RECENTLY by gift of John S. Sommerville, Esq., of Bellefonte, the Pennsylvania Historical and Museum Commission has come into possession of a collection of papers which supplements in a significant way the official file of Pennsylvania Canal documents, records, journals, and correspondence held by the Department of Internal Affairs in the Land Office at the Capitol.

These are the papers chiefly of James Harris and of his rather more eminent son, James Dunlop Harris. James Harris (1755-1825) was a Deputy Surveyor and legislator, and with his father-in-law, James Dunlop, was co-founder of the town of Bellefonte, Centre County. James Dunlop Harris (1797-1842) was Principal Engineer upon the Pennsylvania Canal in the era of its construction. Among these papers are items which throw light interestingly upon the capacities and the culture of a Scotch-Irish family. The Harris family emigrated in 1752 from Donegal, Ireland, to Lancaster County, Pennsylvania, settling first along the Swatara Creek, and presently transferring its activities to Mifflintown on the Juniata River. Before the close of the eighteenth century it connected itself notably and enduringly with surveying, commerce, industry, and engineering in Centre County and the broad tracts of land surrounding that region in Pennsylvania.

But more than such points, the Harris papers illuminate both the absorbing interest of the citizens of the Commonwealth in problems of internal public improvement and the painstaking devoted efforts put forth by responsible public servants into the advancement of an enterprise which they felt to be imperative.

In the late summer and early autumn of 1787 James Harris set down his field notes for the survey of a road from Frankstown on the Juniata to the mouth of Loyalhanna Creek on the Conemaugh. This took him to Blair's Mill Run, to a branch of Clear-
field Creek, to a branch of the Conemaugh, over a branch of the Black Lick, to another branch of the Conemaugh, to the top of Laurel Hill by numerous tree-marked sites, field corners, round tops, and the like to the crossing of Black Lick near its mouth, and forward chain by chain to his western terminus.1 In the spring of 1824, he received a letter (written April 17) from his friend John Blair, of Blair's Gap, who participates deeply with him “in the spirit of canaling” and is happy to find “that your ideas on the subject correspond exactly with my own.”2 Indeed his friend’s communication goes even farther. It shows nine-months-and-a-half before James Clarke and Jacob Holgate rendered the first official Commissioners’ Report for constructing a Pennsylvania Canal which should cross the Alleghenies by the fantastic means of a tunnel,3 that the correspondents were of open mind as to whether thorough cut, tunnel, or railroad should be the means adopted for connecting two great links of the proposed Pennsylvania Canal and carrying its advantages across the divide. Ten months before Charles Treziyulny ruled against a tunnel in his minority report,4 and five-and-a-half years before Moncure Robinson reported his designs and estimates for the Allegheny Portage Railroad,5 Blair and the older Harris were of the belief that “trade could be carried on by a railroad between the highest points of navigation east and west without much interruption or additional expense.”6 The barrier of the Allegheny Plateau was no obstacle to James Harris’ faith in the possibilities of internal improvement.

Interesting is it to note that among the papers of that Deputy Surveyor and legislator (he served in the Pennsylvania Senate from 1800 to 18087) was a copy of the Westchester Village Record for May 5, 1824, containing complete text of Henry Clay’s speech, “In Support of an American System for the Protection of American Industry,” which appealed for the safeguarding of the commerce of the western parts of the states. America, as Henry

1 “August 28th 1787 Field Notes of a road from Frankstown to Conemaugh, etc.” Harris Papers.
2 John Blair to James Harris, April 17, 1824. Harris Papers.
3 Report and Correspondence of the Commissioners for Promoting the Internal Improvement of the State, Harrisburg, 1825, pp. 20-24, 39-40, etc.
4 Ibid., pp. 49-58.
6 John Blair to James Harris, April 17, 1824. Harris Papers.
Clay and James Harris knew, when he wrote "Non delendum est" above the words of the Kentucky Senator, now had an "interior." Harris, as if to confirm his knowledge, saved copy after copy of Hugh Hamilton's *Harrisburg Chronicle* from January, 1825, through June, 1826, which followed the course of legislation for the Pennsylvania Canal. On the issue for January 31, 1825, he made notation "Report of the Baltimore Commissioners on the improvement of the Susquehanna." When two-and-a-half weeks later the reports of Clarke and Holgate and of Treziyulny had been made, he indexed on the number of February 17: "Scudder's speech on the report of the Canal commissioners." On the 21st he set down the simple words "Canals & rail roads" to help keep his mind on the printed sentiment: "If there be any point of paramount importance, on which all our enlightened and public spirited citizens are of the most perfect accord, they are the absolute necessity and the immense advantages of opening a cheap and easy communication between the eastern and the western section of the state, whereby we may secure a ready access to the great and rising states in the western portion of the union."

