PENNSYLVANIA: NETWORK OF CANAL PORTS

By Hubertis M. Cummings*

A FTER the turnpikes came the canals, here to serve as aids to the highways, there to rival in a dangerous competition, but never wholly to supersede them. After the canals came the railroads, first as auxiliaries to serve them at many points in the problems of transportation, then to compete with them ever more dangerously, and finally to supplant them entirely—unmindful of a future day when a new sort of super-turnpike or new airways would threaten their destruction almost as fatefully. The history of business enterprise is never very simple. It was not so in the Commonwealth of Pennsylvania when in the second quarter of the nineteenth century citizenry and legislators grew stubbornly minded to have a waterway empire of commerce for their own. Obstacles of terrain, mountain ranges altitudinous and obstinately transverse, long winding river and creek valleys whose streams sped downwards by rapid fall in many a treacherous current and over myriad barriers of rock, with floods ever a matter of baleful promise, dared not impede or deter them. Pennsylvanians put their minds to the task and, for better or worse, during the three decades after 1826 turned the Commonwealth founded by William Penn into a network of artificial canals and canal ports.

Along the rivers of the State sprang up not only the Pennsylvania Canal, with its Divisions along the Delaware, the Susquehanna and its Branches, the Conemaugh, the Kiskiminetas, the Allegheny, the Ohio, the Beaver, and the Mahoning, but many a harbor of romantic name.

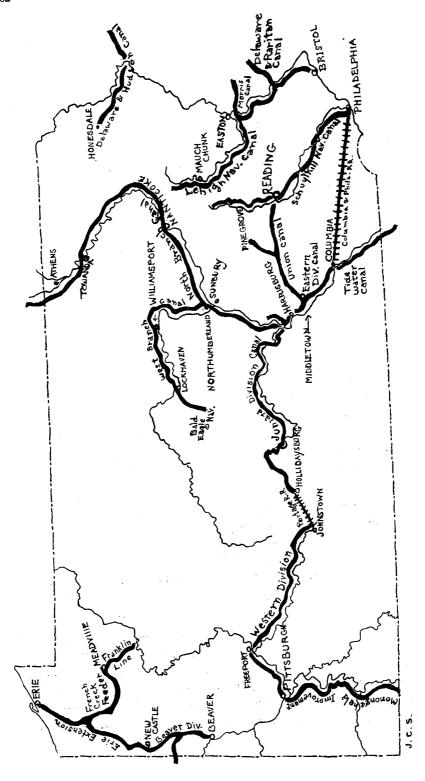
From east to west ranged a new nomenclature. Points which in the eighteenth century gave names to ferries or frontier forts be-

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came ports: Easton, Bristol, Columbia, Lewisburg, Muncy, Lewistown, Beaver, New Castle, and Erie. Towns not assuming the proud name of "Port" became just as truly havens for canal trade: Harrisburg, Liverpool, Berwick, Blairsville, Franklin, Meadville. And, as on State-built canalways, so on those built by navigation companies, appeared others of now famous memory: Honesdale and Hawley; Palmerton, Weissport, and White Haven; Fairmount, Conshohocken, Leesport, and Schuylkill Haven; Union Deposit; Long Level, York Furnace, and Peach Bottom—on streams and rivers from the Lackawaxen to the lower Susquehanna.

At a key point like Reading met two waterway systems, the Schuylkill Navigation and the Union Canals. Portsmouth, which began with that name at the mouth of the Swatara below Middletown, presently became Port Royal, and was until 1884 the junction basin of the privately owned Union Canal with the Commonwealth-built Pennsylvania Canal. Hollidaysburg, on the Frankstown Branch of the Juniata, was, for all westward flowing Pennsylvania canal boat passengers and forwarders' shipments, the port of call from which their mode of canal transportation and travel must change to railway carriage and travel across Allegheny Mountain. Johnstown on the Conemaugh was until 1855 the transfer point at which travelers and goods which had got there by the Allegheny Portage Railroad must change back to packet or barge to continue their way by the Pennsylvania Canal down to Pittsburgh and Allegheny Town.

