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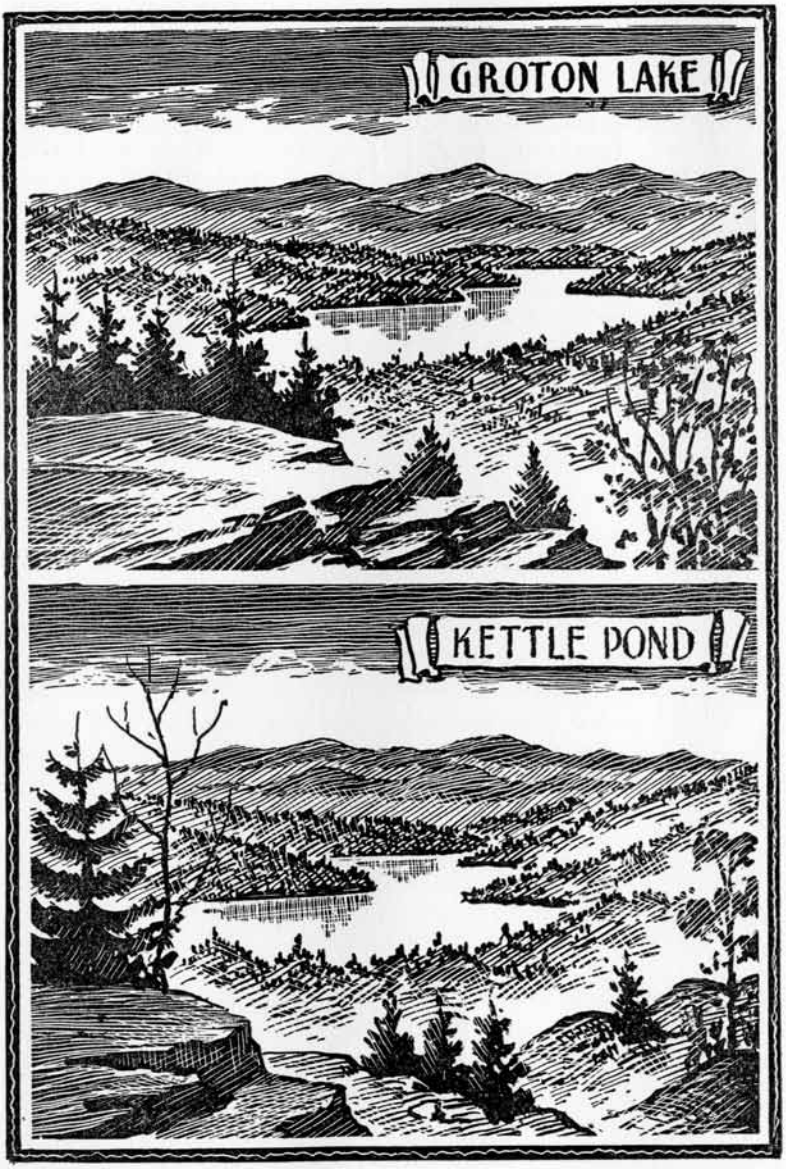
GROTON LAKE
KETTLE POND

A CANAL ACROSS VERMONT

By MELANCTHON W. JACOBUS

The vision of a canal that would join Lake Champlain and the Connecticut River by way of the Winooski River and Montpelier seems visionary indeed, today, but like all dreams that men dream, the fact of the dreaming has its significance. Mr. Jacobus began his exploration of the canal phase of the state's history in a paper in our October, 1953, number under the title, "Canal Surveys in Northern Vermont." Editor.

"Vermont will present the only obstruction to a water communication . . . from Boston to New Orleans."

IN the early sixteenth century a number of explorers from the Old World were sailing in search of a Northwest Passage for trade with the rich lands of Cathay. Even so, in the early eighteen hundreds, the forward-looking folk of northern New England were interested in opening a lesser northwest passage to promote trade and travel between Atlantic ports and Lake Champlain. Premised on natural and artificial waterways, their quest proved almost as elusive as had those of Vasco de Gama, Henry Hudson, and others three centuries before. Although Lake Champlain had already been linked with the Hudson by a canal, and there was a serious undertaking afoot to connect it with the St. Lawrence, too, most of the canals projected to criss-cross the New England countryside never went beyond the preliminary survey stage. Still, that they were contemplated and investigated *at all* is of some passing interest, and it is for that reason that I pursue this study of a canal which would have spanned the Green Mountains and joined the Connecticut River with Lake Champlain.

