consultant on the Schuylkill Navigation, the Farmington Canal, the Chesapeake and Delaware Canal; and was, for a time, Chief Engineer on the Union Canal, the D&R Canal, and the Lehigh Canal respectively. Ill health often interfered with his canal projects, and he finally retired to Florida, where he died at the untimely age of forty-four – a few months before the D&R Canal, his last project, was completed – a great loss to the canal builders of the early Nineteenth Century. *American Society of Civil Engineers Biographical Dictionary & Towpaths to Tugboats: A History of American Canal Engineering* Canvass White, the chief engineer of the D&R Canal was titled “History’s Greatest Canal Engineer” by C.P. Yoder in an article he wrote for the Pennsylvania Canal Society *Canal Currents* issue #10, Fall, 1969. Canvass White’s grave is in the Princeton Borough cemetery, on Greenview Avenue, and a plaque was placed there by the Canal Society of New Jersey as the wording on his grave was nearly illegible. Note: The Canal Society of New Jersey traveled over the Pontcysyllte Aqueduct on several of their trips to England and Wales from 1973 to 2005, most led by Capt. Bill McKelvey.

Whitehall Boatmen, from New York City rowed through the D&R in one of their beautiful barges, on their way to Philadelphia and back in late summer, 1834.

Christie **Whitman** did an election campaign “whistle stop” at Lambertville on the Black River & Western RR, along the D&R Canal Feeder in the fall of 1993.

Wilburtha Stone Quarries, on the D&R Feeder Canal, were owned by Peter de Flesco, who also owned canalboats used to transport his products. In 1910, one of his mule drivers was arrested for unmercifully and brutally beating a team of canal mules trying to move faster with a heavily laden boat. *Trenton Times, August 20, 1910.* Brownstone for the Pennsylvania Railroad’s New Brunswick viaduct was delivered from Wilburtha by canalboat. Forty quarrymen were working to produce the cut stone between 1901 and 1903.

William Clyde & Co. owned the 206-foot steam canalboat *ELKO* which on one of its weekly trips between Philadelphia, New York, Albany and Troy caught fire and burned to the water line at Lock 3 on the D&R in 1902. *Daily State Gazette, April 23, 1902.* *ELKO* was the largest steamer that ran on the D&R Canal. She was built in 1889 and was of 548 gross tons. *Nautical Gazette, April 24, 1902.*

Wilmington and New York Line and their steam canalboat *VESPER* was referred to in a news item in the Bordentown Register of 10.31.1879.

Winter at the Canal Locks is an excellent descriptive story of canal activity at Bordentown. *Bordentown Register, December 17, 1880.*

William **Winterbotham** an English traveler, detailed a possible canal and portage route across the “waist” of New Jersey in 1794.

Winter transportation of canal freight, by the Camden & Amboy Railroad commenced in 1840 when the D&R was closed for navigation in winter. This served to prevent establishment of sea lines which would have reduced canal business during the navigation season.

Winter Storage for Yachts: Through the Locks - The Last Yachting Cruise of the Season - describes the cruising of several yachts up into the canal from the Delaware River to Trenton where they were tied up (perhaps on blocks when the canal was drained) for winter. *Weekly True American, November 23, 1888.*

Wireless Communication Experimental Train: of the Lackawanna Railroad made a round trip over the Bel-Del on March 8 & 9 to test a train to station wireless telegraph system. *Lambertville Beacon, March 8-9, 1914.* “The Lackawanna Railroad Company during the recent storm demonstrated that the wireless telegraph system is practical in spite of the worst weather conditions imaginable. *Warren Journal, March 13, 1914.* On the prior Monday, a special test train with wireless radio equipment aboard passed over the Bel-Del en route from the DL&W at Manunka Chunk to Washington, D.C. On the next day, Tuesday, the train ran back over the Bel-Del en route from Washington, D.C. to the DL&W. *Lambertville Beacon, October 14, 1915.*

Wire Mill Basin: The yacht *MINERVA* was put into the Wire Mill Basin yesterday. During the winter she has been repaired, repainted and furnished with new sails. Next week she will be taken to Bordentown and from thence into the Delaware to the Minerva Yacht Club’s house in the Sixth ward. *Daily True American, April 21, 1884.*

Woodland owned by the canal company in 1840 included 100 acres of lands on and below Goat Hill, near Lambertville, containing timber useful for the purposes of the company in repairs and constructions.

Wood Lawn Mansion, 191 Ryders Lane, New Brunswick, was built in 1830 by Colonel James Neilson, a founding director of the D&R Canal Company; it’s treasurer for most of the balance of his life; and a member of the third generation of a prosperous family with historic ties to New Brunswick and Rutgers. Neilson built Wood Lawn on a portion of the land originally purchased by his mother’s grandfather, Johannis Voorhees, in 1720. The Colonel served as a commander of a company in the War of 1812; was a member of the Rutgers Board of Trustees; and sought to establish Wood Lawn as a gentleman’s farm. Colonel Neilson’s son James, also a Trustee of Rutgers, donated large tracts of land to the University; and was the last Neilson to occupy Wood Lawn. Between 1850 and 1905 several additions and extensive renovations to the building were made. Upon James Neilson’s death Wood Lawn was left to Rutgers University, was subsequently placed on the National Register of Historic Places and has been the home of the Eagleton Institute of Politics since 1956. Eagleton is an active and respected education,

research and public service unit of the University, nationally recognized for its activities in the field of American politics. www.eagleton.rutgers.edu See also "Colonel James Neilson."