From earliest days the Port of Easton was a busy place. At it boats which had brought their coal down the corporately-owned Lehigh Coal and Navigation Canal from Mauch Chunk and the "Gravity" Railroad, which had carried it from Summit Hill to that up-Lehigh River point, locked first into the dam opposite the town, then from the dam into the Delaware Division Canal, providing tasks for inspector, weigh master, and toll collector. Tally of the weight of each was made at the weigh lock, where lowering of the water let its hull and cargo rest momentarily on great scales in the lock chamber. Then, after raising again by the water admitted through the wickets of the upper gates, the barge descended once more through the lower gates into the canal. So, from 1833 to 1931, passed millions of tons of anthracite, burdens en route to New York by New Hope, by rope ferriage across the Delaware River,



from that town to enter the feeder of the Delaware and Raritan Canal and make their way onwards across New Jersey to South Amboy and the Bay—or en route to the Port of Bristol, whence it could descend, steam-tugs drawing the boats, to Philadelphia.

Even more redoubtable was activity at Easton in 1846, when 7,907 boats cleared, 453,643 tons of anthracite passed the weigh lock southwards, 15,613,970 feet of boards and planks, 157,328 barrels of flour, 584,247 gallons of whiskey, great weights in wheat, leather, slate for roofing, staples, furniture, and other products or manufactures. Or when northwards of the weigh lock went 329,423 pounds of cotton, on their way from the South and the Ports of Philadelphia and Bristol; 1,036,523 pounds of green hides for up-river tanneries; 300 barrels of ale, beer, and porter; 823,529 pounds of coffee, 59,918 gallons of foreign liquors, imported wines and brandies to gratify the tastes of rich coal operators whose employees were satisfied with the cruder beverages produced by more local stills; vast quantities of groceries, drugs and medicines, manufactured tobacco, hardware and cutlery, blooms and anchonies, bar and sheet iron from Durham and other furnaces.

At Bristol in that same year 1846 the clearance of boats totaled to 8,275, a goodly commerce for a goodly harbor built at the river's side, grand southern terminus of the Delaware Division, nobly equipped with two entering liftlocks, two great enclosing piers. and a tide lock into the river, and with wharves, mills, shipping houses, and stables fringing the land side of its basin. Up the Delaware came into it manufactured tobacco in great quantity; a small gallonage in whiskey; a vastly larger one in foreign liquors; 29,925 pounds of mahogany wood; china ware, drugs and medicines, German clay, iron machinery, hardware and cutlery, dry goods, and groceries, all in the hundreds of thousands of pounds. For upper Delaware Valley folk had their connection with the great world that year by canal. And downwards from Bristol, the same folk forwarded or sent 387,786 tons of coal; 42,764,493 pounds of iron pigs; 15,391,590 feet of boards and planks; 294,676 bushels of lime; 775,974 gallons of whiskey—considerably more than were brought up; 181,588 barrels of flour; 13,955 pounds of butter.

And expressive were the names of the boats which bore those several and numerous other products: appellations like the *Great*

Western of Mauch Chunk, the Morning Star of the Northern Liberties of Philadelphia, the Shell Duck of Allentown, the Belle of Bristol, the Mary Ann of South Easton, the Here We Go of Shimer Ville, the Cincinnati of Lumberville, the Trailer of Point Pleasant, the Night Hawk of Milford, the Lexington of Erwinna, the Temperance of Uhler's Quarry, the Independence of Walnut Port, the Zephyr of White Haven, the General Jackson of Lehigh Gap. Poetry, history, household affections, love of home sites, romantic sentiment for distant places, zest for an expanding world—all were drawn upon to lend flavor to an era of commerce.

So was it, too, at other ports in inland Pennsylvania. From Columbia to Pittsburgh, from Clark's Ferry to Williamsport or to Wilkes-Barre, from Port Clinton to Leesport to Reading to Fairmount on the Schuylkill Navigation, the same types of affection and fancy gave to canalways everywhere their largesse of beauty in words.

Yet at Columbia, where trains of cars from the Columbia and Philadelphia Railroad descended by incline plane into the harbor town and chugged to a stop alongside the boat slips, a new phenomenon was displayed. From car and from dock sectionalized boats were discharged and launched in the basin, laden with manufactures and merchandise from Philadelphia and its factories and importing houses, to resume their course on the Pennsylvania Canal for Middletown, Harrisburg, Lewistown, Hollidaysburg, and the Portage Railroad, that remote mountainous lane of tracks and ten inclines, for conquest of which they had been sectionally built hundreds of miles away from their crossing of Allegheny Mountain, and by means of which Pennsylvania statesmen and citizens aspired to link the commerce of Philadelphia with that of Pittsburgh.

