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THE BUILDERS OF THE RIDEAU CANAL

1826-32

by

EDWARD F. BUSH

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THE BUILDERS OF THE RIDEAU CANAL, 1826-32

Parks Canada Manuscript Report 185 by Edward F. Bush

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The concept to digitize several of the important Rideau Manuscript Reports was conceived in 2007 by Ken W. Watson, local Rideau author and historian and Chair of Friends of the Rideau’s Publication Committee, as a method to make these valuable research documents more accessible to the general public.

Mary Ann Stienberg of the Rideau Canal Office of Parks Canada, whose library holds these reports, generously offered to OCR (text scan) this manuscript report with the use of Katimavik students. Administration and supervision of the student scanning and proofing work was provided by Cheryl Gulseth. Additional scanning of several sections was done by Cheryl Gulseth. Mary Ann Stienberg was also instrumental in obtaining Parks Canada permission for Friends of the Rideau to make this digital document available to the general public.

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CITATION NOTES

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MANUSCRIPT REPORT SERIES

Shortly after Parks Canada took over the administration of the Rideau Canal in 1972 (previously under the jurisdiction of the Department of Transport) they tasked several of their high quality researchers and historians with detailing various historical/heritage aspects of the Rideau Canal. This resulted in a series of research reports on the Rideau Canal, produced from the mid-1970s through to the mid-1980s.

Intended mostly for internal use, these reports were produced in limited numbers with only a few receiving broader distribution through the History and Archaeology series of books published by the Ministry of Environment (National Historic Parks and Sites Branch of Parks Canada).

A few copies of the manuscript reports were also distributed to “various public repositories in Canada for use by interested individuals” – but today can generally only be found in the local Rideau region libraries of Parks Canada.



The Builders of the Rideau Canal,

1826-32

by Edward F. Bush

Manuscript Report Series is printed in a limited number of copies and is intended for internal use by the Department of Indian and Northern Affairs. Copies of each issue are distributed to various public repositories in Canada for use by interested individuals.

Many of these reports will be published in *Canadian Historic Sites/Lieux historiques canadiens* and may be altered during the publishing process by editing or by further research.

La Série intitulée Travail inédit est imprimée à tirage limité pour les besoins du ministère des Affaires indiennes et du Nord canadien. Des exemplaires de chaque rapport sont distribués à des archives publiques au Canada, où les intéressés peuvent les consulter.

Bon nombre de ces rapports paraîtront dans la revue intitulée *Canadian Historic Sites/Lieux historiques canadiens*, et pourront être remaniés ou mis à jour.

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1826-32

by Edward F. Bush

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Abstract

This paper is a study of the men, both soldiers and civilians, who built the Rideau Canal. The opening pages deal with the organization of the project and the background and personality of the superintending engineer, Lieutenant Colonel John By. An account is then given of the undertaking, focussing on the participants against the background of a frontier society, and concludes with By's recall to England and the Parliamentary inquiry into his conduct. A series of biographical sketches on key figures engaged on the Rideau follows. A number of appendices made up of paylists, nominal lists, requisitions and land petitions submitted by discharged soldiers have also been included to throw further light on the men who participated in this remarkable engineering achievement of a century and a half ago.

Prologue

The last century boasts few engineering achievements more challenging, considering the time and place, than that of the building of the Rideau Canal. This called for the creation of a navigable waterway through a thickly forested and malarial wilderness by means of a series of 47 locks and sundry dams whereby falls and rapids might be bypassed in the 124-mile progress from the Ottawa River to the foot of Lake Ontario. This paper is the story of the men, both soldiers and civilians, who over the course of six arduous years (1826-32) accomplished the feat. It is also the story of the superintending engineer, Lieutenant Colonel John By, Royal Engineer, whose skill, experience and unflagging zeal saw the project through to its conclusion. A by-product of the formidable endeavour was the founding of the nation's future capital.

In 1825 the only settlements of significance in the heavily forested province of Upper Canada were Kingston with a population of under 3,000, and the then nondescript little capital, "muddy" York, with little more than half that number. The white population of the whole province stood at little more than 150,000, concentrated along the left bank of the St. Lawrence, the north shore of Lake Ontario, the Niagara peninsula and the fertile belt along the river Thames. Encroaching on every hand was thick, often all but impassable, mixed hardwood bush which had served as a haunt of nomadic Indian tribes for countless centuries. This was the setting for Colonel By's crowning achievement, albeit

one which eclipsed for a time his reputation and shortened his life.

Inception

The concept of an interior line of communication originated as a defensive measure following the War of 1812. The vulnerability of the St. Lawrence line of communication had been demonstrated in that conflict, and it had been the American failure to appreciate this factor which, as much as anything else, saved Upper Canada. The waterway made up of lakes and rivers linking the Ottawa and St. Lawrence rivers across a low height of land offered an alternative link, somewhat longer but more secure in the event of further hostilities with the Americans - at the time a by no means unlikely contingency.

The Rideau waterway was first explored by Lieutenant French in 1783, and subsequently by Captain Joshua Jebb, who first reported on the feasibility of a navigable route in 1815 [1816]. The Duke of Wellington, then Master General of the Ordnance, took up the theme in a despatch to the Earl of Bathurst, the Secretary of State, early in 1819: "The navigation of the River Rideau should be made practicable and easy to the junction with the first lake; & thence if possible through the different lakes to Kingston."¹ This was followed by a report on a line of communication linking the upper with the lower province, including the Rideau waterway, transmitted by the ill-fated Duke of Richmond to the Colonial Secretary in January 1819.² Wellington's influence in backing a measure for the more sure defence of the vulnerable province may well have been decisive. In 1824 the imperial government offered to assist that of Upper Canada by means of a substantial loan to finance what promised to be an expensive undertaking. Upper Canada

preferring to concentrate on the more direct and commercially promising St. Lawrence route, declined the offer.³ Inasmuch as the defence of an outlying province, so recently subjected to American invasion, was a matter of prime concern to Britain at the time, the imperial government undertook the project itself at the expense of the British taxpayer. As with so many large-scale enterprises before and since, the cost of this one was to exceed the early estimates many times.

A commission consisting of Sir James Carmichael Smyth, Lieutenant Colonel Sir George Hoste and Major Harris, RE, (known as the Smyth Commission), appointed by Wellington then commissioned a civil engineer, Samuel Clowes, to survey the whole line of the Rideau and report upon the feasibility and cost of a navigable waterway. In April 1824 Clowes submitted his report, which was to cause a good deal of later trouble. Clowes recommended locks with the modest dimensions 108 x 20 feet for the misleadingly low figure of £169,000. The Board of Ordnance, the authority charged with responsibility for the undertaking, accepted without question this no doubt encouraging estimate, and decided to proceed with the project. General Gothar [Gother] Mann, Inspector General of Fortifications, was asked to select an experienced officer of engineers to superintend the work. Mann chose a 45-year-old officer of the Corps of Royal Engineers, Lieutenant Colonel John By.⁴

The Founder of Bytown

The Inspector General's choice was more than justified by events, for an undertaking so arduous demanded a man of extraordinary qualities. John By, an engineer of ripe experience, was born in London in 1779, the second son of George By and Mary Brian. By came of a long line of customs

officials, and was the first to break with family tradition, choosing the army as a career. The family motto was "Give and Forgive."⁵ Before his untimely death at the comparatively early age of fifty-seven, John By had given of his health and his strength in full measure, and had much to forgive a government which denied him any recognition for the outstanding achievement of his career.

Graduating from the Royal Military Academy, Woolwich, John By was commissioned second lieutenant in the Royal Artillery on 1 August 1799. He transferred to the Royal Engineers the following December, where he served with distinction the rest of his army career. Colonel By was no stranger to Canada when he assumed command on the Rideau. He was stationed at Quebec 1802-11, where he worked on the strengthening of the citadel. He also designed Martello towers, defensive works mounting guns for the defence of harbours; and he gained his first experience with canals, being engaged on the building of the Cedars Canal near Montreal. During his period at Quebec, By, assisted by another officer, built an elaborate and detailed scale model of Quebec, town and citadel, which for many years was a central attraction in the Public Archives Museum on Sussex Drive and subsequently in the Canadian War Museum.

In 1811, By was recalled to England and posted to Wellington's command in the peninsula. In May and June 1811, By took part in the first two unsuccessful sieges of Badajos, was wounded and invalided home. Little if anything is known of his role in this campaign, but it is not unlikely that he attracted the favourable notice of Wellington. Although Wellington later expressed misgivings concerning By's independent action on the Rideau, it is not unlikely that Wellington was a factor in his appointment.

In 1812 By was put in charge of the Royal Gunpowder Mills, Waltham Abbey, Faversham and Purfleet.

By 1821, in common with so many serving officers following the Napoleonic Wars, By found himself on the unemployed list. The Rideau assignment must have come as a godsend. He conferred first with Carmichael Smyth, who later was to differ sharply with By over the size of the locks. This altercation, however, lay in the future; for the present, Smyth, as head of the commission which had initiated the project, was the logical person to brief By before his embarkation.

In May 1826 Colonel By, accompanied by his 28-year old wife Esther and two daughters, took passage for Canada in the bark *Endeavour*, arriving off Quebec on 30 May.⁶ On the first occasion, nearly a quarter century earlier, when By had arrived at the citadel, he had been a 23-year-old lieutenant. As By stepped ashore on his second posting to the Canadas, a middle-aged officer entrusted with a challenging assignment in the wilderness, one wonders what sort of impression he made. J.E. Alexander in his *Transatlantic Sketches* published in 1833, a year after the completion of the Rideau works, described By as "an officer of singular activity of mind and body."⁷ Without such attributes By could never have completed his assignment. The remoteness of the Rideau region at that time, and the slowness of communications, demanded a man of self-reliance and initiative. A man hanging on orders and authority from his superiors would have been lost.

Physically, By was described by early inhabitants of Bytown as a man of fine soldierly appearance, 5 feet 10 or 5 feet 11 inches in height, with a rather portly figure.⁸

H.R. Morgan, writing many years later (1912) on the basis of pioneer reminiscences, described By as

of medium size and inclined to stoutness,
with full, ruddy, pleasant features, a
happy if determined disposition which is
their usual

accompaniment, and a tendency towards pompousness arising, no doubt, from his military training. He was intelligent, resourceful and most energetic.⁹

The physical description accords closely with documentary sources and with extant portraits. By combined the qualities of a strict disciplinarian with a philosophic view of life and sympathetic understanding - justice tempered with mercy. He was readily accessible to all, of high and low degree alike, and quick to render justice. His character is perhaps best summed up by a bit of indifferent contemporary verse:

A man who knew not how to flinch,
A British soldier every inch
Courteous alike to low and high,
A gentleman was Colonel By.¹⁰

Preliminary Arrangements

On landing at Quebec, By straightway reported to Colonel E.W. Durnford, officer commanding the Royal Engineers in Canada, an officer whose confidence By was to retain in full through the difficult years ahead. By August By had set up a temporary office in Montreal, carried out interviews with prospective contractors, and laid his preparations for departure up-country. Meanwhile he was joined by the nucleus of his staff: Captain Daniel Bolton, RE, destined to succeed him as superintendent on the completion of the canal, who arrived at Quebec on 3 August, and John MacTaggart, a talented but (as it transpired) intemperate clerk of works, who headed the Engineer Department civilian staff.

Based on his initial talks with contractors and other people concerned with or informed about the task, By wrote

his superiors in London that Clowes' estimate of £169,000 for the job was far out, and that a figure of £400,000 would be much nearer the mark. This disclosure marked the first round in a long exchange over costs in which By was to be the victim of conflicting organization and loose accounting. Indeed it is no exaggeration to state that the dilemma in which he was to find himself over expenditures was to cost him his reputation and shorten his life.

With the preliminaries completed in Montreal, By set off up the Ottawa, arriving at Hull (already a considerable community) on 24 September 1826. He had now been little over three months in the Canadas, but was already at the scene of his labours. He conferred with Philemon Wright, the founder of Hull and most knowledgeable settler in the region. By's first task, as he conceived it, was to select the point of entry of the canal to the Ottawa River. In order to avoid the Hog's Back cataract and the 45-foot Rideau Falls, where the Rideau cascades into the Ottawa, an artificial channel or canal had to be provided for the final 5 to 6 miles of the waterway. Originally the Ottawa outlet for the Rideau Canal was planned near the Chaudiere Falls. On going over the ground, By had second thoughts about this, preferring instead a narrow gorge bounded by 80-foot cliffs, offering natural access to the interior. Both the Governor in Chief, Lord Dalhousie (a warm supporter of By's) and Colonel Durnford concurred with By in his decision.¹¹

If By had had any doubts about the formidable nature of his assignment, they must have been dispelled within a few days of his arrival on the scene. Dense mixed hardwood bush flourished to the water's edge. Settlement on the south side of the river, the site of the future capital, was negligible. Nicholas Sparks had a house on what was shortly to be Wellington Street, between the future Kent and Lyon streets. Nicholas Firth kept a tavern at Slide's Bridge

(near the present intersection of Booth and Oregon streets in the LeBreton Flats). Finally, Caleb T. Bellows ran a general store and landing stage at what was then known as Bellow's Point, at the eastern tip of Victoria Island. For the rest the site of the future capital was densely forested. Within a twelve-month a lusty, busy and boisterous little community would arise as a result of the canal works, named after the superintending engineer. Bytown would soon surpass the much older agricultural centre of Richmond as the entrepôt of the district.