On the 24th of February he recorded "calculation of the quantity of water in the Delaware at Easton." On the first page of the *Chronicle* for November 24, 1825, he wrote "Estimate of a canal from Pittsburgh to the mouth of Penn's Creek fall between those points 1154 fe distance 120 miles fall p mile 9.61 feet." Two months later, on January 12, 1826, he marked "first Report of Canal Commrs. 1826 J. Sergeant;" and, on the issue of February 27, 1826, the simple memorandum, "Canal Law," indicated that he would find there the text of "An Act to provide for the commencement of a canal to be constructed at the expense of the state and to be styled 'The Pennsylvania Canal.'"

He made no notation on the March 30, 1826, number of Hamilton's newspaper, although it contained correspondence between John Forster, President of the Harrisburg Canal Company, and John Sergeant, President of the Pennsylvania Canal Commissioners. But on the issue of June 26th he indexed again: "Proceedings of Canal Commrs at Harrisburg June 19th, 1826," intending to keep his attention on a report which began with comment on the Commissioners' adjournment to meet again at the beginning of August in Pittsburgh.
Well might James Harris be interested in a prospective next meeting of the Canal Board in the western city; for there his son James Dunlop Harris, appointed on April 5, 1826, as assistant to Nathan S. Roberts, Engineer of the Western Section, was already at work helping locate a canal for the State. In fact, at this point the papers of James Dunlop Harris begin tying in with those of his father just as they tie in more impressively and cumulatively with the Commonwealth’s great file of Canal Papers in the Land Office.

Almost it is as if the mantle of Elijah is falling upon Elisha. James Harris of Bellefonte, son of that John Harris who migrated from the Swatara with his family and his books to settle at Mifflintown in the Juniata, serve for Cumberland County in the Pennsylvania Assembly for the years 1777-1781 and 1784, for Mifflin County in 1789, and in his career to vote against Pennsylvania’s ratifying of the Constitution of the United States, was about to follow his father to the grave. Second generation of his family in the public service of the Commonwealth, James Harris stopped making entries upon newspapers and died on December 2, 1826. Just two days before that date James Dunlop Harris, as Canal records in the Land Office show, had made his first official report on the locating of the Canal Line on the east side of the Allegheny at Pittsburgh from the site for the Aqueduct near Pine Creek to Washington Street. The third generation of the Harris family of the Swatara, of Mifflintown and Bellefonte, was carrying on for Pennsylvania.

In fact, the next issue of The Harrisburg Chronicle preserved among the Harris Papers was one belonging to James Dunlop Harris. In it, as of February 28, 1827, was printed the report of Chairman William Lehman of the Committee on Inland Navigation, offering resolution “to extend the Pennsylvania Canal to the eastern and western base of the Allegheny, by the waters of the Juniata and the Conemaugh.” A scene for the activity of a surveyor and engineer was now in preparation for a young man of twenty-nine, over terrain and along streams on which his father had been a pioneer surveyor in 1787.

8 Secretary Joseph McIlvaine to James D. Harris, April 6, 1826. Harris Papers.
10 Ibid.
James Dunlop Harris was to be no paragon representative of his profession. Neither the eminence of a Moncure Robinson nor the long sequence of preferments which attended the career of Edward F. Gay in Pennsylvania was to come into his fortune. But the pattern of a canal engineer’s life during the era of the dedication of Pennsylvania to public improvement of the means of transportation is illustrated in his experience, and his papers reflect very comprehensively the associations technical, industrial, professional, political and civic of those years in the Commonwealth which followed upon New York State’s building of the Erie Canal, upon the studies of William Strickland and Canvass White of canals and railroads in England, upon the years when Lehman was whip in the Assembly of Pennsylvania for a canal system and when Pennsylvanians were fluctuating among the changing currents of dwindling Federalism, waning Jeffersonian Democracy, emergent Jacksonian Democracy, and nondescript Anti-Masonry.