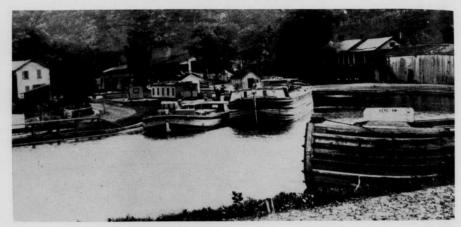
More also there was of activity at this Susquehanna River town, successor to old Wright's Ferry. Here the same canal which bore away argosies for the west brought coal from the north, coal from Nanticoke to lock out into the river; to cross it by towline suspended from towpath bridge to Wrightsville on the west bank until Civil War days and the burning of the old viaduct, and afterwards with the aid of steam-tugs until 1894; to proceed southwards by Susquehanna and Tidewater Canal to Maryland; to cross Chesapeake Bay eastwards, pass through the Chesapeake and Delaware

Canal to the Delaware River, and then onwards to Philadelphia and New York. And here at Columbia other anthracite coal, unloaded by derricks and "grabs" from the boats, was heaped in lofty banks in post-Civil War years for trans-shipment by rail to Philadelphia and other eastern Pennsylvania cities. Moreover, into the same canal port came eastwards across the river boats which had ascended the Susquehanna and Tidewater Canal from Havre de Grace, Maryland, where they had loaded with Baltimore treasures in tobacco, molasses, fish, watermelons, and other commodities, or booked thousands of immigrant passengers for the west.

Lesser scenes were enacted at Middletown, where companyowned Union Canal and State-owned Pennsylvania Canal met. But here came coal from the mines above Pine Grove in Schuylkill County until the Great Dam in the Swatara broke in 1862 and took from Port Mifflin at its head its glory as a canal center. To Middletown, or more properly to Portsmouth below that borough, came for a half century the produce of the Tulpehocken and Swatara Valleys to mingle with the greater tonnages of Pennsylvania Canal trade. Here, close to its weigh lock and its two connecting basins, were warehouses, mills, mule stables, stores and furnaces; and, just beyond the aqueduct which bore the canal over Swatara Creek, were the hum of saw, the grating of plane, the swift merry clink of hammer as workmen in the McCreary Boatyards built craft for shippers and captain-owners.

Harrisburg was a thoroughfare for the canal until 1901, but for many years for a diminishing waterway system and with locations of canal features changing within it. The early Penn Lock, dedicated with elaborate ceremonial in March, 1827, as the first liftlock on the State-owned route, was re-located three decades later in the interest of the Pennsylvania and the Lebanon Valley Railroads. A weigh lock supplemented other new locks; adjunct basins were formed for unloading at coal yards; factories, potteries, lumber yards, brick yards, furnaces followed the course of the ditch.

Up Susquehanna were communities more lasting in canal fame than Harrisburg. Liverpool, minor Venice along the river side, commanding majestic views of water and mountains in every season, almost in every hour of the day, was the home of generations of boat owners and captains. The spacious basin of Port Trevorton offered harborage to hundreds of boats, which loaded with coal brought to them across the main trunk of the river from the Trevorton mines and dropped through car bottoms and chutes into their open hatches for carriage to the south and east. The boatyards of Selinsgrove ranged along the canal prism on the Isle of Que; and the town itself filled up with stately mansions, built out of the profits of shippers, boat builders and importing merchants. Still farther up and across the West Branch from such boroughs was Northumberland, just above the junction of that Branch and the North Branch, and overlooking the great Shamokin Dam.

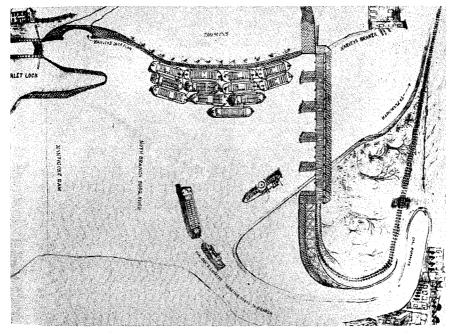


NORTHUMBERLAND CANAL BASIN

Courtesy Warren J. Harder

Here met two famous channels of trade, with the Port of Sunbury on the opposite east bank of the main current of the river. West Branch Division and North Branch Division tied into one at a basin. Outlet lock into the West Branch, upstream and westwards from it a towpath bridge for mules to tow boats across the slackwater of upper Shamokin Dam, weigh lock in the basin, boats moored in that, stables, warehouses, and factories grouped near by, provided among them a picturesque hub of commerce. To it converged by several canalways the coal of Nanticoke and the iron products of furnaces along distant Bald Eagle Creek, brought down to Lock Haven and there locked into the West Branch pool below another towpath bridge for passage across the river and entrance into the West Branch Division Canal and descent on it through Williams-