Before returning to Montreal for the winter, By had Entrance Valley (as the gorge was named) cleared in preparation for the building of a flight of locks the following year. He also planned the location and construction of military and civilian barracks, workshops, an Ordnance office and commissariat, and had chosen as a commanding site overlooking the initial works for his own house. By 4 October 1826, only ten days after his arrival, the *Canadian Courant and Montreal Advertiser* reported that preparations for the great undertaking were well advanced, with some of the staff already engaged. At this point it is helpful to a full understanding of the difficulties which confronted By to consider the cumbersome and complex authority under which he had to undertake his arduous duty.

Organization

The above heading would seem, at first sight, almost a misnomer. A complex and conflicting organization, combined with the slow communications of the time (despatches were a month to six weeks in transit, sometimes more) and primitive conditions in a remote area, threw Colonel By very much on his own initiative. Clowes' initial estimates could be described as most misleading, if not totally mischievous as

far as the future credibility of By's realistic and reliable figures was concerned.

Since the building of the Rideau Canal was an imperial undertaking, Parliamentary appropriations were the source of the funds. These were made available in London through the Colonial Department, and paid out by the Ordnance Department in Montreal as the work progressed; the Ordnance storekeeper had "the necessary credit to make all the periodical payments, whatever may be the sums thus disbursed by the Ordnance Department, **whether more or less than the estimated annual grant each year.**" (emphasis added)¹² The commissariat officer at Quebec, a civilian, represented the crown in all contracts, and was in fact the Treasury representative in the several colonies. The Engineer Department, a branch of the Board of Ordnance, had the direction and supervision of project. The superintending engineer (Colonel By) was responsible both for the design and the execution of all the works (whether locks, dams, weirs and appurtenances thereto) whatever mode performed,¹³ meaning by contract or day labour.

Clowes had recommended use of the contract system for most of the works in the interests of speed and efficiency. Colonel By was responsible for the fulfillment of all contracts, payment for which could not be made by the Ordnance department until the work had been done to By's entire satisfaction. By's relations with the Commissary General's Office in Quebec added to his already burdensome difficulties. The Commissary General, it will be recalled, let the contracts, but By supervised the work on the spot. By failing to make due allowance for the crude conditions which the work had to be carried out, coupled with the slowness of communications, the Commissary General added greatly to Colonel By's burdens.

The Bytown staff was partly composed of Royal Engineer

officers and partly of civilians recruited by the Engineer Department. The officers were directly responsible to the Superintending Engineer for the due fulfillment of contracts at each location along the line of the canal. Wellington feared that under the novel conditions imposed by a remote location far from headquarters, the officers would tend to exceed their authority. He ruled, therefore, that all officers were "to be held within the normal chain of command, especially Colonel By. That officers should not be allowed to assume any novel relations towards the authorities in Canada."¹⁴ In other words, Wellington stood for centralized control, but in the circumstances of the time, centralization would not work. Certainly a cumbersome organization, in the circumstances of the time, could not be expected to operate efficiently. Hence much responsibility, if the job was to be done, devolved upon By himself.

The Engineer Department (Bytown)

Based at Bytown and housed from 1827 in a stone building halfway up the east side of Entrance Valley fronting on the 80-foot flight of locks, this office was the heart or nerve centre of the project. Two officers of Royal Engineers, Captain Daniel Bolton and Lieutenant Henry Pooley, along with an ensign from the 60th Regiment, formed the military complement; the rest were civilians - supervisors, overseers, and master artificers. The senior appointment was the Clerk of Works, drawing pay at 14s. per day, a post first held by the able but mercurial John MacTaggart, who served as By's senior assistant or executive officer. H. Howard Burgess was appointed clerk at 7s.6d. per day. Four Overseers of Works were appointed at the same rate of pay, a Clerk of Stores (A. McGillivray) drawing 5s. per day, a master carpenter (I. Fitzgibbon), a master smith (W.

Formay),¹⁵ besides a Paymaster (William T. Clegg). Provision was also made for three master masons on the establishment, numbering in all 16. By's initial appointments, other than MacTaggart, were H.H. Burgess (22 August 1826), T. Burrows, Overseer of Works (25 September) and A. Gibbs (idem) 6 October. The following spring Colonel Durnford could confirm only MacTaggart, Burgess and J. Burnett, subsequently hired as an Overseer of Works, as permanent employees.¹⁶ Of these three permanent appointees two were subsequently dismissed for misconduct. All such appointments were referred to the Board of Ordnance for approval. Each member of the Engineer Department staff, soldiers and civilians alike, while on duty along the line of the canal, was allowed two horses with forage. Most of the staff gave good service, but inevitably there were exceptions (see Appendix A for dismissals).

The Military

The military stationed on the Rideau were made up of officers of the Corps of Royal Engineers (until 1855 on the Ordnance rather than the Army establishment) and two companies of Royal Sappers and Miners. The latter were composed of sundry artificers and tradesmen recruited upon basis - masons, carpenters, smiths, coopers, miners, quarrymen. In addition to practising their respective trades, the soldier-artificers served on guard and picket duty at the various works along the waterway.

Although ostensibly one unit, the Royal Engineer officers and the rank-and-file Royal Sappers and Miners formed separate establishments until 1854. The King's Engineers, raised for a specific purpose and then disbanded, trace their origins back to the Norman Conquest. A regular Corps of Royal Engineers on a permanent basis originated

by royal warrant dated 26 May 1716.¹⁷ From this date at the end of Queen Anne's wars the corps was able to offer viable careers to talented and ambitious officers. Sixteen Royal Engineers served on the Rideau establishment.¹⁸

The Corps of Royal Sappers and Miners, at first styled the Soldier Artificer Company and recruited from the Gibraltar garrison, originated by royal warrant dated 6 March 1772.¹⁹

Our will and pleasure therefore is that a company of artificers be forthwith raised,...who shall have been bred to the trades of stone-cutters, masons, miners, lime-burners, carpenters, smiths, wheelers and gardeners.²⁰

By had first asked for four companies, but had to be content with two. The companies were recruited for the Rideau service by warrant dated 27 March 1827. The 15th Company, under the command of Captain Victor, arrived at Quebec on the transport *Southworth* on 1 June 1827, and the 7th, led by Captain Savage, on the *Haydon* on 17 September. The total complement of the two companies was 162 men.²¹

Arrived on the Rideau, the troops first camped under canvas at Richmond Landing, until they had built three barracks of "good rubble masonry"²² on the commanding site, at that time appropriately known as Barracks Hill, overlooking the Ottawa, the future site of the federal parliament buildings. Spare rooms in the barracks were assigned to officers, and accommodation for soldiers' wives was provided above the kitchens. The 15th Company remained stationed at Bytown, but in the spring of 1828, following their first winter on the Rideau, the 7th Company transferred to Newboro, a point midway along the line of the canal.

Cornish workmen were in demand, particularly masons and

stone-cutters, because of their skill in "dry key work" dam construction. The soldier artificers, however, were recruited from a number of regions in the United Kingdom.

There can be no doubt concerning By's satisfaction with the Sappers and Miners. In writing to General Gothar [Gother] Mann, Inspector General of Fortifications early in July 1827, By had high praise for the unit and added that he could use four companies to good advantage:

I have the honor to report that I find the greater part of Capt'n Victor's company such intelligent and well instructed men, that they are of the greatest use to me, and I beg to assure the Master General & Right Honbl. Board that nothing will tend to forward the great work so much as allowing me four companies of Royal Sappers & Miners.²³

The Sappers and Miners, in contrast to a similar unit, the Royal Staff Corps (which had served on the construction of the Carillon and Grenville canals) had an extra hourly rate "according to their talents." Trades pay varied between 6d. and 1s. per day for ranks below that of sergeant major and "2nd master sergeants."²⁴ The two artificer units, Royal Staff Corps and Royal Sappers and Miners, were rivals; the former was on the establishment of the Quartermaster General's Department, and the latter reported to the Ordnance. When the Rideau project fell to the Ordnance Department, the Royal Engineers and Sappers and Miners became the inevitable executors of the work.²⁵

By thought it prudent to keep the Sappers and Miners at Bytown end of the canal. Desertion was endemic in the British army of the day, and proximity to the American boundary undoubtedly encouraged the tendency. The waterway was somewhat healthier on the Bytown side of the low height of land. As an added inducement to see the job through,

Colonel By proposed free 100-acre land grants for each soldier who completed his service in a satisfactory manner. Undoubtedly this bounty had a salutary effect in stemming desertion, for by the standards of the time and the arduous conditions imposed in an insalubrious wilderness, a much higher rate could have been anticipated.

The soldier artificers proved their worth many times. Their first assignment included the following: clearing Entrance Valley, in order that excavation could be undertaken for the flight of eight locks; and building a barracks and hospital on Barracks Hill, civilian barracks in Lower Town, a commissariat office (now the Bytown Museum), together with Ordnance and Engineer Department offices half-way up Entrance Valley, wooden workshops, and Colonel By's house commanding a view of the whole undertaking. Their carpenters built the heavy lock gates of oak, and smiths made the crabs and gear for the operation of the heavy gates. Following the failure of the Hog's Back dam, the most challenging work on the whole line, entailing the construction of a 45-foot dam of inverted keywork, a 60-man detachment was posted to this location. A detachment was posted to the exceedingly feverish Isthmus, following the failure of the contractor there. Small detachments for the safeguarding of stores and maintaining of order were stationed at the various works - Merrick's Mills, the Isthmus, Chaffey's Mills and Newboro.

The Contractors

The Clowes Report, it will be recalled, recommended contracting for most of the major works in the interests of time and economy. By December 1826 advertisements for tenders were appearing in Canadian and American newspapers. One such advertisement, quoted by Robert Legget in *Rideau*

Waterway, ran thus:

The works of the Rideau Canal seem to divide themselves into the following great branches; building and finishing locks of heavy masonry, excavating earth and clay, excavating rock and gravel, constructing aqueducts and bridges of wood etc.²⁶

Each contractor had to cite two guarantors, who were to be Canadian residents of responsible character. John MacTaggart, the first Clerk of Works, made clear in his *Three Years in Canada* (London, 1829) that contractors would be engaged in their own line of work only - a tender from a mason would not be accepted for excavation. Each contract was subject to a two-year deadline. Although By was responsible for the final approval of all work before the contractor could be paid, he was in no wise legally liable since all contracts were let by the Commissary General acting for the crown. Contractors were paid not in cash, sterling being in short supply in the Canadas, but in drafts payable on Montreal, which they turned in for provincial bank notes (dollars).²⁷ MacTaggart mentioned in his *Three Years in Canada* that the chief money in circulation in the upper and lower province were dollar bills, and American half-dollars; the Commissariat furnished the contractors half-dollars for the payment of their men.²⁸ The suggestion was advanced by contractors that payment be made by cheque, which would have obviated the necessity of conveying large sums of cash to Bytown, but the suggestion was rejected on the grounds that "the adoption of this proposal would embarrass the system of account."²⁹ As a safeguard in the interests of the workmen, the Commissariat delayed payment to contractors until the Board of Ordnance was satisfied that they had settled all arrears of pay with their men.

One disadvantage of the contract system lay in the widespread practice of sub-contracting, giving rise to misunderstandings and frequent litigation. Colonel By followed the principle of prompt payment for work satisfactorily completed, dealing with the principal or prime contractor only. Although exacting in his demands on the quality of the workmanship, By was fair in his treatment of contractors. Whenever it became apparent to him that a particular contractor was losing money or was not up to the job, as happened not infrequently, By let the contract to someone else. Many contractors underbid in their tenders, particularly for excavation work. Those who abandoned their projects incurred a penalty according to the terms of their contracts.