It is hard to determine exactly when the Onion River Canal was first conceived. There were several canal ventures in the New World at the outset of the nineteenth century. Some of them had been completed and were prospering before 1824, and I suspect it was this knowledge that prompted John Quincy Adams that same year to send "a topographical party" into Vermont to make canal surveys. It is reported that the Hon. Daniel Baldwin of Montpelier was one of those commissioned to do the task, but before he got very far along,

he was persuaded to survey for railroads instead—twenty-four years before a locomotive ever chuffed along Vermont tracks!

On January 4, 1825, Governor Clinton of New York addressed both Houses of his State Legislature on the subject of inland waterways, and his message was reprinted in serial form in three or four issues of Spooner's *Vermont Journal* (Windsor, Vt.) early that year. Coincidentally, or otherwise, a convention was held in Windsor on February 17. According to Spooner's paper, it was called specifically "for the purpose of eliciting opinions and feelings relative to an improved navigation on Connecticut river." While a canal to Lake Champlain does not appear to have been on the main agenda, there undoubtedly was a connection between the Windsor convention and a meeting in Montpelier early that summer.

The date was June 30. The problems of a canal from the Connecticut River to Lake Champlain were discussed in a sane and serious way, and only five days later the matter was presented to the public in a "Circular" outlining the project and soliciting subscriptions. The response to the appeal, largely in increments of twenty-five and fifty cent contributions, apparently realized enough to pay for some crude surveys. These, in turn, warranted a favorable report which was made to Governor Van Ness on November 2, the incorporation of the Onion River Navigation and Tow Path Companies on November 8, and a suggestion that the War Department send along some Army engineers to make a detailed study of the possible routes. That all this transpired within 128 days from the date the circular was put out can probably be laid to the enthusiasm and drive of a Mr. Araunah Waterman of Montpelier, who will be heard from again in connection with the canal. And yet, despite the momentum gathered in the first few months, very little seems to have happened in the next four years. I have examined copies of a number of Vermont newspapers between 1825 and 1829 and uncovered only one report—dated June 12, 1827—which told of engineers surveying for the canal near Williamstown and Brookfield. In all that time the Onion River Canal might easily have expired from natural causes of public apathy or geographical obstacles, but it was kept alive, somehow, or revived, and more exploratory surveys were conducted in the summer of 1829.

Perhaps a first look at the Onion River Canal can best be taken through a study of the circular itself. It was a dignified document, issued on the Fourth of July, 1825, and addressed to "the Inhabitants of the several towns in Washington, Chittenden, Orange, Windsor and Caledonia Counties, and all other persons interested." The whys

and wherefores of the Montpelier meeting were concisely and clearly set forth in an opening paragraph, declaring that delegates had met to adopt "suitable measures to explore and survey a route or routes, for a Canal connecting the waters of Lake Champlain with the Connecticut River, through the valley of Onion River."

Thereupon followed six resolutions of which I quote the first:

1. *Resolved*, That the connexion of the waters of Lake Champlain with Connecticut river, by means of a navigable Canal through the valley of Onion river, is an object of great public importance, and that prompt and efficient measures ought to be taken, to secure the vast and permanent benefits, which would necessarily result from a water communication thus formed through the centre of the State, and through a fertile, populous, and wealthy section of the country.

The gist of the other resolutions was to get the War Department to send an engineer, to have the various routes explored, and to set up machinery for raising money, calling meetings, and filling vacancies on the Board of Commissioners.

Names of three appointed commissioners were listed as Araunah Waterman of Montpelier, John L. Woods of Newbury, and John Downer of Hartford; and a committee was named, consisting of Samuel Prentiss, Timothy Merrill, Jeduthun Loomis, Johua Y. Vail, and Joseph Howes.

The circular then went on to state "that the present object is solely to raise . . . a sum of money, sufficient to procure the necessary surveys" which were figured to cost between three and five hundred dollars. It also noted that "the committee" was quite aware "that prejudices and sentiments exist in the minds of a few respectable and intelligent citizens, adverse to an enterprize of this kind. . . ." For them the committee recommended "a nearer and more attentive view of the subject."