port, Muncy Pool, Watsontown, and Milton. Here came timber cut above Williamsport, at Dunnstown, Jersey Shore, Linden, and other sites, and sawed into lumber at hundreds of mills all the way to Northumberland. Hither patient mules towed the riches of the forests, initially brought out of the hills of Buffalo Valley along Buffalo Creek and subsequently planed into boards and planks at the Port of Lewisburg on the west side of the West Branch for loading into boats and carriage across the river into the Side-Cut Canal on the east bank and forwards in that into the commerce of the Pennsylvania Canal. To Northumberland descended for many decades on the North Branch Canal the products and manufactures of Pittston, Wilkes-Barre, Nanticoke, Shickshinny, Berwick, Bloomsburg, and Danville. A great tonnage of anthracite for Philadelphia and New York was drawn



THE CANAL AT NANTICOKE

From an early sketch.

Courtesy Warren J. Harder

by steam-tugs across the North Branch at Nanticoke Dam to enter the canal by its guard lock at West Nanticoke. Boats built at the Pennsylvania Canal Company Yards at Espytown during the second half of the nineteenth century provided holds for an all but fabulous tonnage, which had risen as early as 1851 to 334,017 tons.

But not all the trade passing through Northumberland moved southwards. Diverted through its basin and adjunct locks were numerous cargoes for West Branch and North Branch towns: hides from down river, dry goods from Philadelphia, hardware and cutlery from Williamsport, marble for the east, iron pigs out of the Juniata Valley for manufacture into rails and railroad irons up the North Branch at Danville, agricultural implements for farmers, merchandise, groceries, salt, bacon, fish, and fruit for all comers.

For Northumberland wore in canal years the proud look which had been worn "at the Point" in Revolutionary times, and which it wears today. And pride it needed, with its rival, Port Sunbury, on the other side of the Susquehanna, sending for six decades great tonnages of anthracite across the river until the steamtugged boats were ready to enter the Susquehanna Division Canal at the Shamokin Dam Lock and continue their course along the southward towpath with the aid of towline, mule, and "mule-skinner."

Upward from Duncan's Island and Clark's Ferry on the Susquehanna, the Juniata Division Canal ascended for 127 miles to Hollidaysburg. It reached that town after overcoming a river-fall of 554 feet by means of 91 locks, the feeding of water into it by 17 dams, and 22 aqueducts bearing its course across Buffalo. Kishacoquillas, and other intersecting streams. When the mules of the barges and the horses of the packet boats and their several drivers had got cargoes and passengers to that submontane canal port, a novel scene was enacted. Towlines were fastened round snubbing posts, travelers disembarked from packets, garnered or inspected their luggage, clambered into diminutive coaches for portage by incline plane and rail over Allegheny Mountain. Or. having descended from the deck of their portable express boat, they watched the sections of that unique craft being drawn up out of the water on the low-wheeled trucks to which they were to be secured for ascent on the tracks of the planes of the Portage Railroad, and, after the fifth of these had been passed, for descent by five more planes on the western slopes of the lofty divide.

It was no heyday of travel luxury. To leave Hollidaysburg now for Pittsburgh meant to overcome another 1,171 feet of altitude; to experience in reverse at Johnstown on the Conemaugh River the experiences of arrival by canal at the upper waters of the Frankstown Branch of the Juniata River; and then to descend for 104 miles by 70 locks on the Western Division Canal to the city at the Forks of the Ohio. That was the experience which the novelist Charles Dickens confronted with not too great an ardor in the late March of 1842, when he had got on to Hollidaysburg from Harrisburg by Pennsylvania Canal; that was the reversed experience which Ulysses Simpson Grant, on his way to becoming a plebe at West Point Military Academy in the spring of 1839. had chosen rather than "the expeditious stage" from Pittsburgh to Harrisburg, and an experience which seems to have left little impress on his youthful mind beyond "opportunity of enjoying the fine scenery of Western Pennsylvania."