The following were the principal contractors on the Rideau, with the location of their works:

Thomas McKay	Bytown locks, Hartwell's
John Redpath	Jones Falls
Thomas Phillips and	
Andrew White	Black Rapids, Long Island
A.C. Stevens	Nicholsons, Clowes, Merricksville
Crawford	Maitlands
Richardson	Edmonds, Old Slys, Smiths Falls, The Narrows
Wiley	First Rapids
Haggart	Isthmus, Chaffey's
Robert Drummond	Davis, Brewer's Mills and Kingston Mills

Among the contractors, four were singled out by Colonel By at the end of the project for special recognition. McKay, Redpath, Phillips and White each received from Colonel By a silver cup hand-crafted and engraved in England as a memorial for their signal services. These four

contractors had formed a partnership in which they pooled their finances and shared the profits equally, a form of joint stock company; the association was dissolved on 27 March 1831 on completion of the main body of the works. The partnership of Phillips and White must have been an uneasy one, for By observed of the former: "Mr. Phillips is an excellent worker, ...but I have observed that he has a very peculiar temper and cannot at all times agree with his own partner, Mr. White."³¹

Although payment was made in dollars rates were quoted in sterling; these rates varied with each contract according to the tender, based on the contractor's estimate of what the job entailed - whether excavation was in rock or earth, whether stone was readily available for masonry or not. For a rough idea of rates, witness Colonel By's estimate for masonry work on the first eleven locks (Bytown end): 1s.5d. per cubic foot, and £15 15 0 per acre for clearing.³² Contract rates were £20 an acre for chopping down trees and clearing ground, £4 per acre for removing trees only, 4 shillings per cubic yard for rock excavation, and one shilling for earth. Royal Engineer officers measured all work performed, their rulings being final.

Despite the generally satisfactory quality of contract work, differences inevitably arose between the contractors and the Engineer Department over the fulfillment of contracts.

Some contractors had taken on more than they could handle, particularly in the case of excavation work. Colonel By scrupulously investigated all claims and complaints. Although he saw to it that contractors had what was coming to them in full measure, Colonel By would not compromise on quality or overlook the slightest irregularity. A number of disgruntled contractors appealed to the governor. Throughout his five arduous years on the

Rideau the harassed but indefatigable By had to contend with the clamour of contractors on the one hand and the mounting displeasure of the Treasury at home on the other for his spiralling expenditure which regularly ran ahead of the annual Parliamentary grants.

In a sense By found himself between the devil and the deep blue sea. In the words of the Select Committee on Canal Communications in Canada (June 1832):

From the nature of the Works to be executed under most of the foregoing Contracts, it will be observed, that as they were for specific purposes, no stop could have been put to them without exposing Government to the risk of actions for breach of covenant³³

Once under way contractors usually pursued the work with all dispatch, for to dally would be to lose money. The effect, however, was to place By, the superintending engineer, in a dilemma: in paying the contractors for work satisfactorily completed he earned the displeasure of the Treasury Board, but the alternative, to await the appropriations, would have laid the crown open to suits for breach of contract. By's sole concern through five trying years was to get the work done as expeditiously as possible and to the highest standards of workmanship.

Labour: Artificers, Tradesmen, Navvies

The artificers (masons, carpenters, smiths, stone-cutters, coopers et al.) were in part supplied from the ranks of the Royal Sappers and Miners and in part by civilians engaged either by the various contractors or by the Engineer Department. Finally there was the host of ragged, unskilled and unlettered labourers, or navvies, who did the pick and shovel work, the hauling and pulling, without which the work

could not have gone forward. Many contemporary accounts and reminiscences describe these workers as a poor class of immigrant Irish ³⁴ Unfortunately, pay lists for the whole line of the canal are not available, but those appearing in Appendix F for Dow's Swamp and the Hog's Back, and in Appendix G for Jones Falls, contain too many French names to support the surmise that most of this class of worker were Irish.

There have been numerous estimates as to the numbers of workers employed along the line of the canal, but no overall reliable figures are available. The work force fluctuated considerably with the season at the various sites. Robert Legget quotes a figure varying between two and six thousand; C.E. Billings (in an article published in the journal of the Canadian Womens' Canadian Historical Society of Ottawa) cites the figure 2,000. V.A. George in his well-documented thesis, "The Rideau Corridor," estimates that at peak periods as many as 100 men were employed at Kingston Mills, Jones Falls, Smiths Falls, Merrickville, Long Island and the Hog's Back, whereas the smaller works Upper and Lower Brewer's Mills, Davis, Chaffeys, Newboro, the Narrows, Poonamalie - named after a hill station in India - Old Slys, Edmunds, Kilmarnock, Clowes, Nicholsons, Burritts Rapids, Black Rapids and Hartwell's) engaged about half that number. George's overall estimate for Rideau Labour is between 2,500 and 4,000. ³⁵

Helen Cowan in *British Emigration to North America* cites the figure 2,700 for the total work force in 1829. The foregoing estimates concur with a contemporary forecast in the *U.E. Loyalist*, a York paper, at the outset of the project; the editor predicted that no fewer than 1,000 masons and as many as 4,000 labourers, would find employment on the Rideau that summer (1827). Since the Rideau region was sparsely populated at the time, many of the workers, skilled and otherwise, had to

make their way from the lower province, the United Kingdom or neighbouring regions of the United States. Fares were not excessive; \$3 covered steamer passage from Quebec City, for example, whereas Americans in most instances paid considerably less.³⁶ Stone masons were paid 7s. per day, blacksmiths 6s., and carpenters 5s. Most commentators refer to English and Scottish artificers: Harry and Olive Walker (*Carleton Saga*), for example, state that Colonel By recruited masons in the West Country, Bristol and Bath, and Karen Price ("The Construction of the Rideau Canal") attributes to By a preference for Cornishmen. A commissariat memorandum dated 2 April 1831 recorded that some of the best workmen on the job were Montreal artificers.³⁷ Skilled tradesmen hailed from the British Isles, particularly the West Country of England and Scotland, with a leavening of native talent from the Canadas. Certainly many of the Royal Sappers and Miners apparently were of English and Scottish origin, with a considerable admixture of Irish. On the other hand, canoemen and axemen were definitely French-Canadian. Unskilled labourers were paid at the rate of a half-crown (2s.6d.) per day, and had to supply the tools of their trade - wheelbarrows, picks, shovels, axes, sledge-hammers, and the like. Their employers supplied small winches and hand-operated cranes for the handling of heavy stone.

Stone for the locks and dams was quarried as near the site as possible. Sandstone was used on the southerly end of the line, and limestone generally from the Narrows to Bytown.³⁸ There was no shortage of wood, for thick mixed hardwood bush encroached closely on every hand. Where the quarries were at a distance from the work site oxen were used to haul the stone. The Reverend Robert Bell, an austere and forthright Presbyterian whose descriptive diaries recall vividly the rugged conditions of the time,

described in an entry for 8 February 1830 a scene between Richmond and Bytown:

The road in the woods in the first part of my journey was narrow and much encumbered by horses and ox teams, drawing stones for the locks in the canal. Both at Poonamalie and Smiths' Falls, I saw great quantities of cut stones prepared for building the locks, and numerous [sic] mechanics and labourers employed.³⁹

Bell had reservations about the efficiency of government-directed works: "at Poonamalie, where I crossed the Rideau canal, a great number of men were employed, but to very little purpose, as is often the case with government works."⁴⁰

The Bell diaries support the traditional view that a Primitive and aggressive type of Irish immigrant supplied much of the pick-and-shovel labour. An entry in August 1830, describing Kingston Mills, refers to the great number of huts inhabited by Irish labourers⁴¹ and By himself complained to Durnford before the project had got under way of having trouble "with the lower class of Irish." He recommended the stationing of 12-man detachments under the command of a sergeant at each work site to protect stores and property.⁴² Mary Agnes Fitzgibbon, the granddaughter of an adjutant general, recalled (albeit many years later) that Rideau labour was largely of the rougher Irish sort. Some of these had settled in Lanark County under the auspices of the Roman Catholic Bishop of Upper Canada, Alexander Macdonell, where they found employment ready to hand on the canal works.⁴³ These unfortunate and ignorant people were to be the occasion of much mischief, not to end with the completion of the canal. Indeed as early as June 1827 Lieutenant Pooley wrote to Dalhousie that "much difficulty

and delay had been occasioned by the demands of the workmen," mainly over the issue of wages, but that By had prudently held off. In a 1909 article C.E. Billings wrote that Peter Robinson had brought out a number of Irish who found work on the canal. Thomas McKay, one of the principal contractors, recalled in 1837 that he had employed between 100 and 300 men, two-thirds of whom were Irish, adding that he had had no trouble handling them.⁴⁵ Before the commencement of the work (3 November 1826), an anonymous correspondent, described as "an able and respectable engineer engaged in the Rideau Canal" had a good word for the Irish in a letter to the *Kingston Chronicle*, as well as for the French-Canadians, but "let them work apart, and wonders may be wrought."⁴⁶ The same correspondent was less kind to the Americans:

As to Jonathan, I know not what to think - he comes here guessing - and after he has pry'd about for two or three days, goes away and calculates that we have pretty considerable of work in - but it won't suit him - he wants to fill his pockets, he cares not how.⁴⁷

The proximity of the American boundary would lead one to suppose that considerable American labour would have gravitated to the scene, and indeed some American contractors and sub-contractors had a hand in the work. Whether based on national prejudice (the War of 1812 still fresh in men's' memories) or whether because the Rideau works attracted speculators and sharks, several contemporary commentators had no good to say of their neighbours across the line. John Burrows, Overseer of Works, heatedly recorded his sentiments in his field notes.

Through the whole route the Yankees followed after us like Vultures after an Army, or Sharks after a sick ship, seeking for jobs! - no less

than 7 speculating, calculating & sloping Brother Jonathans made close siege of the works at Chaffey's Mills, where Providence has called away a husband, & left a wife & family struggling to live.⁴⁸

The overall impression from contemporary accounts and reminiscences alike is of a rowdy and brawling, largely Irish work force at the pick-and-shovel level, and of rapacious American speculators in contrast with the steadier skilled tradesmen of Anglo-Scots origins. This broad generalization, coloured, no doubt, by national sentiment and bigotry, probably does less than justice to many of the Irish and Americans who participated in the construction of the canal.

Accommodation was provided for workers at each site by either the contractor or the Engineer department. Civilian barracks or living quarters were of frame construction. Those put up by Redpath at Jones Falls measured 40 by 30 feet, with accommodation for 20 men.⁴⁹ Fresh beef, salt pork, flour, salt, tea, tobacco and soap were supplied from Montreal, Kingston and Bytown for each site. Beer too was provided by the contractors, and sometimes spirits. At the principal work sites a 60-man detachment under the command of a subaltern was stationed, together with a doctor and a supply of medicines for the care of the sick.

The work along the line of the canal posed two hazards - accident through blasting or cave-in, and sickness; the latter affected all, from Colonel By to the illiterate and bare-footed navy. The nature of the work, particularly excavation, entailed risks which were greatly compounded by carelessness. Although the Royal Engineers, with access to Ordnance stores, used a much superior powder to that generally used in quarrying and excavation work (commonly called merchants' blasting powder), carelessness in

investigating misfires and in setting the charges resulted in many accidents as well as fatalities. The *Brockville Gazette* in February 1830 described the death of a man examining a misfire at the Isthmus; the same day another man was killed by a falling stone. A labourer named Patrick Martin was blinded by blasting powder. Colonel By provided transport, with a two shilling daily allowance, for the man and his wife to Quebec. The victim and his wife had second thoughts about repatriation and failed to board the transport, whereupon their allowance was cut off.⁵⁰ John MacTaggart left ample testimony in his *Three Years in Canada* of the incredible carelessness, amounting almost to criminal negligence, displayed by some of the labourers, who seemed to have little notion of the hazards of the material they were handling.

I once saw a poor man blow a red stick,
and hold it deliberately to the priming of
a large shot he had just charged. I cried
out, but it was no use. He seemed to turn
round his face, as if to avoid the smoke;
off went the blast...and he was killed in
a moment.⁵¹

Cave-ins were another hazard. MacTaggart wrote of labourers seeking to undermine large trees by digging beneath their roots, who were buried alive in the process. Late in 1827 two men were buried by a slide when a clay bank gave way. On 6 August 1830 between Entrance Valley and the Hog's Back the banks gave way over a distance of 300 feet; only the fact that the mishap occurred at lunch time prevented a very large loss of life. In addition to accidents in some cases more or less inevitable for want of strict safety regulations on construction projects, there were sundry mishaps which took the lives of people other than those engaged on the works. For example, a woman was killed in Bytown from being struck by a falling stone caused

by blasting. Or witness that of the man crossing the Hog's Back dam with horse and cart; on meeting another rig his horse bolted, whereupon man, horse and cart plunged 70 feet to the rocks below. The man survived but so badly injured that his recovery was despaired of - an example of a freakish accident which could not be foreseen.⁵² It may readily be appreciated that a canal under construction was no place for children to play. Late in the fall of 1829 the *Brockville Gazette* reported the death of a contractor's child through the inadvertent action of a pile-driver, concluding "If machinery of so dangerous a kind and so easily set in motion, is left accessible to children during the absence of the workman, accidents that occur in consequence can only be attributed to wilful neglect."⁵³

A century and a half ago life was cheap. Only in our own times has the enforcement of stringent safety regulations reduced the toll to a minimum; even now periodic disasters make the headlines.