A reference was made directly to "exertions which are now making in Massachusetts and New Hampshire," and by implication to the Erie Canal and other western waterways, for it cautioned that "Vermont will present the only obstruction to a water communication . . . from Boston to New Orleans." Asking themselves whether this canal was practicable or not, the committee members assured themselves it was, quoting "one of the ablest engineers in our country" who argued thusly: "Our mountains so far from being barriers are rather to be considered the great laboratories of that element [water, of course] which is necessary to its execution."

The final question was about finances and where would the money

come from. The reply—"the national government. . ." At least the committee thought it would "probably listen to our application for aid." Should the government decline to subsidize the undertaking, the committee counted on help from local capitalists, and at the end of the circular a fair amount of blank space was conveniently left for a list of subscribers and their subscriptions.

There you have it. Call it a pompous vision if you will—for surely the *grand plan* of inland navigation for all time was the one in which Vermont figured as "the only obstruction" between Massachusetts and Louisiana! Yet how could a mere ridge of Green Mountains deter an unidentified but philosophical engineer like the one whose faith in canals was quoted for all to see? Or was it a case of history anticipating itself—with federal aid versus private enterprise being debated back then? Whatever their worth, the pronouncements of this circular were not, I believe, simply the bugle calls of canal fans and fanciers, but sidelights on an early American way of life.

I guess the circular was received that summer very much as a comparable prospectus would be received today. There were some who would have dismissed the plan as a fantastic one and filed the circular in the waste basket. Others as heartily endorsed the idea—though their enthusiasm was often tempered with inertia. On the whole, I think it is fair to say, the project for the Onion River Canal must have been acceptable. Acceptance was sometimes conditional—the conditions being the contrary ideas of various Vermonters who thought they had a better notion of how and where the canal should go. There was, for example, some free advice offered the committee by a man who was worried about the "rocks at Bolton and Middlesex" and suggested—but did not specify—a circuitous detour around them. And Mr. James Whitelaw of Ryegate wrote Mr. Vail (of the committee) that the canal "will never touch the County of Caledonia, in my opinion there are two much better routes—." Yet, he went on, "I am so old that I shall never see the work completed but to make a beginning I inclose to you a three dollar bill which I believe will be the greatest donation you will get from any individual in this town—."

It is probably time now to take "a nearer and more attentive view" of the Onion River Canal and to examine several routes that were proposed. As its name implies, the Onion—now the Winooski—River was its main artery. There was virtually no disagreement about this, and northwestward from Montpelier traffic would follow this stream down to Lake Champlain. It was steep in places, with substantial cascades at Bolton and Essex Junction, but there were stretches

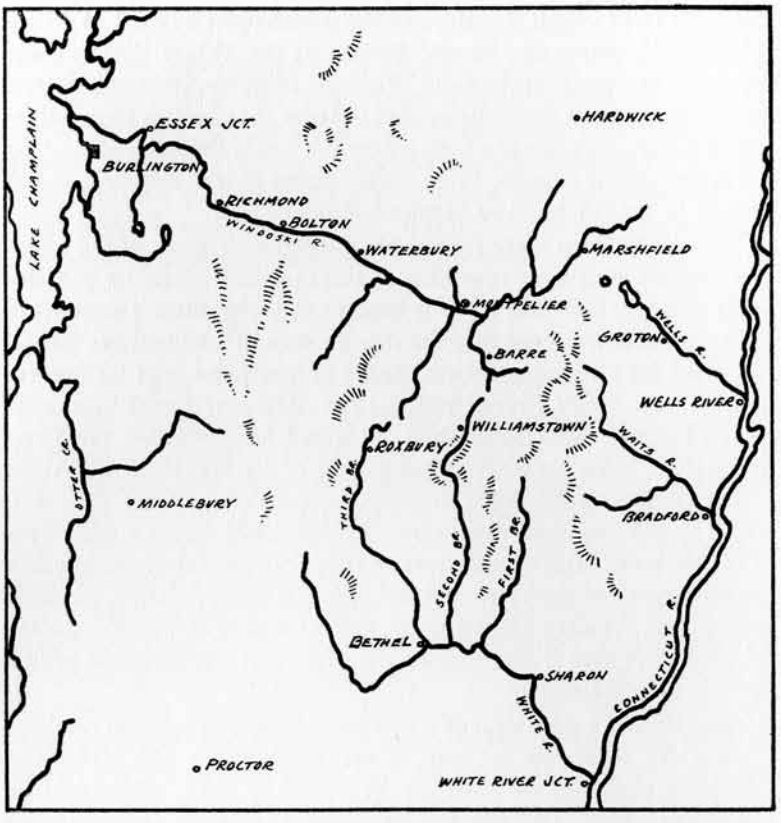

PLATE I

where the river flattened out perceptibly, presenting a gradient (in round numbers) of only 1 in 2000. Two—maybe three—major lock installations would be required, but between Montpelier and Lake Champlain the Onion River offered really very few problems of navigation.