Works Project Administration: After the canal closed in 1932 it was taken over by the State of New Jersey in 1934. The Trenton portion was deeded to the city in 1936. Their portion was filled in by the Works Project Administration using equipment provided by the city and much manual labor paid for by the Federal government. Much of the fill arrived in railroad gondola cars and was literally shoveled out to fill the canal which was right along the track. In 1950 a portion of the filled in former canal right-of-way was re-excavated to an even greater depth for the Trenton Freeway (US Rt. 1), a project that had been talked about for about 75 years. The 1929/30 concrete lock and filled in canal right-of-way between the former aqueduct and Laylor Street remained vacant until the present Rt. 129 highway was built.

The **World Canal Conference** was held in 2006 at Bethlehem, PA. The extensive program included a presentation on the D&R Canal by Jim Amon, Executive Director of the D&R Canal Commission and a brief tour of the Feeder Canal with a stop at Prallsville Mills.

Wrecks Caused by Cows: The Sunset Cow Wreck occurred in 1853 as a gravel train carrying 250 Irish naavies (laborers) was backing into Bulls Island Station along the Feeder Canal. A cow jumped up and ran under the forward end of the first car, derailing it and others. The cars left the track and plummeted down the embankment, killing 11 of the workers. In July 1879, a northbound freight was speeding past the Greensburg (Wilburtha) quarries when the engine struck two cows that had wandered onto the track. The engine and five cars were turned upside down and smashed into a "perfect wreck." The crew undoubtedly escaped death or serious injury by jumping from the train. A brakeman sprained an ankle when he landed on the canal bank; but another member of the crew, who was standing on top of the car that was thrown almost at right angles with the track, actually escaped injury when he was catapulted to safety into the Feeder Canal. Once again the canal was shown to be a much more hospitable landing point to airborne railroaders, hastily departing from a wreck, than terra firma. More often than not, the trackside waterway, which paralleled the railroad for approximately a third of the route, proved to be a lifesaver for trainmen who were about to be embroiled in a wreck. *Down Along the Old Bel Del, Warren F. Lee*

Wright family (of Bridgeport, NJ) owned and operated the motor freight vessels *ELIZABETH W.*, *J.B. WRIGHT*, and *WRIGHT BROS.*, which transited the entire length of the D&R canal on occasion in the final years of operation of the canal. Capt. John Wright was extremely helpful in supplying information and photos on the operation of his family vessels and information on other operators as well. He also assisted us by donating numerous artifacts for display at the museum of the Canal Society of New Jersey at Waterloo.

Yachts: The yacht *HERALD*, belonging to James Gordon Bennett, Jr. passed through the canal last Saturday homeward bound from the Cape May Regatta. Mr. Bennett and Thomas Cash left the *HERALD* at the locks and proceeded to New York on the 11:30am train. *Bordentown Register, July 4, 1871*. The yacht *WITOCO*, with W.T. Colbron, owner and commodore of the Columbia Yacht Club of New York, and a party of friends on board, returning home from a visit to Washington, D.C., entered the D&R Canal locks last night and left this morning. *Daily True American, June 13, 1902*. D&R yacht traffic per year in the final decade was: 1923: 531; 1924: 604;

1925: 740; 1926: 710; 1927: 703; 1928: 738; 1929: 941; 1930: 870; 1931: 689; 1932: 418.

The **Yacht ALICE**, by Henry Howard, Boston: Lauriat, 1926, describes a trip “Through Inland Waterways from New York to Florida” in October, 1924. *ALICE* was a brand new, ketch rigged, 52-foot, yacht with an auxiliary Bolinder oil engine, designed by Commodore R. M. Munroe and built by A.C. Brown & Sons at Tottenville, Staten Island. Seven pages are devoted to a description of their transit through the D&R. Some excerpts: “...it was delightful to be tied up in the peaceful canal. All slept soundly...” They were passed by a good-sized motor boat, *STROLLER*, from Cleveland, bound for Florida. Ahead of them was the 95-foot power boat *OSWICHEE* from Port Clinton, Ohio.

The **Yapewi Aquatic Club**, was founded in 1892 at Bordentown as a membership sport/recreation club. Their members “improved” a D&R scow with a canvass awning, chairs and other amenities for a pleasure journey on the canal, in its final years. The club survives at River Bank, in Bordentown.

York Road or Old York Road: Was built from west (Philadelphia) to East (Elizabeth-towne Point) and crossed the future route of the D&R Feeder Canal only at Lambertville. In our state it went by way of Ringoes, Three Bridges, Raritan, Somerville, Bound Brook, Scotch Plains, Westfield, and Elizabeth considered one of the most important of the few roads that existed in late Colonial and early Federal years, mainly because it was the shortest and fastest overland route between New York (City) and Philadelphia. It not only played an important part in the development of commerce between the two cities; it also became the main travel artery across New Jersey, to which feeder roads were later built. The road was of great strategic value to the continental Army during the Revolutionary War for the movement of men and supplies. The whole of the road across New Jersey from Coryell’s Ferry (Lambertville) to Elizabeth-towne Point was not open for vehicle traffic until 1764. *Along the Old York Road by James and Margaret Cawley.*

The **Young Men’s Clay and Frelinghuysen Club of New Brunswick** have chartered 4 packets to convey passengers on the (D&R) canal to the Millstone Convention, a gathering of the Jersey Blues at the Birth-Place of Frelinghuysen, on Wednesday, Aug. 7th and return for 25 cents each.

Ted **Xaras** painted “An American Classic” depicting Pennsylvania Railroad 4-4-0 steam locomotive No. 5064 powering a passenger train with four Tuscan red coaches traveling north along the D&R Canal Feeder with a section canalboat, strikingly similar to those from the Morris Canal, traveling in the opposite direction. Color lithographs of the view are available from www.Artprints.com, Lakeland, FL.

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