The Ague

Of the ordeals of the Rideau service, and no distinguisher of persons, the ague or swamp fever was the worst. It may surprise many an inhabitant of the region today to learn that this debilitating sickness, often fatal, which delayed the completion of the works by more than six months, was none other than malaria.

Few nowadays associate this malady, named by one Francesco Torti (1658-1741), an Italian physician and pharmacologist, with the temperate climate. The derivation of the word is from *mal aria*, or bad air, the prevalent notion being that the contagion originated in the miasmatic humours of swamps.⁵⁴ Dr. H.E. MacDermot in his *One Hundred Years of Medicine in Canada* informs us that malaria

persisted in southern and eastern Ontario until the 1870s, and could on occasion be encountered as far north as the 47th parallel. Medical research established that malaria was caused by a micro-organism in the blood carried by the anopheles mosquito, a nocturnal pest still extant in this region. Sir William Osler (1849-1919), a Canadian-born medical researcher of renown, demonstrated that once malaria has been expelled from a region it does not recur, even although the carrier continues to flourish.⁵⁵ A number of factors account for the extinction of malaria in this region, and generally throughout the temperate zone. Better drainage has reduced the number of mosquitoes, and the use of window screens the vulnerability of their victims. The widespread use of quinine and better nutrition built up resistance to the infection. These factors, combined with improved sanitation, about a century ago resulted in malaria's restriction to more southerly climes, so that nowadays the disease is for the most part associated with the tropics.

In the early 19th century, however, immigrants from malarial regions of Europe introduced the infection to immigrants hitherto free of it. The crowding together of immigrants below decks in foetid transports lowered bodily resistance. The practices of slow travel along water courses, where mosquitoes bred, and of sleeping out, often without netting, exposed the early settlers to the fever.⁵⁶

The ravages of the epidemics which afflicted the Rideau works will be dealt with in context. The ague raged in epidemic proportions along the whole line of the canal throughout the months of August and September 1828-30.

John MacTaggart took malaria, which he describes vividly under various terms - bilious fever, the ague:

The Fever and Ague of Canada are different, I am told, from those of other countries; they

generally come on with an attack of bilious fever, dreadful vomiting, pains in the back and loins, general debility, loss of appetite, so that one cannot even take tea, a thing that can be endured by the stomach in England when nothing else can be suffered. After being in this state for eight or ten days, the yellow jaundice is likely to ensue, then fits of trembling....For two or three hours before they arrive, we feel so cold that nothing will warm us; the greatest heat that can be applied is perfectly unfelt....Our very bones ache, teeth chatter, and the ribs are sore, continuing thus in great agony for about an hour and a half; we then commonly have a vomit, the trembling ends, and a profuse sweat ensues, which lasts for two hours longer. This over, we find the malady has run one of its rounds, and start out of the bed in a feeble state.⁵⁷

The Reverend William Bell also fell victim, recording in his diary in April 1827 "Repeated attacks of ague have left me reduced in body and discouraged in mind."⁵⁸ Qualified physicians in Upper Canada were few, and Bell held them in contempt. Quinine was coming into general use but was very expensive; according to the clergyman's son, the price ran as high as \$16 an ounce or 6d. a grain. A York paper, the *Canadian Freeman*, carried this advertisement in its issue of 18 January 1827:

AGUE POWDERS

E LESLIE & SONS

Have just received a fresh supply of QUININE, -so celebrated as a cure for the Ague, which they warrant to be pure and genuine. Also

BEST LIMA OR JESUIT BARK⁵⁹

Although the province abounded in semi-qualified quacks and outright charlatans, to the degree that most settlers relied on themselves for home remedies, the canal workers were not left destitute of proper medical attention. Perhaps the most able and devoted physician was Dr. M.H. Tuthill, Ordnance surgeon, who joined By's staff in 1826, and was in charge of the military hospital in Bytown until 1832. Colonel By himself owed his life to the exertions of Dr. Tuthill. Tuthill was paid 10s. per day over and above his regular salary, and in the spring of 1829 was given a badly needed assistant (at 5s. per day), Dr. John Edward Rankin, an army surgeon and graduate of St. Andrews.

The principle was established in the summer of 1827 that all men employed on public works in the Canadas were, when ill, to receive treatment by Ordnance medical officers.⁶⁰ This provision at first applied only to men employed by the Ordnance on a permanent basis. Pay was to cease when a man was admitted to hospital, and 9d. was credited to the hospital by the Ordnance storekeeper for the maintenance of each hospitalized patient. The Ordnance storekeeper deducted 1-1/2d. from the pay of foremen and artificers, and 1d. from labourers, known as "medical stoppages," to cover hospital treatment. Allowances were provided for a patient's dependents: a wife with one child received one-half her husband's pay, and with more than one child, two-thirds of his pay.⁶¹

Such were the ravages of repeated epidemics each summer that this provision was obviously inadequate and inequitable; for at least as many (and probably more) men were employed by the contractors then by the Ordnance. In December 1828 the director general of the Ordnance Medical Department recommended that all labourers be put "under stoppages" when ill, and that the expense in the case of contract labour be deducted from payments to the employer.

The Master General of the Ordnance concurred.⁶² Colonel By was at all times solicitous for the proper care of the sick. He was particularly concerned for the poorest class of unskilled labour, employed neither by the contractors nor "on the cheque" - presumably day labourers not on the Ordnance payroll. The Master General agreed with By that these men too should be properly cared for, medicines and surgical requisites being drawn from public stores, recognising "the necessity of adopting an extraordinary means to meet an extraordinary case."⁶³ Before the regulations had been stretched to cover all who needed medical treatment and hospitalization, both Dr. Tuthill and Colonel By dug into their own pockets to supply the need.

The ravages of the fever up and down the line of the canal will be dealt with later, with some attempt at statistical analysis. In passing some idea of the virulence of the fever may be gained by the fact that during the five years of construction at one site, Kingston Mills, under the contractor Robert Drummond, 500 men died of malaria.⁶⁴

A Frontier Society

Canadians of the present perhaps tend to think of the frontier as associated with the West, an assumption which several generations of horse-opera has engendered. The conditions of a century and a half ago in the Ottawa Valley and the Rideau would make many of the roughest and most lawless cow towns and mining camps of the American west look tame. Before proceeding to an account of Colonel By's six years on the Rideau and that of the numerous company who brought that formidable endeavour to a successful conclusion, it is pertinent to consider the raw and isolated society on which he drew, and with which he not infrequently had to contend, a society created in large part by the canal

and its works.

Richmond, founded by half-pay officers in 1818, was then the only community between Kingston and Hull. In contrast with what was to follow, Richmond exhibited a settled orderly aspect with well-defined establishment in the English fashion. Michael S. Cross in his article "The Age of Gentility" in *Canadian Historical Association Annual Report* (1967) depicts a society in which Anglicanism in religion and loyalty to the crown were prime principles, a society observing a set code of honour and decorum. This genteel and well-ordered society, its economy based on agriculture, existed on the fringe of the wilderness.

With the initiation of the canal project a very different society, at once rowdier, more fluid and egalitarian, formed at Bytown. Although the ruling elite was not to be challenged by the reformers for a few more years, society at large developed a rough, brawling and unruly character readily associated with the frontier.

V.A. George in his afore-mentioned thesis demonstrates that the Rideau Canal project hardly resulted in an influx out of proportion to that of the rest of the province. In 1824 the region's population stood at 18,246 whereas ten years later it had increased to 30,505,⁶⁵ a growth rate or expansion only slightly above the norm for the whole province. Nonetheless it is beyond dispute that the building of the Rideau Canal was the making of Bytown, establishing it as the entrepôt for the region, quickly surpassing Richmond, and eventually Kingston as well. The demand for tradesmen and labourers brought in its train a host of workers who settled in Bytown, Merrickville, Perth and Smiths Falls. The country opened up so rapidly that by 1829 Colonel By reported that travellers could now proceed by horseback along the whole of the waterway, whereas a few years previously canoe alone sufficed, with dense forest

extending to the water's edge. The farmers who gradually cleared land found a ready market for their produce and employment as teamsters at the various works.

Nowhere was the transformation more startling than at Bytown, headquarters for the undertaking. Entrance Valley, the narrow gorge giving access to the interior, became a hub of activity. By the end of 1827, according to the *U.E. Loyalist* of York, Bytown boasted 2,000 inhabitants. Both the Anglicans and Presbyterians were building churches, while the Methodists and Catholics had improvised houses of worship. The little community had a market place and a school, and a number of houses, some of stone.⁶⁶ Blodwen Davis in *Ottawa: Portrait of a Capital* credits Bytown in the second year of its existence with about 150 houses and 15 shops, including three jewellers. By 1830 there were two markets, one in Lower and one in Upper Town. Two frame buildings in Lower Town (on George and Rideau streets) housed civilian workmen. Workshops serving the project went up on the future sites of the Chateau Laurier Hotel and the Daly Building. The neat and orderly layout of the little community was the work of Colonel By, who laid out streets of generous width with surveyed town lots in proportion. Legend has it that By foresaw the nation's future capital in the thriving and bustling little village opposite Hull. Charles Pope writing about 1867, quotes Colonel By replying to a settler asking for a bigger lot, "Sir, this land will be valuable some day, it will be the capital of Canada."⁶⁷ Wilfrid Eggleston (in *The Queen's Choice*) concurs with Blodwen Davis's figure of about 150 houses for Bytown in 1828, adding that they were mostly of log or frame construction. A correspondent for the *Canadian Courant and Montreal Advertiser* in 1830 estimated the Bytown population at 3,000, fluctuating according to the labour needs on the canal. Colonel By had shown foresight in limiting the size

of lots leased (66 feet by 198) so that workers would be reasonably close to their work sites. At first these lots leased for a mere 2/6 per annum; later the rental went up to £4.6.0 in order to discourage land speculators.⁶⁸

Notwithstanding the neat and well-laid out appearance of Upper Town the burgeoning little settlement which was to become the national capital exhibited the turbulence, and on occasion the lawlessness, associated with the frontier. If anything the situation worsened with completion of the canal and the resultant departure of the military, when maintenance of law and order devolved upon a couple of over-worked constables. Nonetheless, during the heyday of construction there was no lack of excitement. A population largely composed of religious partisans, a goodly proportion of Irish immigrants to whom authority, civil or military, was repugnant, a superfluity of grog shops and hotels purveying a cheap and often deleterious liquor, gave the so-called respectable, industrious and God-fearing element much to inveigh against.

Of the several factors contributing to this "frontier" scene, liquor was undoubtedly the most important. Although it would be a gross error to ascribe a taste for liquor to the whole population, the problem was serious enough to warrant the concern of the sober element of the community. The abuse of liquor, however, was not confined to Bytown nor to the navvies who laboured on the canal.

Many an intemperate tippler among the ragged labourers paid for his inordinate thirst with his life. In August 1831 an inquest was held on the body of one Patrick Sweeney, drowned in the Rideau on Sly's Rapids in an ill-fated attempt to swim the river to procure another bottle of whiskey. Already far-gone in liquor, Sweeney did not survive the attempt. In the words of the coroner: "When last seen alive, he was going down with a bottle or flask in

his mouth.⁶⁹

Nor in some respects did their superiors behave much better. William Bell's diary records in the winter of 1832 the antics of two contractors, Wylie and Ferguson, en route to Bytown, who checked into a hotel kept by a Mr. Schofield.

He [Schoefield] told me that when they had the contract at Poonamalie, they came to his house one afternoon on their way to Bytown, but soon got so drunk they could proceed no farther, so he took their horses from the sleigh and put them in the stable. They concluded to stay all night and ordered a supper of oysters to be got ready for them of which he said they ate until they actually spued upon their plates. Next morning they sent back a man with their sleigh for a keg of whiskey which they had forgot, but when he returned they were again drunk, and could not proceed so the horses were put in the stable. In this way they were brought out and put back, three or four times in the course of the day. In the afternoon, confiding they were unable to proceed, they remained another night and went off the next morning.⁷⁰

It is not difficult to imagine what impression such scenes made on the strait-laced. J. Wilson, writing to the Reverend William Bell, gives this description of Bytown's rowdiness:

No place is better calculated to exhibit the savages of civilized countries than Bytown. All that the art of unprincipled men can devise comes under my observation every day, and a mealtime seldom passes without witnessing the determination of an important case by "wager of battle;" that is a few civil blows.