That was not so, up to Montpelier from the Connecticut. There seemed to be a choice of five routes: two of them would ascend the White River, one the Waits River, and two more would climb the Wells River. [*See Plate I*]

From White River Junction the first two routes would start up the White River together, one breaking off at North Royalton to climb the Second Branch, and the other turning at Bethel up the Third Branch. It would take a long flight of stairs (locks) to carry

the canal from North Royalton to the summit just beyond Williamstown Gulf, where the Second Branch of the White River almost meets the Stevens Branch of the Winooski at an elevation of 910 feet, but still more steps would be needed to boost the canal up from Bethel over Roxbury Flat at 1000 feet, where the Third Branch and the Dog River begin their courses. From these heights of land the canal would have to be locked down to Montpelier at 523 feet.

These hill-climbs were formidable but fell well short of the 1800-foot summit in Orange township or the 1400-foot levels up in Caledonia County. [*See Plate II*] It is hard to see why these routes were even considered, except that the one by way of Orange was direct, and there did seem to be an abundance of ponds and bogs for feeders up above the Wells River. And had the Merrimac Canal been constructed across New Hampshire, it would have reached the Connecticut at a point not far from the mouths of the Waits and the Wells.

The passage up the Waits River met a brook above West Topsham, which would carry the canal up to Riddle Pond. About a mile west of the pond the canal would crest at 1800 feet, then descend to catch the Jail Branch of the Winooski and follow it along to Barre. So much lockage was required for this route, and the source of water so doubtful, that I am sure it was thrown out of serious consideration pretty early in the explorations.

Finally—and a good deal of time seems to have been spent on them—were the routes up by way of the Wells River and across the Caledonia highlands to reach the Winooski in either Marshfield or Cabot townships. The present-day Barre & Chelsea (formerly the Montpelier and Wells River) Railroad follows the same route for much of the way. The height of land would be about 1400 feet at Kettle Pond, and about the same at Peacham Pond if the canal were diverted that way.

I imagine much of the foregoing information was available at the conclusion of the early investigations. Nothing has turned up about what was accomplished in 1827, but there is some material on the surveys two years later. It begins with a letter to Mr. Vail from Governor Crafts, date-lined Craftsbury. July 4th 1829.

As Capt Graham of the U.S. Engineer, is now in the vicinity of Montpelier, with a view to making examinations and surveys for the purpose of ascertaining the practicability of opening a water communication from Lake Champlain to Connecticut River, by Onion River—it is believed that if some gentleman acquainted with the several routes, which have been proposed, and who would feel an interest in the object, would attend upon the engineers,