More obscure voyagers and Allegheny Portage Railway journevers had time to chat at Hollidaysburg about the rival advantages of travel by Baltimore Line, Pioneer Line, Reliance Line, Portable Boat Line. Or they could look on at the unloading and re-loading of cargo boats, the unloading and re-loading of miniature railway box cars. Boatmen and laborers, captains, shippers, and inspectors bestirred themselves with ladings of mahogany wood, china ware, coffee, dry goods, groceries, medicines and drugs, foreign liquors, fish, tin, ropes and cordage, and soap stones from the East; with iron pigs, blooms and anchonies, nails and spikes out of Juniata Valley furnaces and mills and meant for Pittsburgh; with staves for pipes, hogsheads, barrels, shingles, leather, bacon, beef, pork, butter, fish, flour, rags, and sundries out of the West for the East. The boast of the Pennsylvania Canal Collector at the Port of Hollidaysburg in 1846 was that 3,670 boats had cleared there that year, and 28,522 cars.

At Johnstown, 36 miles away by the Portage and its 10 planes and corresponding 11 levels of rail and tracks, was similar activity in the same near mid-century year. From the weigh lock in its basin record of a vast tonnage was meticulously set down, once car loads had become boat loads, or before boat ladings had become temporary railroad freight. In communities the shipments corresponded closely to those of Hollidaysburg, although clear-

ances presented marked differences. Cars clearing in 1846 were 8,833 fewer, and boats 1,149 fewer than at the town east of the great mountain. Moreover, to make the situation paradoxical and yet at the same time significant, the total of passenger miles traveled eastwards from Johnstown was 274,790, while the corresponding total westwards was 953,317—another index, indeed, to the direction which the course of American empire was taking two years before the California gold rush.

Boroughs and towns along the Kiskiminetas and the Ligonier Lines of the Western Division Canal from Johnstown to Pittsburgh offered further scenes of artificial waterway commerce. Blairsville shipped her products in iron, Saltsburg exported the products of her adjacent salt mines. All the boroughs and towns pursued a multifarious minor commerce with the mighty city at the western terminus of the Division. As for that metropolis, it had not only its docks and landings at the sides of its two rivers but also its canal crossing the Allegheny by aqueduct into it; its Grant's Hill Tunnel to give that waterway access to the Monongahela by descent of four terminal liftlocks to that river; and, short of these on the near side of the Tunnel, its two intra-urban basins bordered by shops, mills, and warehouses.

Yet Pittsburgh had too many other facilities to achieve any great fame by being a canal town. The advantage of steamboats on its three rivers even before the Pennsylvania Canal came, the development of its railroads by the middle of the nineteenth century had pre-empted the dignities of the Western Division there within less than three decades of its building. Only the minor notes in the music of its vast industry and commerce were sounded along the canal prism, towpath, and berm bank which bisected the town.

Memories of artifical waterway traffic were to survive longer and more fresh at inland ports along the Beaver Division and the Erie Extension Canals. Those two projects, conceived of in the earliest years of the Commonwealth's canal fever between 1824 and 1826, and finally completed and linked in 1845, had a longer enduring use and legendry. The intention was by them, plus 30 miles of northward descent for boats on the Ohio River to Beaver, to connect Pittsburgh with the City of Erie and the Lakes, and

by the same token to connect the Great Lakes, Erie, and Pittsburgh with the Main Line of the Pennsylvania Canal, with Philadelphia and the eastern seaboard.

That momentous design, favorite dream of Western Pennsylvania folk and politicians, did not consummate in high grandeur. But it did not prove so costly, fragile, and transient a project as either the French Creek Feeder Canal or the Franklin Line, both waterways devised to bring Meadville and the Town of Franklin into connection with the upper Allegheny River and Pittsburgh; and the canal route to Erie fully sufficed to bring life and prosperity to the towns strung along its course.

Beaver, at the mouth of the Beaver River on the Ohio, and first town on the Beaver Division, was long a haven. Here came boats from Pittsburgh to lock into the canal and pursue their way farther northwards within the Commonwealth's own boundaries or to lock into the company-owned Sandy and Beaver Canal and presently cross the line into the State of Ohio and make their way westwards to Bolivar on the Ohio Canal and seek still more distant harbors at Cleveland on Lake Erie or at Portsmouth on the Ohio River. Hardly less important a way point was Moravia, later Mahoningtown, where boats left the Beaver Division to enter the Ohio and Pennsylvania "Cross-Cut" Canal and follow the towpaths between that waterway and the Mahoning River to Youngstown and Akron.