The zeal with which men fight and the cordiality of their reconciliation are highly amusing.⁷¹

Religious tolerance was in short supply in early Bytown. The situation was exacerbated, on the one hand, by Protestant bigotry, and, on the other, by the high spirits and intemperate habits of a good proportion of the Irish and French Catholics. J. Wilson, Bell's correspondent, was scandalized by the way in which the Sabbath was kept.

Two weeks ago, on the Sabbath - you recollect the pigeons flew in vast numbers...[because], that day a continuous [gun]fire was kept up in front of every house, nay even around the Church. And the same evening I saw the people dancing in full glee to the music of a flute or some such instrument. The Irish and Canadians deem it no harm to sport and play on Sunday. To pay the priest and confess occasionally make ample amends for all their follies.⁷²

On the other hand it should be remembered that many of these poor people lived in a ghetto known as Corktown, a slovenly mass of shacks and shanties along the canal embankment, from what was to be the foot of Slater Street to the future site of the Union Station. The name Corktown was derived, some said, from the intemperate habits of its denizens; others attributed the name to the town of Cork whence many of its indigent dwellers had come. All observers concurred in labelling the shanty Irish the most intemperate and unruly element in town. Bell's correspondent, for instance, testified to the number of women staggering about the streets or sprawled in the gutters. With allowances for Wilson's self-righteous indignation and a certain degree of Phariseism, his account was probably not overdrawn.

One wonders whether the immigrant Irish have not been

made scapegoats for excesses all too common in that rough period. Then as now, a largely illiterate immigrant group attracted the critical notice of the property holders and middle class. In any case by the autumn of 1830 Wilson noted a slight improvement in the moral tone of the community, attributable to the departure of a goodly portion of the maligned Irish. Writing to Bell, he noted that

The place is becoming less wicked, but this is perhaps owing neither to ministers or lawyers. The truth is half the rabble of Irishmen have gone, and carried their goodness and infirmities with them; so that I say the place is less wicked although we cannot boast of the remaining sample.⁷³

One might assume that the Catholic clergy would have acted as a restraining influence on the turbulent Irish and Canadians, but in the early days of Bytown such, apparently, was not the case. The Roman hierarchy in the upper province at that time was dominated by the Scots, who had little love for their Irish co-religionists. In any case, according to Michael Cross the early clergy were an indifferent, if not scandalous, lot. Cross cites the first diocesan priest, Reverend Patrick Horan, as an incorrigible drunkard who was removed from his benefice at the request of the parish. Patrick Polin, curate from 1832-35, turned out to be an imposter, never having taken holy orders. Finally, the Reverend Timothy O'Meara, a supporter of the lawless Shiners (aggressive and pugnacious rivermen) who terrorized Bytown from his parish for "shameful Immoralities" and "execrable conduct."⁷⁴ From the unedifying character of the early clergy dominated by a Scottish hierarchy, hardly sympathetic to the Irish, it is not surprising that ecclesiastical influence in these early years was minimal. Add to this the fact that several generations were yet to pass in Ireland itself

before the hierarchy made common cause with reformers and nationalists for the redress of Irish grievances. The contemporary "render unto Caesar" policy towards English authority cannot have endeared the Church to those unfortunate Irish who saw in England their chief oppressor. And so it is not surprising that the church in Bytown's earliest days had yet to acquire the influence of later years.

Perhaps the scandalized contemporaries cited above did not make due allowance for the time and place, but the overall impression left to posterity is that of a community in the raw, similar to American cattle and mining towns a generation or two later. Brawling not infrequently developed into full-scale riot and rapine. For example, the notorious St. Patrick's Day riot of 1828 at the Hog's Back cost an unfortunate Englishman, Thomas Ford, his life, when he was felled by an assailant wielding the limb of a tree. A yet more flagrant breach of the peace occurred near Merrickville in September 1829. An Irish canal worker, Thomas Foley, was arrested on a charge of trespass brought by a local resident. Several of Foley's mates rescued him from the constable's custody, beating the latter within an inch of his life. The constable obtained a bench warrant for the arrest of the miscreants, but when the sheriff and his deputy seized one of the ringleaders, a melee ensued, in which the two law officers were compelled to flee under a fusillade of stones, in the course of which the deputy-sheriff was injured. The sheriff returned the following morning with a 60-man detachment of militia with which he quelled the rioters. The three ruffians named in the warrant eluded capture, but three ringleaders were taken into custody and charged.⁷⁵ A battle between the Orange and the Green factions took place in December 1829 at the isthmus, more than 400 partisans being locked in combat

until subdued and broken up by soldiery. The ringleaders were arrested and held for trial.⁷⁶ Early in 1830 disgruntled canal workers, having some grievance against a resident at the Hog's Back, stole a barrel of gunpowder, with which they blew his house to kindling; fortunately no one was home at the time. On 15 January five suspects were brought to Perth to stand trial at the assizes.⁷⁷ These incidents, among others, induced Colonel By to increase his detachments along the line of the canal.

This was the turbulent setting, on the fringe of the wilderness, lacking many of the amenities of life, for Colonel By's formidable endeavour, one whose rigours would materially shorten his life.

The Canal and Its Builders

Having established his headquarters in Bytown and completed his arrangements to get the project under way in the spring, By returned to Montreal in November 1826. His summer's work in Bytown had convinced him of the necessity of locks much larger than envisaged, of sufficient dimensions to pass steamboats. In part By conceived this as a defence measure - locks of sufficient size could handle a vessel carrying a 12-pounder and about 70 men - and in part in anticipation of the steamboat trade, which he foresaw would dominate the commerce of the future. As early as July 1826, By had advocated locks 110 to 130 feet long and 40 to 50 feet wide, at an estimated cost of £400,000, a figure which, it transpired, was too low by half when the job was done. The largest locks recommended by the Macaulay commission, on the other hand, were 100 by 22 feet at an overall estimate of £230,785. In December 1826, shortly after his return to Montreal for the winter, By wrote to Mann strongly recommending locks 150 feet in length by 50 in breadth with a depth of 5 feet.¹ By thus fell foul of his superiors in London at any early date; they were alarmed by spiralling estimates and the victims of their own cumbersome organization. Sir James Carmichael Smyth's report had cited the misleading figure of £169,000 for the project, and now By's initial estimate was more than double that. Adhering to his own figures, Smyth advised Mann in August 1826 that allowing for a five-year job, £32,800 would be required for the ensuing season.² Predictably Smyth became one of By's

inveterate critics, contending that the larger locks would greatly increase the cost of the canal without compensatory advantage. Steamboats could not use the locks because their wash would damage the lock walls, an hypothesis which By denied. In any case, what was the use of spending a great deal more money for larger locks when those already built on the Ottawa and St. Lawrence did not correspond in size? The contention was to damage By's credibility in London, particularly with the Treasury, and was finally to rob him of credit for his great achievement.

Undaunted, By's final plans were laid by early October. The following spring, work would begin simultaneously at Bytown, the height of land and at Kingston. He anticipated a work force of 2,000 at each of the three locations.³

1827: The Ground is Broken

In the spring Colonel By undertook a personal survey of the whole line of the proposed canal. Having had no experience with canoes, the only practical conveyance at the outset. By turned to the Hudson's Bay Company. The fur traders supplied him with two birch-bark canoes, complete with 5-man crews, and spared no efforts on his behalf. On 14 April By expressed his appreciation to the company for its timely assistance and advice. He announced his departure date from Montreal, 27 April. Before departure By engaged Samuel Clowes and a Brockville surveyor by the name of Sherwood to carry out a detailed land survey of the waterway; Clowes agreed to serve for 15s. a day plus expenses.⁴

A number of his contemporaries testified to Colonel By's hardihood in canoeing the waterway, a mode of travel involving considerable hardship of which the 48-year-old By had had no previous experience. It must have been a tough

regimen for a man no longer in the prime of life, unaccustomed to roughing it in a malarial wilderness. One writer, albeit a century after the event, describes By's canoe as fitted with an awning, and well stocked with "provisions, wines and liquors,"⁵ and John Burrows (a contemporary) in his sketchbook refers to the canoemens' appreciation of a little stimulant to lighten the labour: there was "nothing like the stimulus of rum to quicken the motion of the paddle or to awaken the vocal powers of the Canadian boatmen."⁶ A boatmens' playlist in the Burrows Sketchbook is, with one exception, made up of French names.⁷ All contemporary accounts refer to French-Canadian boatmen or canoemen, whose traditional folk-songs lightened the spirits on many a journey. Despite portages and swamps the crews made good time when required, for in May 1827 By traversed the whole 126-mile waterway in only three days.⁸ John MacTaggart, By's first Clerk of Works, recorded the provisions for a party with three canoes manned by 15 canoemen: 2 barrels of pork, 104 pounds of pease, 20 pounds of tea, 120 pounds of sugar, six hundredweight of biscuit, and last but not least, one barrel (40 gallons) of rum.⁹ The diet may have been monotonous but surely the evenings were not. Liquor could, however, prove a mixed blessing; John MacTaggart, the senior civilian on the staff, lost his position through over-indulgence on one of these safaris. The torments these hardy souls endured from the swarms of mosquitoes (some of which were malarial) and no doubt from blackflies may be readily imagined by anyone who has travelled in the Canadian bush in the early summer. The hardships of wilderness travel took their toll. Probably if Colonel By had stayed in Bytown he would not have fallen ill, but he was not one to spare himself.

The *Kingston Chronicle* announced that the work had begun on 22 May "at the foot of Tuttle's Hill, four miles

from the town" at the Kingston end of the line.¹⁰ At Bytown the excavation of Entrance Valley for the first eight locks, because of subterranean streams, took longer than expected. Nonetheless, the first stone was ceremonially laid by the celebrated arctic explorer, Sir John Franklin, en route through Bytown, on 16 August 1827. The major festivities at Bytown were reserved, however, for the official cornerstone ceremony on 29 September. With the Governor-in-Chief, the Earl of Dalhousie officiating, the two-ton stone was gingerly lowered into place, as the governor bestowed three ceremonial taps thereon with a hammer, amidst the huzzahs of soldiers and citizenry. A puncheon of rum (a measure varying between 72 and 120 gallons) was broached for the undoubtedly thirsty workmen, and charges were let off in the adjacent quarries to mark the event. When darkness fell bonfires were lit and festivities continued into the night.¹¹ The 4-1/2-year project, to cost nearly £1 million, was under way with full vice-regal honours.

On 1 November 1827 By informed Mann that he had begun work on three locks, similar in dimensions (108 feet in length, 20 in width and 5 feet in depth) to those on the Grenville and Lachine canals, in accordance with his instructions. He then went on to plead the necessity for larger locks, 150 feet in length by 50 in width, sufficient to accommodate steamers fit to navigate the waters of Lake Ontario and to pass spars 120 to 150 feet in length for the use of the naval dockyard in Kingston. At this perhaps juncture By received strong support from an unexpected quarter; Commodore Robert Barrie, in command of the Kingston Dockyard (1818-35) appreciated the strategic need for larger locks, and so supported By at the Admiralty. By concluded his despatch by predicting completion of the work by 12 August 1830; he would need about £100,000 annually for disbursements.¹² By's deadline was premature

by more than a year, mainly because of stoppages of work due to recurrent fever each summer.

Smyth continued to oppose By's pleas for larger locks on the grounds of extravagance. By's trusted subordinate, Lieutenant Henry Pooley, who had accompanied him up and down the line of the canal, had been dispatched to England in order to explain and justify the need for bigger locks. But Smyth could not be mollified:

It appears to me that Lieut Colonel By has lost sight entirely of the plans and estimates for the work having the same object in view which the late Master General and Board contemplated when they ordered Lt Colonel By to execute this service; but that he has not distinctly reported that he has done so, much less accounted for his doing so, excepting verbally through Lieut Pooley ¹³

A board of inquiry was accordingly set up to go into the whole matter.

The rapid progress of the various works the first summer was very encouraging. Writing to Dalhousie, By said that he had found the work "proceeding with great rapidity and generally speaking to my entire satisfaction,"¹⁴ an opinion that was confirmed by two of the commissioners from the Lachine Canal. These two visitors told By that the stones in his masonry were much larger than those used on the Lachine Canal, and that the workmanship, if anything was superior, in spite of the fact that By's contract rates, at 1s. 1-1/2d. per cubic foot, were less than a third those paid on the Lachine Canal.¹⁵

The first season's work ended on a very encouraging note, despite the trouble that was brewing in high quarters at home over the superintending engineer's insistence on larger locks and consequent expense.