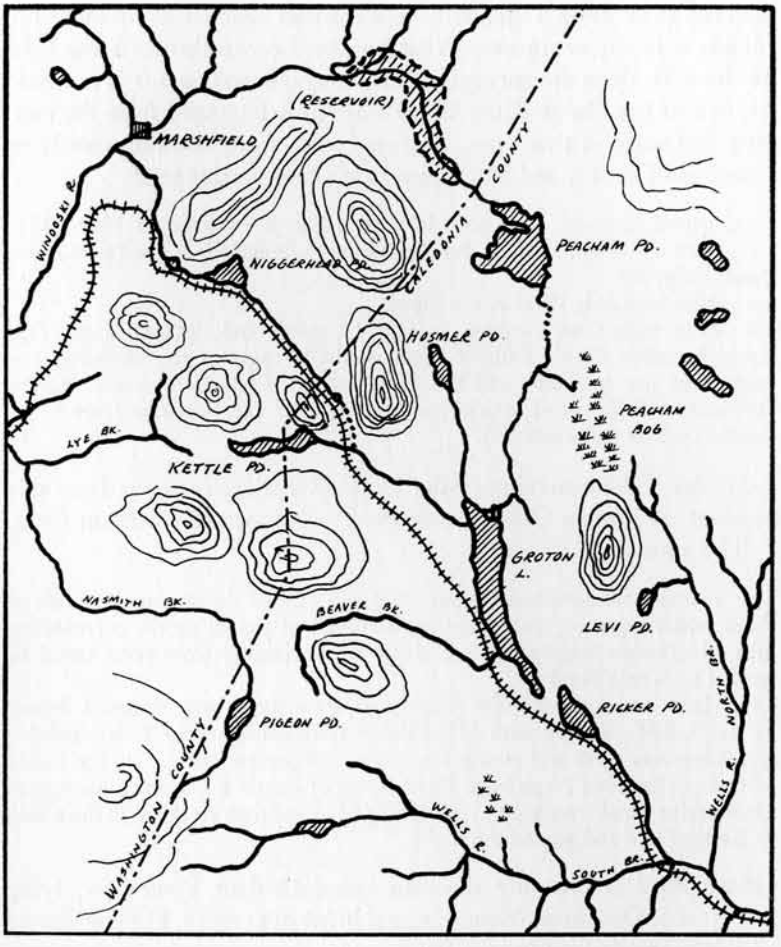

PLATE II

who must of course be unacquainted with the country, and point out to them the several contemplated routes, it would very much facilitate the object they have in charge—I therefore request that you would consider yourself as an agent on the part of the state for the purpose of procuring all such information as you may think necessary, to enable the engineers to designate the best and most convenient route for a canal . . .

Mr. Vail apparently designated Mr. Araunah Waterman as *his* agent and "a gentleman acquainted with the several routes." In the collections of the Vermont Historical Society there are a few pages

believed to be from a "journal" he kept that summer as he made the rounds with the engineers. What he jotted down throws some light on the difficulties the surveying party encountered, and it is not hard to see that the Onion River Canal was still a long way from the construction stage at that time. The engineers were working mostly in Caledonia County, and Mr. Waterman's first entries read:

Commenced Services as Agent July 13 1829—I repaired to Plainfield
14 Went with Capt Graham & Judge Pitkin to Onion River Pond to examine Pond, Falls, &c
15 Went to Kettle Pond & Ly Brook
16 Went with Capt Graham and Gov^{r} Crafts" and "examined the falls formerly called Moll's Falls and gauged the stream—at top discharge 800 cubic feet per minuett—and the Falls by the Company present, named 'Winooskie Falls'—and which was approved by the Gov'r and are to be known by that name *hereafter*.

I wonder if the renaming of the Onion River really stems from this incident, and when Onion River Pond was renamed Peacham Pond.

The journal continues:

17 Visited and examined Pigeon Pond and gauged the stream at mouth of Pond—discharges 297 cubic feet per minuet and passed on the surrounding hills to examine heights and see if the Brook issuing from pond could be carried to Kettle Pond—
18 Made arrangements for further Examinations and returned home.
21 at 8 AM Started with Judge Pitkin from his house for Kettle Pond—met Engineers there and repaired to Camp—Reconnoitred . . . in the valley of Goose Pond and Negrohead Pond, north of Kettle Pond, for a passage to Onion river Pond—went on to the Owl's head and then returned to the Camp at Kettle Pond and passed the night.

Goose Pond is probably the one called Goslant Pond now, lying just west of Owlshead Mountain, and in his next entry, H Pond almost certainly stands for Hosmer Pond.

22 Reconnoitred . . . for a pass from Kettle Pond to Onion River Pond, passed round H Pond and up to Heath's and on to the Hill above his home, and became convinced from observations that Kettle pond must be higher than Onion river Pond and Hosmer Pond too—

Here Mr. Waterman was batting only .500; Kettle (elevation 1443) is higher than Peacham (elevation 1401) but is twenty-seven feet lower than Hosmer. [*See Plate II*] Captain Graham was skeptical for, the next day, "he determined to ascertain heights of ponds by actual surveys." I am a bit surprised that he did not think of this sooner, although it was definitely not as easy as it sounds, running levels

through the brush and up and down sharp slopes. And he may have been hoping to reach some firm conclusions without using his instruments.

On the 24th, after a party had been detailed to "cut a road to Wells River Pond" (which must be Groton Lake), Mr. Waterman noted:

. . . reached Wells River Pond 40 minuets past 12 At noon. Passed round the head of the Pond & reconnoitred for a Camp and a route to Onion river Pond —5 minuets past 3 o'clock left W. R. Pond for Kettle Pond and went a foot to S. Williams in Plainfield arrived at a five minuets after sundown—took a horse and came home a few minuets after nine PM.