A few miles north of Moravia rose the county seat of Lawrence County, New Castle, in the fork of the Shenango River and Neshannock Creek. Prosperous from its earliest years by reason of saw-mills and grist-mills, this meagre town became in canal days an important limestone and iron center. Boats brought ore and passed on with ore for upstream points; boats carried away the iron products of New Castle's own works and foundries, or the limestone so useful to iron furnaces elsewhere. And here in the mid-nineteenth century days, when railroads had not encroached close upon the community, the zestful rivalry of packet-boat travel with stagecoach journeying still remained colorful. Two packets left daily in 1854 southwards for New Brighton and Rochester, where passengers could transfer to the cars of the Ohio and Pennsylvania Railroad (later the Pittsburgh, Fort Wayne, and Chicago) for Pittsburgh; one packet left northwards

for Sharon. Four to eight stage coaches departed each day for Enon, near the Ohio-State Line, where travelers who were eager to risk it could transfer to cars on the Ohio and Pennsylvania for a longer 49-mile trip by rail into the busy metropolis at the junction of the Monongahela and Allegheny.

In 1835 the northwestern counties of Mercer, Crawford, and Erie, when elsewhere the great Main Line of the Pennsylvania Canal had been completed, kept calling vociferously to the Assembly of the Commonwealth for a canalway for themselves. something to redeem promises of a decade earlier. In 1845 those counties were in possession of their dream; the Erie Extension Canal which they had demanded, with the Beaver Division southwards of it, was being operated by the Erie Canal Company. In its wake wealth was coming. The charcoal furnaces at Sharon, Sharpsville, Clarksville, Greenville, in the line of its course, turned gradually into blast furnaces supported by bituminous coal. New processes were developed; and, to further them, came Lake Superior ores, now descending from a long voyage on the Great Lakes to the City of Erie and from the great lake harbor of Presque Isle into the canal. The county towpaths filled with wharves and iron-manufacturing towns-and prepared the way for the railroads to come and supplant the slower modes of waterway transportation. Until 1860 there was no direct railway transportation between Pittsburgh and Erie. Five years after the close of the Civil War the Erie Extension Canal had ceased to function. Mutabile mutandis!

The days have long been gone since that Civil War era, when the Union Canal Company, by way of advertising prospectus, published the map of its connections "with the Canals of the North and West." A casual glance at that fiction in cartography, and the canal enthusiast could have his choice, as it were. From a center like Reading on the Schuylkill he could apparently journey by artificial waterway to any point on the grand radius of Portsmouth on the Ohio; Cleveland on Lake Erie; Buffalo, Rochester, Oswego on Lake Ontario, and Albany on the Hudson River in New York; Patterson on the Morris Canal or Amboy on the Raritan Canal in New Jersey; Philadelphia in Pennsylvania; Havre de Grace in Maryland. Had he marked out a journey to Oswego, most northern point of the great circle, he would have borne hard

by Athens, on the North Branch of the Susquehanna, and just on the eve of the Civil War would have noted at that point of meeting with the Chemung Canal of New York State a lively boat traffic in Barclay coal.

If not all of the radius seemed possible to him, at the least he would have found promoters willing to vouch for the truth of it. And, to verify, he had, of course, the privilege of buying a pocket-size copy of Henry S. Tanner's American Traveler; or Guide through the United States. From that he might freely have learned not only the short cuts to an advantageous use of that grand thoroughfare of New York State, the Erie Canal, but also the best means to follow the intricacies of the canalage network of the Keystone Commonwealth, with bustle and excitement to enjoy at his every stopping point.

He might, indeed, have had the luck of James Fite in June, 1835, and have watched with that young Quaker, on the deck of their packet, the two days' run and race of two boats from North-umberland to Columbia. His might have been the incidental fun of seeing the hat of his own captain go sailing overboard in the wind, the new haste of the horse-boys after the recovery of that treasure, the sudden surge of the beasts which next broke the tow-line, the sad threat of the skipper's temper breaking after that second accident.

He might have had the amusement of watching the hands get their boat through the locks as they perceived the rival craft bearing hard behind them. He might finally have witnessed the victory won by the packet on which he rode, as it got into the Columbia Basin just one minute in advance of its competitor. Indeed, he might have seen his Quaker fellow-passenger ruefully paying his fare to the captain, while he murmured, "Thee beat the other boat, but thee did not get me here when the boat agent at Northumberland promised thee would."