1828: Policy Conflict; Sickness

As early as January of the previous year By's prognostications had profoundly disturbed no less a personage than Wellington, who expressed his misgivings candidly in a memorandum dated 27 January:

I must say that I am not at all at my ease about the employment of Lt Colonel By in the execution of this great Work, after the perusal of his letters....! have never seen upon any subject such a performance as the last; in which he proposes so many alterations, without stating for what object. He must adhere strictly to his Orders respecting the Dimensions of the Locks.¹⁶

Early in 1828, William Huskisson, Secretary of State for War and the Colonies, whose duty it was as a member of the cabinet to present the Rideau estimates to the House, wrote to Sir Peregrine Maitland, Governor of Upper Canada, that the estimates had risen to such an alarming degree that it was necessary "to subject the proceedings there to the strictest examination," and that a committee of officers of engineers had been convened to go into the matter. On completion of the committee's report a commission would proceed to Canada to carry on an inquiry at the site. In the meantime all works other than those to which the government had an unavoidable commitment should be suspended.¹⁷

The aforementioned Committee of Engineers, sitting in London, was composed of Major General Alexander Bryce, Colonel John T. Jones, and Lieutenant Colonel Edward Fanshawe. They concluded that Clowes' estimates had been unrealistically low, and gave conditional support to By's demand for larger locks as "deserving of consideration." Perhaps, they havered, a savings could be effected by

building the last 20 locks of wood.¹⁸ Smyth adhered to his position opposing By's larger locks.

In March Wellington (now prime minister) expressed his regret to the colonial secretary that By had taken on so much himself without awaiting instructions and criticized the Engineer department's lax system of keeping accounts. Dalhousie, on the other hand, stoutly defended By, as did Sir James Kempt, chairman of the "Committee appointed to assemble in Canada upon matters relating to the Rideau Canal."

It is too bad to blame him simply because his estimates formed with judgment and after mature reflexion very much exceed the estimates of persons incompetent to form a correct opinion of the expense, and who only pledge themselves as to the practicability of the undertaking.¹⁹

Kempt stressed the folly of government undertaking so mammoth a project on such misleading and superficial estimates, and then expecting Colonel By to govern himself accordingly.

The upshot of the investigation, once the Kempt committee had travelled the whole waterway, was their report published 28 June 1828. The report in the main supported Colonel By "whose personal and zealous exertions" had secured contracts on the best terms. The Kempt committee also supported By in his demand for larger locks, although not of the dimensions recommended by the superintending engineer. In this was an element of compromise, but the dimensions approved and subsequently built (134 feet in length by 33 in width) substantially met By's requirements for locks of sufficient size to pass steamers and gunboats.

The rapid progress of the works the previous year was not to be repeated in 1828 or thereafter. Of all the handicaps and impediments which dogged By on the Rideau,

including litigation and labour strife, the most formidable was sickness. Smallpox broke out in June 1828, and By at once requisitioned vaccine from Montreal with which Dr. M.H. Tuthill vaccinated more than 500 labourers together with their families. Although the times were no stranger to both smallpox and cholera, malaria or lake fever was to be the scourge peculiar to the Rideau. The ague (as it was most commonly called), broke out in August and raged in epidemic proportions well into September. By reported on 8 September that the sickness had spread throughout the line of the canal, at its most virulent amid the swamps of the Isthmus. Men of high and low degree alike were stricken, along with their families. Bell noted in his diary at this time "The bilious fever, here called lake fever, I found spread far and wide. Indeed every house was like a hospital..."²⁰ So many went down with this debilitating and frequently fatal distemper that work virtually ceased on the Kingston side of the height of land.

Colonel By took immediate measures to care for the sick. Men directly employed by the Engineer Department were entitled to medicines and treatment in hospital as a charge of the Ordnance department, but contractors were held responsible for the care of their own sick. By was particularly concerned at the plight of the casual workers, paid piece rates, who did not fall within the Ordnance provisions; there were also hosts of unemployed, thrown out of work by suspension of many of the works pending the report of the Kempt Committee. By requested Dr. Tuthill to render what assistance he could to all who stood in need of care and treatment, and recommended to his superiors that Dr. Tuthill be granted an extra allowance of 10s. per day. The recommendation was approved by the Ordnance the following December with the stipulation that the contractors must allow for such contingencies as the care of their sick in

their future estimates. In the meantime Dr. Tuthill had been caring for the indigent ill, at his own expense in many instances.²¹

Some idea of the extent of the epidemic may be gleaned from Captain Savage's report, dated 6 September 1828:

Kingston Mills: Lieutenant Briscoe, the assistant overseer, the contractor along with his clerk and foreman, together with 100 labourers ill; the clerk and 12 men had died.

Brewer's Mills: work at a standstill.

Chaffey's: contractor and many men very ill.

Davis Mills: many sick.

Jones Falls: work stopped, except at the quarry six miles from the site; contractor, assistant overseer and two clerks ill.

Isthmus: one of the contractors (by name Stephenson) very sick, several deaths, only four men on the job.

Ottawa side Rideau Lake (or north of the height of land): epidemic less severe, but many sick including three contractors.²²

The *Montreal Gazette* reported the deaths of John Sheriff at Chaffey's Mills on 23 September, and of Samuel Clowes, Sr., civil engineer, at the Hog's Back on 14 September.²³ With the onset of cooler weather by the third week of September the fever subsided, and men gradually returned to work. By did not forget to credit Dr. Tuthill, of whom he wrote: "nothing could exceed the great kindness of that officer to those poor sufferers."²⁴

The year 1828, which had been so trying and harassing in many ways, maintained a consistency to the end. By received no word from the Board of Ordnance in London authorizing him to continue the work the following year. Faced with the prospect of awaiting instruction, throwing hundreds of men out of work and laying the crown open to lawsuits brought by contractors for breach of contract, the

resolute By took it upon himself to continue the work, with target date for the project's completion 12 August 1831.²⁵

1829; Recurrent Fever and the Failure of the Hog's Back Dam

The two most formidable works on the Rideau were the 60-foot high Jones Falls Dam, the work of John Redpath (although designed by Colonel By) and the Hog's Back Dam, 45 feet high, which stemmed the Rideau at this constricted point in order to create a quiet navigable reach upstream. The Hog's Back contract was first awarded to an American, Walter Walsh Fenelon, who, according to Legget and to plans of the site, built a narrow-gauge tramway from the quarry to the dam site. Both here and at Smiths Falls the contractors had little experience in the type of masonry construction (known as arched key-work) designed for these sites. As a result the inspecting engineers and overseers had continually to order the taking down and rebuilding of faulty work. By June 1828 Fenelon, finding that he was losing money, sought release from his contract, with which By complied. The Hog's Back contract was then given to Philemon Wright, with the active direction of the work devolving upon his son Tiberius. Early in November the "sudden and unexpected rise in the water of the Rideau River" induced By to transfer the better part of two companies of Royal Sappers and Miners from Bytown to the threatened site in order to strengthen the dam,²⁶ with orders that it must be raised to sufficient height to withstand the spring floods.

Under the command of Captain Victor the soldiers spent the winter of 1828-29 on this task. On 28 March, however, a massive leak developed. The severe frost had frozen the earthwork above the water line into a solid mass, on which the spring floods had a disastrous effect. On the morning of 3 April, with a roar like thunder, fully a third of the

structure gave way. As By wrote to Mann the following day, the arch key work, 26 feet thick at the base, gave way about 15 feet from the foundation, and near the centre of the dam, with a noise resembling thunder. I was standing on it with forty men, employed in attempting to stop the leak, when I felt a motion like an earthquake, and instantly ordered the men to run, the stone falling from under my feet as I moved off.²⁷

According to an account written a few years later, By had exclaimed a few moments before the collapse, "You see, boys, what our perseverance has accomplished," adding almost in the next breath, "Throw down your tools and run for your lives."²⁸

It is the measure of the man that the following day in his report to General Mann, By was able to write: "Notwithstanding the present failure of this work...I do not entertain the least doubt of being able to establish the dam."²⁹ By was as good as his word, for by the end of the year he could proudly report that the dam had been raised to its full 45-foot height. With a few modifications to the original design, his concept had proved sound. This work, pushed through to completion in one summer, was the more remarkable in that once again fever raged along the whole line of the canal in epidemic proportions. This time By himself was to fall victim.

The ague first laid Colonel By low in April 1829, induced no doubt (and By subsequently expressed this opinion himself) by anxiety over the failure of the Hog's Back Dam. He took to his bed, but thanks to the prompt treatment of his friend Dr. Tuthill was not confined there long. Within a fortnight he was able to accompany Colonel Durnford over the whole line of the canal. One wonders whether, despite his robust constitution, he was not attempting too much. On

21 May the *Montreal Gazette*, reporting on By's recent arrival in Kingston, stated that he was "in very bad health." Three months later the military secretary informed Dalhousie that By is much shaken, and frequently bled."³⁰

In September he was smitten with a yet more acute attack of the lake fever, so severe that his life was in jeopardy, but once again Dr. Tuthill's ministrations pulled him through. By 12 October Tuthill reported that his patient was on the mend, but in so debilitated a condition that he doubted that By would be fit for active duty for some time. Dr. Tuthill underestimated the resilience of his patient. By 9 November, a month later, By had again taken to the canoe traversing the waterway. Writing later that year to General Mann, By recalled that he had been

exposed to very great hardships, by being frozen in on Mud Lake, and passing the night in a small uninhabited island, I have not suffered; and trust my health is so established as to permit me to continue my arduous duties until this great work is completed.³¹

There can be little doubt that these hardships undertaken so soon after a near fatal illness weakened his robust constitution and no doubt shortened his life.

The year 1829 closed on a more encouraging note than had its predecessor. In his progress report, composed on New Year's Eve, By recorded that more than three-fifths of the works were completed and that he anticipated the opening of the whole system to navigation by August 1831, in less than two years' time. By emphasized that he could in no way limit his expenditure to the amount allotted by Parliament, particularly because the contractors, alarmed by the dreadful depredations of the lake fever increasing their operating costs, were more anxious than ever to finish up and get out.³² The wording of their contracts made payment

mandatory for each phase of the work satisfactorily completed and up to the standards enforced by the Royal Engineers. It was for this unavoidable expediency that Colonel By was to be called to account by the home authorities.

1830: Slander and Impediments

The following season saw no diminution of Colonel By's burden. The ague again brought the work over a considerable part of the canal to a virtual halt in late summer. One of his early appointments, a young man of apparently good background, kicked over the traces, behaving in an abominable manner and carrying his spurious grievances to England. Despite harassment devised by man and impediments imposed by nature, the Rideau works progressed so satisfactorily that Colonel By anticipated the discharge of his two companies of Sappers and Miners by the end of June 1831 - a forecast which was, as it transpired, premature, for the services of the soldier artificers were required to the end of the year. In July 1830 By confidently expected to meet his August 1831 deadline, an expectation frustrated by renewed lake fever and by the untimely action of William Merrick, who chose an awkward time to dam up a stretch of the river in order to repair his mill. By expected to have the first 50 miles of the waterway from Bytown open to navigation by the fall of 1830, and in fact the first steamer from Bytown reached Kemptville late that season.

Before the New Year was many weeks old fire razed the officers' quarters in Bytown; Captain and Mrs. Bolton barely escaped with their lives. The fire was attributed to the carelessness of a servant.³³

In February, in the dead of winter, the completion of the Long Island Dam, provided a festive note. The

contractors, Thomas Phillips and Andrew White, had secured the services of a piper and the grog flowed freely. The Union Jack was hoisted as the skirl of the pipes broke upon the frosty air. As the early winter twilight drew on the spirits of the company rose; the piper led the way onto the ice of the lock, where the happy celebrants danced the hours away until near dawn. It was said at the time that the Long Island site was known for the good relations between management and labour, in contrast to the disorder so frequently encountered at other locations.³⁴

1830 brought no relief to the burden of anxiety shouldered by Colonel By. The Treasury continued to cast a baleful eye on the rising costs which ran well ahead of Parliamentary appropriations, although Colonel Durnford himself reminded the military secretary repeatedly that any check to the work would result in a number of lawsuits being brought by the contractors against the crown, a process which in the end could only increase the costs. To this the military secretary replied that the governor (Sir James Kempt, acting as administrator since September 1828) disapproved of any expense exceeding the annual appropriation.³⁵ Under such conditions, and with his authority in question, Colonel By had to finish his great work.