There had been no college of engineering to train the younger Harris. He belonged to a time when the initiate in surveying was the chain-carrier, the rodman, the assistant, the map-maker to an experienced surveyor. Differentiation had not yet occurred between civil engineer, canal engineer, railroad engineer, hydraulic engineer, mechanical engineer, electrical engineer. A bridge designer and builder was still in popular acceptance as much an architect as he was an engineer. If the neophyte did not learn by rule of thumb or by his own personal study of mathematics, geodesy, mechanics, hydraulics, natural philosophy, he learned from a superior, from an uncle, an older brother, a man to whom he virtually apprenticed himself, a father. In Pennsylvania, not having the advantage of the Erie Canal to act as a school of technology to him as it did to Nathan S. Roberts, Canvass White, DeWitt Clinton, Jr., Edward F. Gay, and a multitude of other young surveyors of the first third of the nineteenth century, James Dunlop Harris learned first from his father and next from Nathan S. Roberts. Then having learned, he trained. As from schooling given them by their superior Canvass White, Siméon Guilford, Sylvester Welch, and William Milnor Roberts learned and became subsequently expert both in the construction of canals and railroads, so from schooling given him by Harris
William B. Foster, Jr., was to mount from distinction to distinction as an engineer on canals in three states and as a paramount celebrity on the Pennsylvania Railroad.

Much of the interest of the papers of Engineer James D. Harris is that they reveal what his equals in the profession, his subordinates, and his pupils thought about him, about other engineers, and about politicians of the day, what they thought professionally and what personally. With them we go not only back stage but back stairs, as we find opinions aired with frankness even to salaciousness in communications to the addressee, from whose responses never one word of slur, one stroke of malice, one instance of profanity falls. Harris never pronounces himself a gentleman. He never forgets to practice what it is to be one.

But his correspondence is not limited to his professional colleagues or aides. It is directed to and from eminent men of the day like Josiah White, Simon Cameron, James Cameron, General Abner Lacock, Judge Thomas Burnside, and William Fisher Packer. Numerous letters are exchanged between Harris and Canal Commissioner John Mitchell. There are many exchanges between him and a succession of Secretaries to the Canal Board: Joseph McIlvaine, Francis R. Shunk, E. F. Pennypacker, Joseph Smith, and William C. McPherson. To the Board are formal communications and reports, with intervals, for many years. Contractors on the Canal, ironmasters in Centre County, coal mine owners, lumber dealers, citizens—all address or are addressed by him. He is equally in touch with the promoters of the Pennsylvania-Ohio (Cross-Cut) Canal and those of the Bald Eagle and Spring Creek Navigation Company. A printed report of January 22, 1839, to the Union Canal Company on modes of enlarging their waterway between Reading and Middletown illuminates his conversancy with canal problems and his acceptability among experts.

In his correspondence he becomes the exemplar of what must have been the professional deportment of many another forgotten engineer on the Pennsylvania Canal and the Public Works of the State between 1826 and 1845. The work of a canal builder as lo-
cater, designer, estimator, intermediary in contracts, inspector, rej
ector, approver, general handy-man, consultant, censor, and pro
moter—all is illustrated there. Harris’ papers are a veritable sig
post pointing to the resources of the official roster of Canal and Public Works map books and documents shelved in two cabi
nets and ten tiers in the Pennsylvania Land Office at Harrisburg.

Of the map books in that roster there are fifty-two, whose contents are admittedly multifarious rather than finely comprehensive; but they embrace the best records of surveys for the early public canals and railroads which the State now owns, and within them is many a drawing for bridge, dam, raft chute, lock, aqueduct, or the like.

Unfortunately in instances where survey map books were, during building years, actually used by the engineer and his assistants, few copies survive. Too many of the maps preserved were for locations never adopted or constructed. Of lock or aqueduct designs the same truth too much maintains. But by that token among the books many maps or drawings survive from the first surveyors and engineers for the Public Works, items like:

a. “Plan and Profile of the Allegany Mountain between the head-waters of Blair’s Creek, a branch of the Juniata, and the mountain branch of the Conemaugh with the proposed Tunnel Line connecting the two streams and the Reservoirs and Feeders, State of Pennsylvania, 1824” (in Map Book No. 19), delineated by Charles Treziyulny for himself and his fellow commissioners Jacob Holgate and James Clarke as the three men carried out legislative instructions of March 27, 1824.