Not only had Mr. Waterman put in a busy day, but the entry gives a clue as to two possible courses the canal might follow through connected depressions in the highlands there. From Groton Lake one would cut for Niggerhead Pond, and then down to the Winooski at Marshfield; the other would find a way over to Peacham Pond, and from there to the Winooski down Molly's Falls Brook.

The survey suffered a setback three days later when Captain Graham "formed a determination to visit his family at Georgetown D.C." Mr. Waterman, and a Mr. McDuffie besides, "sat up to answer questions and give him information to enable him to give instructions to Lieut. Mackay in whose hands he left the Survey."

For the next few days the party worked in and near Peacham Bog where they got caught—and very wet—in a heavy rain. Then:

29 Took our horses and went round to view Macomber Pond—and went upon Mantletree Mountain and took a view of the situation of W. R. Pond & Lund's Pond both in fair view the valley containing Bogs and *the bog*, Kettle Pond and Onion River Pond—

It is difficult to position Mantletree Mountain precisely. The name does not persist, nor have I come across it on any old maps. With Groton Lake and Rickers (Lund's) Pond both "in fair view" from it, as well as the bogland and Kettle and Peacham Ponds, my dead reckoning would suggest it was what is known as Jerry Lund Mountain today. And Levi Pond, nearby, might well have been Macomber Pond.

The entry for the next day follows:

30 Went with Party to Onion river pond where proceeded in two parties one to run from Pond down the brook to Onion River—and one to run a Level to strike Molly's Pond brook starting 10 feet above the level of Onion river Pond . . .

There have been changes since Mr. Waterman's report—these brooks have been jointly dammed, forming a capacious reservoir in the southeast corner of Cabot township—yet it is easy to see what the survey party had in mind as a likely route for the canal.

An early August entry introduces a Lieutenant Chase (who was *he?*) and tells of their getting lost:

7th Went with Lieut Chase to Onion River Pond, cross the same through the woods for the Bog—missed our way in the woods till 3 o'clock reconnoitred it a while and went to Mr. Martin's for refreshments.

Not only the genial host, the next day Mr. Martin was pilot as well:

8th Got Mr. Martin to guide us again repaired to the Bog examined the *Outlet* on the west and followed the brook to the line of Survey and up the height to Bench Mark—with *Martin*, and then back—Led Lt. Chase to the other two Outletts who surveyed each for dams—the easterly one to be raised 8 feet requires a dam 904 feet—the southeasterly one a dam of 440 feet & the westerly one a dam of 232 feet in length—returned to Martin's—& took tea there . . .

Their wallowing about in the bog was occasioned, I'm sure, by their spotting it as a feasible feeder for the canal. While it would never provide a crystal-clear torrent, there was a source of water in the marshes, which could be stored behind the dams and tapped at will. But I shudder at the size of the dams required—one of them over three hundred yards long! Maybe Mr. Waterman had misgivings, too, for at this point he paused to tot up an expense account of 18″64 (I presume $18.64) for such travel perquisites as stage fares, horses, and the use of a gig twice.

The homesick Captain Graham returned on August 20th and "expended the forenoon" with Mr. Waterman at Montpelier, after which they repaired to Haverhill (New Hampshire). The next day they joined the survey party "someways above the village" of Wells River. The party was evidently working down off the highlands and almost finished with that route. The journal contains but two more notations:

22 Assisted in completing the Survey to the Connecticut, made all the arrangements required and at 6 o'clock PM left Capt G. and Wells River for Haverill

23 Returned from Haverill to Montpelier & closed services for the present.

It is a futile kind of speculation, I know, but I wonder whether Mr. Waterman felt he was through just for the time being—while the data were being collated, the construction plans drawn up, and the contracts let—or if he knew it was the end of the project for good.

What the surveyors found—or didn't find—in the pattern of ponds and bogs up in the highlands may have sealed the doom of a canal in those parts. Old Jim Whitelaw, with his three-dollar bill, was right; it would "never touch the County of Caledonia." As for the other routes, I've been over them, too. They are rugged! I am afraid the Onion River Canal must be listed as another failure in the search for a "Northwest Passage."

[The maps and the photographs used for the illustrations on the frontispiece page are the work of Mr. Jacobus. Editor.]