Not the least of his burdens, what with disgruntled contractors, litigious land holders and fractious labour, were the spurious allegations - amounting in the end to sheer calumny - raised by his clerk of works. Henry Howard Burgess, the son of an officer of dragoons serving in the East Indies, was a presentable, seemingly well-bred young Englishman. On the death of his father, Burgess and his mother returned to England. There they fell on straightened circumstances despite the £1,000 subscription raised by the officers of her husband's regiment; this sum had been mulcted from them by a confidence man. In these

circumstances young Burgess appealed to his godfather for assistance in finding a position.³⁶ This gentleman, a Colonel Howard of the 23rd Lancers, put him forward for an appointment to the Engineer department. Through some family connection or channel of patronage, Henry Burgess had also the favour of the Anglican Bishop of Quebec. Not surprisingly, with such testimonials and background, Colonel By did not hesitate to appoint him as clerk of works, at 5s. per day, effective 22 August 1826. Along with MacTaggart and Burnet, Burgess was the first hired for the Rideau project.

At the outset Burgess's work and conduct were quite satisfactory in the Bytown office of the Engineer Department. Unfortunately the young man's conduct (By later recalled) began to deteriorate by the spring of 1827. Certainly he was given plenty of rope, for as late as November 1829, two and a half years later, By felt able to write to Colonel Howard in the following terms:

I have the honour of assuring you that no young man could have conducted himself more to my entire satisfaction, and I regret extremely that the situation he holds under me, will cease with the service on which I am employed, about the middle of August 1831.³⁷

Poor By must bitterly have regretted the writing of this testimonial, for Burgess did not scruple to use it against him in his long campaign of diatribe and slander. Shortly after By's premature testimonial Burgess's conduct had become so violent and irrational that many, including Colonel By, doubted his sanity. The young Englishman had taken to drink with a vengeance and was quite unable to hold his liquor. Even Dr. Tuthill at first suspected mental disorder. From May 1829 to February 1830 Burgess lodged with William Formay, master smith on the Bytown staff.

Formay was forced to eject his lodger for his deplorable behaviour, which did not stop short of insulting Formay's wife and threatening Formay himself with a horse-whip. On another occasion Burgess had threatened his brother, and fellow lodger, with a dagger. The Formays had shown such forbearance that had Formay not finally put the man out, his fellow lodgers would have done so.³⁸ Burgess defaulted on his rent (£3.6.0 for a private room which he no doubt needed), nor would he pay for a mirror he had smashed in a drunken rage. Burgess then lodged in the house of Thomas Fitzgibbon, a master carpenter with the Engineer Department, but Fitzgibbon too had to throw him out in the street, for fear that he would set fire to the house in his drunken revels.

Naturally the quality and reliability of Burgess's work rapidly deteriorated, in the preparation of the 1829 report N.H. Baird, the Clerk of Works, detected a £3,000 discrepancy in Burgess's figures. Baird sharply ordered Burgess to check his figures, to which order the latter took umbrage, leaving the office in a pique. Thereafter Burgess defied repeated orders from Colonel By to return to work. John Burrows's account of the incident concurred with Baird's.³⁹ In forwarding his 1829 progress report to General Mann, By apologized for its "slovenly state" occasioned by the reduced staff due to the lake fever, and by "the temporary insanity of my first clerk, Mr. H.H. Burgess."⁴⁰

By's patience ran out in the face of the clerk's continued obduracy; he suspended him on 25 March and on 2 April dismissed both Burgess and his brother for neglect of duty. But if Colonel By fondly imagined that he had seen the last of this trouble-maker he was soon disillusioned. Burgess now trumped up a variety of charges against By and his staff - peculation, graft, misuse of funds, and

defrauding £249.2.6 from his own pay. He also accused Baird of having cadged wood and water from government stores for his own use. It transpired that Baird had By's permission to do so because at the outset, following his appointment as MacTaggart's successor, he could only be paid temporarily at the rate of 7s.6d. per day rather than the 14s. drawn by the clerk of works.⁴¹ By put the case squarely to Burgess in May:

You have been dismissed from your situation as 1st Clerk in the Roy. Eng. Department, for neglect of duty, which I attributed at first to indisposition, but regret to state I have since found it arose from your constant habit of getting drunk every night.⁴²

Burgess's dissipation was common knowledge in Bytown, and certainly Burgess found no sympathy in the Engineer department, where he had rendered himself thoroughly obnoxious. He did find one supporter in the *Montreal Vindicator*, whose editor inveighed against "the flagrant abuses which have prevailed in that undertaking, shameful and fraudulent."⁴³ On the other hand, both the *Montreal Gazette* and *The Herald* defended Colonel By's integrity.

The charges which Burgess had been emboldened to carry to England could not pass unchallenged. On 2 December 1830, Colonel By wrote to Burgess requesting that he put his allegations in writing. Battle was now joined. In order to follow the Burgess episode to its denouement, it is necessary to digress from the chronological context briefly.

In April 1831 Burgess appealed to the Board of Ordnance, and in July proceeded himself to England, where he enlisted the interest of William Ewert, the member for Liverpool. The result of these representations was that the Board of Ordnance on 12 October 1831 ordered an inquiry into the Burgess charges. The court convened at Bytown in

November, under the presidency of Colonel C. Nichol.⁴⁴ On 16 December Burgess disembarked at New York on his return from England, whereupon the court reconvened in order to hear his testimony, as well as that of his brother. Burgess was given free conveyance to Bytown and an allowance of 5s. per day for a fortnight's period.

At this point Burgess showed signs of the growing mental aberration which eventually landed him in an asylum. He left Montreal for Bytown to attend the court on 23 January 1832. A week later he wrote to the Respective Officers in Quebec begging for protection against "insult and assassination." Charles Friel alone in that lawless community had opened his door to him, he wrote, and he enclosed a letter purportedly written by his host stating that such was the local feeling against Burgess that he (Friel) incurred some risk harbouring him in his house. To this the Adjutant General replied, "the laws of Upper Canada will prove a sufficient protection against any acts of violence to which Mr Burgess may be exposed in Bytown."⁴⁵

Such violence as there was, it transpired, was provoked entirely by the erstwhile clerk, who lost no opportunity to insult his former colleagues. Colonel By counselled his staff to ignore Burgess. On the evening of 4 February 1832 Burgess goaded his former landlord, William Formay, into a fracas in a grocery shop. Burgess brought charges and the court bound Formay over to keep the peace.⁴⁶ The long-suffering blacksmith felt indignant over the judgment of the court, assuring Colonel By that he had not used any threatening language. No doubt he regretted his past forbearance.

At the last minute Burgess had second thoughts about testifying before the court. In order to save face, he took issue with the court for holding its hearings in camera with unsworn witnesses; to this Colonel Nicol replied that the

court had been regulated "by the usages and practices of such courts and the instructions of the Commander of the Forces."⁴⁷ Burgess and his brother hurriedly left Bytown without testifying. Before leaving for England on 5 March Burgess wrote to the Respective Officers threatening to publicize the charges once he had reached home. In the meantime the Bytown court of inquiry exonerated Colonel By of all charges.

Colonel By treated Burgess in later years with the contempt he merited, but felt keenly nonetheless the aspersion cast on his honour. Later, in retirement at his country house in Frant, Sussex, he wrote:

that as an officer holding the rank I do in the service of my sovereign, & sustaining as I trust I have, an unsullied reputation during the 34 years I have had the honour of holding His Majesty's Commission, should be called upon to repeal any portion of the calumnies that had been alleged against me by a person who might well be designated as infamous; and who had basely fled from the honourable tribunal established at his instance, to afford him an opportunity to make good, under circumstances of great advantage, his charges against my conduct and character as a public officer.⁴⁸

To return to Bytown, the Brockville Gazette rang the curtain down on the little drama with the printing of a letter from "a respectable source dated Bytown 17th February 1832:"

I write to inform you that Henry H. Burgess has absconded or bolted; that his friend Freel (sic) was this morning found dead in his own house at the foot of the step ladder leading from the first floor to the cellar, where he

kept the grog shop....We congratulate the country upon the result of this protracted warfare against everything that is honourable and just, and rejoice in the development of the infamous conspiracy that meditated the ruin of Colonel By's professional reputation.⁴⁹

The rest of the Burgess story is soon told. In 1833 Burgess may be traced to Baltimore, where he held an undefined appointment in St. Mary's College, a Sulpician seminary. He enclosed an affidavit signed by three doctors that he was of sound mind.⁵⁰ Ten years later, still resident in Baltimore, Burgess continued to badger the Ordnance office with spurious claims for monies owed him and abuse of Colonel By. Some idea of the deranged malevolence of this man may be gained from a letter addressed to the Ordnance office, dated 4 July 1843, vilifying the memory of a man who had been dead seven years:

as to the manner in which I ought to have replied to the billingate and filth with which Lt Col By and a few of his followers endeavoured to bespatter me when my petition went before the Commons of England in Parliament assembled....I was not long in the employment of John By when I discovered that he had a corrupt heart, a foul mouth, and a false tongue;...At last his wicked career was cut short, and he was ushered into eternity with all his sins upon his head; and his carcass now lies mouldering in the tomb, yet shall his memory not escape.⁵¹

According to Burgess's tally, the Ordnance now owed him the considerable sum of £1,125.12.3-3/4.

In 1847 Burgess repeated his charges and announced that he had embraced the Roman Catholic faith. Somewhat

fatuously he proclaimed that if he had been indeed guilty of fraud, he could not have been absolved of his sins. A pity, he concluded, that there had not been more practising Catholics in the Engineer Department; things would have gone better.⁵²

Burgess faded from the scene with his last hysterical outburst from Baltimore, this time addressed to the Surveyor General, in which he denounced his former associates as a "nest of rogues & drunkards and thieves."⁵³ The most charitable view one can take of Burgess is that he was obviously demented. His charges had no substance, and are of significance only by reason of the additional strain they imposed on an already harassed Colonel By.

Reverting to the year 1830, to continue the account, lake fever recurred for the third consecutive summer, closing down most of the work sites in August and September. The most unhealthy location on the waterway was the 18-mile-long swamp at the height of land, between Mud (now Newboro) and Clear lakes [the 18-mile-long swamp is actually Cranberry Marsh, which was located in the area between present day Whitefish Lake and Upper Brewers Lockstation, not near Newboro - kww]. In March, By decided to clear a 300- to 400-foot corridor to effect a freer circulation of air through this foetid region. The excavation work at the Isthmus was let to a number of contractors who did not co-operate with one another, flooding one another's work, with resultant confrontations and brawling. MacTaggart has left perhaps the most vivid description of this noisome region from which rose the heavy stench of rotting vegetation [MacTaggart was referencing Cranberry Marsh, not the Isthmus - kww].

The Isthmus must have been one of the most unpopular postings along the waterway, and the officer of engineers stationed at this point must have been under considerable strain. More than once mention is made in the various contemporary accounts of friction between officers and civilians. Whether the officer of Royal Engineers (not identified) described by the Montreal *Canadian Courant* as an officer "whose military habits but ill accord with the

direction of civilians,"⁵⁴ was indeed overbearing or merely doing his duty under stress is matter of opinion. Certainly the trying conditions at the Isthmus would tax anyone's forbearance.

Foreseeing a recurrence of fever at the Isthmus, By posted an assistant surgeon there in April. And a sickly season 1830 proved to be, prostrating all and sundry for the third successive summer, particularly on the Kingston side of the height of land. An official return of the sick has been preserved for 1830. Of the 1,316 men plus dependents employed between the Isthmus and Kingston Mills for the six-week period, 1 August to 15 September, 787 were stricken, 89 of whom were relapsed cases. Fifty-five of the sick died, of whom a little over half were dependents [women and children].⁵⁵ The most severely affected location was Chaffey's Mills, with 100 per cent of the work force down, followed by the notorious Isthmus with 74 per cent on the sick list. Brewer's Upper Mills was, comparatively speaking, the healthiest location, with 41 per cent affected. There is no reason to assume that the epidemics of 1828 and 1829 had been less severe. Under such harrowing conditions Colonel By, in company with two engineer officers, toured the line of the canal, arriving at Kingston on 13 October. He announced on arrival that he expected the waterway to be open from Bytown to Merricks Mills (Merrickville) that season.⁵⁶

1831: Litigation

Colonel By had been empowered by the terms of the Rideau Canal Act to expropriate lands required for the canal. Not all the landholders were content with the terms and hence court action was a frequent resort. The act safeguarded Colonel By from Court judgements, but not from the legal

proceedings pertaining thereto. In 1830 By had the foresight to request that the Attorney General of Upper Canada be retained as his counsel, a request which was approved by the governor.⁵⁷

In March 1829 Nicholas Sparks, a pioneer resident of Bytown, brought an action against Colonel By for the expropriation of 88 acres of land to be used for a reservoir and quays at the head of the flight of eight locks. Sparks enjoyed a reputation as a public-spirited citizen, hardly a land speculator. Nonetheless in this instance Sparks claimed that he had acquired this property in 1823 for £85 per acre, and that its value had soared to £500 at the time of the expropriation four years later. He now brought an action for compensation at this rate. Colonel By had been able, according to the regulations, to compensate Sparks at £1 per acre. Sparks contended that he should not be called on to take such a loss, even in the public interest. Colonel By's case was that enhanced property values due to the canal construction had made Sparks exorbitant in his demands.⁵⁸ The issue was typical of many raised by landholders along the line of the canal.