b. That masterpiece of map making in forty-eight panels executed by the brilliant surveyor Treziyulny and a corps of aides in 1826 and 1827, “Charts and Profile” for the entire course and the total fall of the Susquehanna River from its great bend in New York State down through Pennsylvania to the Maryland Line (in Map Book No. 22).


d. Whippo’s “Maps and Profile of the Canal Lines on the North Branch of the Susquehanna River: From Nanticoke Falls to
Northumberland. M. R. Stealey, Draftsman, 1828” (in Map Book No. 29).
e. Moncure Robinson’s “Plan and Section of the proposed Susquehanna & Lehigh Canal surveyed Oct*: 1828” (in Map Book No. 29).
f. Those two beautiful performances in cartography: “A Map and Profile for a Slack Water Navigation along the Monongahela River from the Virginia Line to Pittsburgh as Examined in 1828 by Edward F. Gay, Engineer” (in twenty panels in Map Book No. 5), and “A Map and Profile for a Slack Water Navigation along the Ohio River from Pittsburgh to Beaver as Examined in 1828 by Edward F. Gay Engineer” (in six panels in Map Book No. 6).
g. “Plan and Section of a canal from West Br. Div. Penna. Canal to W. Br. of Susqueh: opposite Lewisburg, Surveyed 1830 F. W. Rawle, Eng*:” (in Map Book No. 29).
h. That deft exercise for a youthful engineer who would subsequently become the third president of the great Pennsylvania Railroad, “Plan and Section of a Survey for a Canal commencing at Fair Mount Dam and extending along the western slope of the River Schuylkill to Mill Creek. Laid down from surveys made during the year 1833 by J. Edgar Thomson, Civil Eng*: Drawn by John C. Trautwine Ass*: Eng*:” (in Map Book No. 7).
i. Draftsman A. W. Kennedy’s “Map of the Delaware Division of the Pennsylvania Canal, Bristol to Easton” (an undated item, but not later than 1830 or 1832, which fills Book No. 2).
j. That other impressive but undated work, aiming to note the promise of the iron industry to the Pennsylvania Canal and the promise of the Canal to industry, executed it is more than likely by the hand of James Dunlop Harris, “A Map showing the present termination of the West Branch Canal and the relative geographical positions of the Coal and Iron Regions” (in Map Book No. 29).

In this varied cartographic abundance other inclusions are as worthy of respect among those who remember that the mind of Pennsylvania during the second quarter of the nineteenth century extended frequently from canals on to railroads. The two cabinets of map books reveal many another novelty. Here is the “Map
and Profile of the Proposed Route for a Railway and Canal from the Head of Juniata Canal to the Head of Kiskiminetas Feeder” (In Map Book No. 9) surveyed in 1826 by Canvass White’s aide George P. Olmsted, before there was either Juniata Canal or Kiskiminetas Feeder. Here in items 16. and 20. of Map Book No. 1 are drawings for railways to avoid the Columbia and the Schuylkill Inclined Planes. Here, in item 3. of Map Book No. 4 drawn for J. D. Harris, Eng*, by J. Paxton, is “Map and Profile of a Route for a Canal from the Pennsylvania Canal to New Berlin in Union County also of a Route for a Rail-Road between the Same Points” (an enterprise apparently of the year 1837).12

Item 20. of Map Book 29 is a “Plan for Improvements around Columbia Basin” reported, in conformity to resolutions of the Legislature of March and April, 1833, by Engineers E. F. Gay and A. B. Warford, indicating connections between the Columbia and Philadelphia Railroad and boat slips at the junction of that line with the Pennsylvania Canal. Item 26. of Map Book No. 7 is the “Map and Profile of the Gettysburg Rail Road as surveyed by Order of the Legislature of Pennsylvania, 1839” by H. R. Campbell; and next to it is the unsigned and undated item, “Gettysburg Extension of the Pennsylvania Rail Road,” in three sections. A more ambitious but hardly more felicitous enterprise is suggested by the “Profile of the Harrisburg and Pittsburg Rail Road, Middle Route and Conemaugh Route” surveyed for the State (but never subsequently built) under the direction of Charles F. Schlatter, with S. Moylan Fox, Principal Assistant, in 1840 (Items, 23-29. of Map Book No. 5).

Interesting in Map Book No. 51 are a set of “Maps of the Water Power on the N. Branch & Susq. Divisions. Penna-Canal—A. B. Warford Engineer,” 1841-1842, which were executed by T. T. Wierman and Thos H. Walker, assistant engineers, in 20 panels, and which indirectly afforded as simple and forthright a summary as is discoverable today of the details of two divisions, from seven miles above Wilkes-Barre to Nanticoke to Northumberland along the North Branch, and to Selinsgrove along the main trunk of the Susquehanna River to Lock No. 8 below Mt. Patrick.

12 Notes of Joseph M. Nesbit on two surveys done in 1837 along Penn’s Creek; and James D. Harris to the Canal Board, December 6, 1837. Harris Papers.
And, last to be mentioned here, from among the map books in the two cabinets in the Land Office, is a work of an experienced canal engineer on the West Branch, Robert Faries. His "Profile of Inclined Planes of A. P. R. R. in connection with Grades of New Road located by R. Faries, C. E. From Johnstown to Hollidaysburg 36.45 miles" is a sort of ghostly allusion to the New Allegheny Portage Railway to which in the early 1850's Pennsylvania was giving much thought, large funds, and little realistic insight, as the incorporated Pennsylvania Railroad was gradually making its way across the Alleghenies to supplant the Old Portage which Moncure Robinson had designed and Sylvester Welch had built two decades—but in railway history a figurative half-millennium—earlier. That item in Map Book No. 19 sings its own sort of swan song in the fading romance of the publicly owned railways in the Commonwealth.

More complete and more definitive than the canal and railroad map books in the Land Office are the contents of the ten tiers. Tier 1, which is typical in its scope, contains forty-three volumes of papers, nine for the Susquehanna Division of the Pennsylvania Canal, twenty-three for the Juniata Division, eleven for the Delaware Division. Certain volumes here file contracts on sections of the canal, or on bridges, culverts, aqueducts, dams, chutes, waste weirs, lock houses, fences, basins, docks, wharves, and the like. Other volumes file land and damage claims; still others, contractors for relief, releases, damages, and compensations.

Interesting are the volumes which index "Reports and Miscellaneous Documents", of which there are three volumes for the Susquehanna Division, 1826-1858; two for the Juniata Division, 1826-1840, and three for that division, 1841-1858; and five for the Delaware Division, two for 1827-1835, one for 1836-1844, and two for 1845-1858. For here indexed with their names, although not in fixed chronological order, are the letters of canal engineers, superintendents, supervisors, contractors, proponents of ideas or devices to officials of the Pennsylvania Canal—letters which open many a personal window upon an era, among them not only contributions of Principal Engineers Thomas W. Kennedy, Henry G. Sargent, John H. Hopkins, and John Carey, but also from Lewis S. Coryell, designer of the lifting wheels for supplying the canal at the New Hope with water from the Delaware; from
Josiah White, the good Quaker director of the famous Lehigh Navigation Company, inventor and promoter; and from his aide Canvass White, pupil of the Erie Canal of New York.

In the other nine tiers similar "Reports and Miscellaneous Documents" appear for the North Branch, the Eastern, the Beaver, the French Creek, the Erie Extension, the West Branch, the Western Divisions, and the Wiconisco Canal, the Allegheny Portage, the Columbia and Philadelphia and the Gettysburg Railroads. What the State of Pennsylvania and her engineers, superintendents, and like officers put their hands to is reflected in a vast correspondence.

In the Columbia and Philadelphia Railroad volumes appear letters of the first Principal Engineer Major John Wilson; Josiah White, Principal Engineers Edward F. Gay and John P. Bailey; Superintendents John Barber and James Cameron; Judge Richard Peters, upon whose Belmont property the Schuylkill Plane impinged; Matthias William Baldwin, builder of locomotive engines for the railway, and founder of the Baldwin Locomotive Works in Philadelphia.

In the Allegheny Portage volumes are letters of Moncure Robinson; Sylvester Welch; William Milnor Roberts; John W. Geary; Superintendents Samuel Jones and John Snodgrass; and of that famous engineer and inventor of wire rope John A. Roebling, with whom contracts, in consequence of his own suggestion, were entered into to supply cables for drawing loaded canal boats up the inclined planes of the Railroad; of Philadelphia Post Master for the United States, Amos Kendall.

In Eastern Division volumes occur communications from William Lehman, the canal legislator; from William Strickland, first eminent as agent for the Philadelphia Improvement Society in their inquiry into the practicability of the early canals and railroads in England, later to be famous as the architect who built the United States Mint at Philadelphia and designed its State House for Tennessee; from Canvass White, pupil of the Erie Canal, Principal Engineer for the Union Canal, later to be also Principal Engineer for the Lehigh Navigation Company, mentor to engineers like Sylvester Welch and William Milnor Roberts; from Acting Canal Commissioner Charles Mowry; from John Forster, President of the Harrisburg Canal Company, a corporation which, unhappily, was to exist more for litigation than for construction;
from Anthony B. Warford and divers more obscure engineers and superintendents.

In the Juniata Division other men represent themselves: Acting Canal Commissioner James Clarke, earlier colleague of Jacob Holgate and Charles Treziyulny in the first survey for the Pennsylvania Canal; Principal Engineers DeWitt Clinton, Jr., Simeon Guilford, and Edward F. Gay; and various contractors.

In Western Division volumes are letters from William Strickland; from William B. Foster, Toll-Collector at Pittsburgh, and father of the engineer William B. Foster, Jr., and his more illustrious brother Stephen Collins Foster, the song-writer; from Principal Engineers Nathan S. Roberts, James Dunlop Harris, Alonzo Livermore, and Sylvester Welch; from General Abner Lacock and Mayor John M. Snowden of Pittsburgh.

Among Beaver Division documents are letters from Canal Commissioners John Mitchell and Abner Lacock; from that nonpareil cartographer Matthew R. Stealey; from his chief, Principal Engineer Dr. Charles T. Whippo; from Superintendent John Dickey; and from his politically much troubled successor, Samuel Kerr.

In the Erie Extension volume of "Reports and Miscellaneous Documents, 1836-1847," John Mitchell, Charles T. Whippo, and William Milnor Roberts are numerously represented by letters. In the French Creek Division records Mitchell appears again, with Supervisors Hugh Brawley and George R. Espy (in 1839 Governor Porter's Auditor General); in one letter Professor David B. Douglass of West Point, original proponent of the French Creek Feeder; and in many, his successors, Engineers James Ferguson and Dr. Whippo.

In the volumes of North Branch and North Branch Extension reports and documents occur again the familiar names of James Ferguson and Charles T. Whippo as writers of letters; and accompanying these are John Bennett, John Mitchell, William B. Foster, Jr., James D. Harris, Victor E. Piollet, David Petriken, Superintendent John McReynolds, Principal Engineer William R. Maffet, Engineers Anthony B. Warford, T. T. Wierman, and John C. Mitchell, and Ellicott and Abbott of Philadelphia, manufacturers of rail road and weigh lock scales and contractors for the famous weigh lock of the Pennsylvania Canal at Beach Haven.
Within West Branch Division volumes of letters are examples from Engineers Robert Faries, James D. Harris, Benjamin Aykrigg, William B. Foster, Jr., and Joseph M. Nesbit, from Superintendents William B. Mitchell and William Fisher Packer, the latter of whom was interested in the Pennsylvania Canal from early days as the editor of Williamsport's *Lycoming Gazette* to later days as Pennsylvania's Chief Executive; and from his predecessor in that office, Governor George Wolf.

Susquehanna Division volumes reveal letters of Engineers Simeon Guilford and Francis W. Rawle, Acting Canal Commissioner Charles Mowry, Toll Collector John Youngman, and Supervisor Jackson McFadden. In the one volume of records held by the State for the years 1837-1841 in connection with the Wiconisco (Feeder) Canal the only names which stand out are those of Thomas Elder and Jacob M. Haldeman, bankers and landowners along the Susquehanna in Dauphin County along the line of the projection, and of Engineer A. B. Warford and Superintendent Simon Sallade.

Not less significant for archival contents than the above "Reports and Miscellaneous Documents" are the two volumes of "Surveys and Correspondence, 1825-1829," and the volume "Instructions to Engineers, 1826-1829," (all shelved in Tier No. 10) which together file a great number of letters related to the earliest field endeavors towards a Pennsylvania Canal. Here over their signatures, among those of numerous others, appear communications from such pioneer aides in the Public Improvements as James Clarke, David B. Douglass, James Ferguson, Edward F. Gay, James D. Harris, Wm. R. Hopkins, Thomas G. Kennedy, Abner Lacock, Charles Mowry, Francis W. Rawle, Nathan S. Roberts, Moncure Robinson, David Scott, H. G. Sargent, Charles T. Whippo, John Wilson, and Canvass White. Of similar archival importance also, perhaps, is another volume of title "Water Power; Pennsylvania Canal and Public Works" (shelved in Tier No. 4), which garners 146 letters of recommendation and inquiry upon a subject which no modern student of rivers and utilities would normally ignore.

Interesting, too, is a volume filed in Tier No. 10. "Surveys of Public Property—Department of Internal Affairs" (Book No. 4) preserves the record of surveys made in 1841 and 1847 of the
features of the Pennsylvania Canal then owned and operated by the State. Within its brief compass are found small scale but skillfully drawn maps for the greater part of the old system of Public Works, of locks, aqueducts, reservoirs, and the like, with measurements of water power available at each, and with incidental birds-eye views of all the important canal ports of the Commonwealth from Pittsburgh to Columbia; Williamsport, Nanticoke and Northumberland to Clark's Ferry; Easton to Bristol. Here in miniature cartography, as it were, is exhibited a whole era of inland transportation.

But comprehensive as can be any scribal view of Pennsylvania's era of Public Improvements is that which the researcher can catch from the eleven folio volumes of the Canal Commissioners' Journal from June 1, 1829, to July 25, 1859, and the one smaller book, "Minutes of the Board of Canal Commissioners, from May 9, 1825, to May 30, 1829," all shelved in Tier No. 8. Here in clerkly fair round hand is unfolded the business of an age. Everything that takes place in the annals of an organization is entered, from the employment or dismissal of a contractor or the appointment or dismissal of an engineer or superintendent to the request for a design for a towing-path bridge, the refusal to accept an estimate for the construction of a division, or the acceptance of repair costs on a dam. Commissioners vote to discharge, to let, to re-employ. They record their division of responsibilities, their meetings, their adjournments. Minutes reflect the peripatetic character of their activity; for they were not men laboring in one office on Capitol Hill—rather they were everywhere in the State, here inspecting a raft chute or an aqueduct, here determining with an engineer the form of structure to be attempted, here authorizing payments by a superintendent to a contractor or a canal laborer. And not all of them, the folio volumes make clear, were mere politicos. If they moved throughout the State from the Delaware to the Susquehanna, to the Kiskiminetas and the Allegheny, from Philadelphia to Erie, they worked also advisedly on the immediate scenes of operation: Abner Lacock on the Western Division, James Clarke on the Juniata, Charles Mowry on the Susquehanna and the Eastern, John Mitchell on the West Branch.

The minutes of their meetings ignore, of course, many a claim and many a proposal. But, happily, where a gap occurs in the rec-
ord set down, there is closely at hand a cluster of letters in a volume of "Reports and Miscellaneous Documents," to illuminate the omission.

In brief, combined with the host of papers in other volumes of the Land Office tiers and cabinets, supplemented by the far more modest collection of the James Harris and the James Dunlop Harris Papers, the Commissioners' Journal constitutes an open sesame to the history of industry and transportation in Pennsylvania for three of the most important decades of the nineteenth century, from 1825 to 1859. Moreover the Journal is carefully indexed.

It is a matter of deep regret to the editor of Pennsylvania History and to the author of the above article that the donor of the Harris Papers should have died before its appearance.

A retired civil engineer, a leading citizen in Bellefonte, a director of the Centre County Library, and active figure in the Centre County Historical Society, Mr. John S. Sommerville was still carrying on notably in the fine tradition of his forbears when his death occurred at the age of eighty-four years, on December 21, 1950. He was a gentleman and scholar particularly well versed in the history of the Commonwealth of Pennsylvania, and most sedulous to preserve for Centre Countians, old and young, the dignity of their heritage as an integral force in the shaping of a great State and of the ideals of its citizens. Perhaps even more significant than that was his conviction that the important papers of a family which has served the public well can find no better and more appropriate final repository than among the carefully maintained official records. If he did not attain to the eminence of either his grandfather James D. Harris or his great-grandfather James Harris as a public servant of Pennsylvania, at the least he kept his actions characteristic of their generosity and fidelity, and he gave in the same spirit as they had earlier given.

His widow, Mrs. Kate D. Sommerville, wrote early this month to a member of the Pennsylvania Historical and Museum Commission staff that it was to him "the greatest relief to know that the Harris Papers would not be lost," and that his associations with the gift of them had in his last year "brought the greatest pleasure and interest into his life."