The case came up in August 1831. Sparks's counsel valued the property at £10,000, something over £113 per acre, which (though very much less than Sparks's valuation) was a good deal more than the pittance he had received. They also contended that By had used his authority less for the canal requirements than as a means of lowering the value of the rest of Sparks's property in retaliation for the latter's non-cooperation. Judgement was rendered for By, much to the indignation of the Reverend William Bell, who recorded in his digressive diary, "The more I see of courts of law, the less confidence I have in them. A verdict against Mr Sparks of Bytown, was...absurd."⁵⁹ The authors of *Carleton Saga* also sided with Sparks, stating that

"Colonel By practically took 104 [not 88] acres from Sparks" both for canal construction and fortifications. When plans for the latter were abandoned Sparks regained his property in 1848.⁶⁰

A sharper and more protracted lawsuit was initiated by the contractors Rykert and Simpson who had undertaken the works at Smiths Falls, consisting of a 23-foot dam and three locks. Their workmanship did not measure up to the required standards. In April 1829 a leak developed in the keywork of the dam. By the morning of 23 April the structure had been so weakened that collapse was imminent. Rykert was absent from the site at the time, and so Lieutenant Pooley directed the foremen in taking measures which saved the dam. The contractor returned the following day, and followed Pooley's orders, but he had lost the lieutenant's confidence.

Thereafter the relationship of Lieutenant Pooley with the two contractors deteriorated, with matters coming to a head early in 1831. On 3 January James Simpson wrote to Colonel By describing Lieutenant Pooley's conduct as "highly reprehensible" and stating his refusal to continue the work subject to Pooley's inspection.⁶¹ On 7 January, less than a week later, By replied to Simpson that his contract was being taken over by Bell and Richardson, and that Lieutenant Pooley had been instructed to make a final measurement of Rykert's work. In attempting to carry out his orders Pooley encountered obstruction and harassment at every turn, and the case finally went to court.

On 11 January Pooley informed Simpson of his intention to measure the stone quarried by Simpson's men at Merrickville; Simpson replied that he would permit this under no circumstances because the stone quarried had not been turned over to the Engineer department. The following day Pooley countered with the declaration that he would carry out his orders forthwith, and that any interference would

not be tolerated. Although Simpson was not at the quarry when Pooley arrived, accompanied by Lieutenant Frome and a master mason, several of his men barred access to the site. Wishing to avoid violence, Pooley withdrew. When the new contractor, Richardson, went to the quarry to get stone for the dam, one of the quarrymen threatened him with a gun.

The Smiths Falls situation had obviously reached a deadlock, but Colonel By was not one to succumb to force. On 14 January he ordered a detachment of two NCOs and 20 Royal Sappers and Miners to Smiths Falls, cautioning Pooley that the Riot Act must be read three times by a magistrate before the troops legally might open fire. The same day By wrote to Simpson that he had had now ample time to settle up with his subcontractors, and that measurement at the quarry would proceed forthwith:

I hereby seize on behalf of his Majesty,
on the authority of the Provincial Act for
the Rideau Canal, the whole of the
materials, Quarries, Lands etc required
for the Public Works and am willing to
come to an immediate settlement.⁶²

Lieutenant Pooley had been empowered to call on civil authority, and, in the last resort, to use force if further obstruction were encountered.

One would have thought this would have ended the matter, but the wily Simpson had one card left to play. When Pooley arrived at the head of his detachment on the morning of 17 January he was told by Simpson that he would be charged with trespass if any of them set foot in the quarry. Simpson had bought the property from a Mr. Jones of Brockville. Again perforce Pooley withdrew, leaving Simpson in possession of the field.

On 23 January By informed Pooley that all the land adjacent to the Smiths Falls works had been acquired by the government in May 1827, and that he had informed Simpson at

the time that he might erect his mills thereon since the government did not wish to interfere with local improvements. He instructed Pooley to apply to the Attorney-General of Upper Canada "to defend any actions that may be brought against us." The quarry was to be picketed, marking it as government property. On 19 April W.J. Hagerman, solicitor, assured By that he was amply covered by the terms of the Act: "You have the power by the Provincial Statute to enter upon and take possession of whatever grounds lay contiguous to the Canal that you may deem necessary for the said works."⁶³ In the meantime Pooley reported that Simpson had committed a "flagrant act of violence" - in an apparent attempt to test the legality of the Act Simpson had torn up the pickets and flung them in the river.

Pooley took possession of the quarry, and was thereupon served with a writ to appear in the Court of King's Bench at Brockville on 20 June 1831 to answer a charge of trespass brought by James Simpson, with damages of £5,000. The case was heard in August, and judgement was awarded to the defendant.⁶⁴ After so much provocation By had at last been vindicated. Simpson, having botched his job, had put every impediment in the way of its completion. Certainly By had shown forbearance, having given the litigious contractor numerous opportunities to reconsider his action.

Unfortunately Rykert and Simpson were not the only thorns in his side. Colonel By had become almost a focal point of litigation, the target for sundry individuals harbouring a variety of grievances. He took issue with the Montreal Vindicator of 11 October 1831 for having printed a charge reflecting on his honour, to which he replied:

I have to state that a board of officers
is now assembled in this place, and your
correspondant particularly the one signing
himself an

inhabitant of Bytown, have now an opportunity of laying their proofs before the Board of Officers alluded to.⁶⁵

As in Burgess's case, it proved easier to make libellous and spurious statements than to substantiate them before a board of officers. Mud was spattered on Colonel By, but none of it stuck.

A case in point is that of a letter printed in the *Canadian Courant and Montreal Advertiser* of 4 May 1831 alleging that the house of a "respectable trader" in Bytown had been broken into by a military picket acting under the orders of Colonel By, and that puncheons of gin and brandy to the value of £300 had been broken open in the street, where a merry mob made short work of their contents. On the face of it this was an arbitrary action, but a week later a correspondent signing himself "A Friend to the Rideau Canal," gave the facts in the columns of the *Canadian Courant*. The "respectable traders" had been bootlegging spirits to the canal workers, and having been warned several times, continued their activity in defiance of the law. By had given them 48 hours to comply or take the consequences. He then ordered their goods seized and premises padlocked.⁶⁶

"A Friend to the Rideau Canal" again appeared in print to defend By from disparaging gossip which distorted the truth. By had incurred criticism for removing his name from a subscription list for a new bridge. He had agreed to put up £150 for the bridge fund on the condition that an equivalent amount be pledged by other contributors. The organizers of the fund then managed to raise £500, expecting By thereupon to raise his contribution to that figure. By felt that he was being put upon, and so withdrew his contribution. The gossip about town had focussed merely on the fact that By had withdrawn his name from the subscription list.⁶⁷

Edward John Barker, writing soon after the event bore testimony to By's honesty, his integrity against which nothing could be brought: "it cannot be shown that one shilling of the public money was pocketed by him."⁶⁸

By the autumn of 1831 the great project was nearing completion. Recurrence of the lake fever delayed the opening of the canal, however, until the following spring. Colonel By had the satisfaction notwithstanding of passing through 16 locks aboard the steamer *Union* to Merrickville, accompanied on board by his wife, Commissary Miller, Dr. Tuttle and a Lieutenant Moore of the 15th Regiment of Foot. The company was in a gay mood, passing the day "with the greatest hilarity, and it is what we might expect from Colonel By's urbanity."⁶⁹ Above Merrickville By had to continue his journey by canoe, but he anticipated the completion of the rest of the locks that season. It must have seemed to him none too soon, for he was down with the lake fever for the third time that summer.⁷⁰

At about the same time that Colonel By and his party were making their festive passage through the canal, another, better known to posterity than By was visiting the region. William Lyon Mackenzie, the radical reformer, commented on the workmanship of the Rideau locks in his *Sketches of Canada and the United States*:

Such of the locks as I saw are noble monuments of the skill and experience of the masons and architects who planned and built them. The three locks at Merrickville, and the lock at Burritt's Rapids...are equal, if not superior, to the locks at Lockport, on the Lachine canal; and being upon a grand scale, and built of beautiful hewn stone, have an imposing and durable appearance, looking as if they would last for ages. The dams, and other erections,

also seem to be of the most permanent possible character.⁷¹

Mackenzie was not deceived. The Rideau works have borne him out for nearly a century and a half.

With the close of 1831, the great undertaking within a few months of completion, By discharged the two companies of soldier artificers who had served him so well. A total of 71 Sappers and Miners, induced by the 100-acre land grant, took their discharge on the Rideau - 9 NC0s, 61 privates and one bugler.⁷² Fourteen men chose to return to England for their discharge, and 12 continued in service. Of the 14 men who took their discharge in England, one, Sergeant Joseph Coombes, returned to Canada.⁷³ The proportion from each company choosing to stay in Canada was similar: 39 men from the 7th Company and 34 from the 15th Company.⁷⁴

As noted before, the Royal Sappers and Miners left England in the spring of 1827 160 strong. Thirty-five men deserted during their 4-1/2 year service on the Rideau, nearly 22 per cent of the total complement, the norm for the British army serving in Canada at this time. Considering the arduous conditions of the Rideau service, the record of the two companies may be considered better than average in this respect. Sixteen of their number died, 10 per cent of their complement, because of the ravages of lake fever. One man drowned, and five were killed in blasting operations. Finally one hapless soldier suffered transportation for some felony or attempted desertion.⁷⁵ Five were invalided home. Death by misadventure of only six men on a project entailing considerable hazard to life and limb may be considered a very good record by the standards of the time.⁷⁶

1832: Opening of the Canal and By's Recall

The Rideau Canal was officially opened in May 1832, five

years after the first ground had been broken. Festivities marked the event at all the stations along the line, focussing on the passage of the steamer *Pumper* (re-named in honour of the occasion the *Rideau*) bearing Colonel By, his wife and two daughters and a merrymaking company through the canal. Embarking at Kingston, Colonel By made a triumphant progress along the wilderness waterway. At the first of the locks, Kingston Mills, an enthusiastic crowd gave three cheers for the colonel, Captain Briscoe and the contractor, Robert Drummond (who had also built the *Rideau*).⁷⁷

Accommodation aboard the little steamship was primitive. According to H.R. Morgan in *Saturday Night* (1925), the hold

scarcely worthy of being dignified a cabin, was divided into two compartments by a canvas screen. In the foremost compartment mattresses were spread on the floor for the accommodation of Colonel By and his family, while the gentlemen, who occupied the other half, slept as they could on the bare boards⁷⁸

The discomfort of the passage through the canal did nothing damp the spirits of the company. A gala reception awaited the *Rideau* at every lock along the waterway, a triumphal progress and a fitting celebration of the five-year endeavour which had cost so many lives. The celebrations at Smiths Falls nearly ended in disaster. The salutes from a gun aboard the *Rideau* were answered by those from an ancient 18-pounder ashore. On the third discharge abnormally loud explosion and a dense cloud of smoke gave unmistakable indication that this ancient piece of ordnance had exploded. Heavy pieces of metal were scattered far and wide, including one projectile weighing over 200 pounds which lit "about six rods west of Government House, occupied Mr Shaw, at a measured distance of 26 rods" (429 feet).⁷⁹ Miraculously no one was injured, although one man was

standing within eight feet of the piece, and several more within 30 feet. The incident cast only a momentary pall over the festivities as the *Rideau* proceeded downstream for Bytown. She reached it on 6 June, having completed the first passage of the 123.5-mile waterway and its 47 locks. The trip was a fitting climax to By's six laborious years on the Rideau; he was to have little further comfort as the result of his considerable achievement.

With the job completed, a permanent staff to operate and maintain the canal was appointed. Preference was given those who had served on the Rideau from the start. Of the 73 appointees, fully half were discharged Royal Sappers and Miners. Captain Daniel Bolton, on Colonel By's recommendation, succeeded him as the canal's superintending engineer. John Burrows was confirmed as overseer of works; he had been one of the early appointees when the project started, and had an excellent record. Fitzgibbon and Formay likewise continued on the establishment as master carpenter and master smith respectively, and William Clegg was retained as clerk of cheque. William Addison, who had served with the rank of sergeant in the 7th Company, was appointed lockmaster at Bytown and keeper of the depot stores. Another veteran of the Engineer department, Thomas Burrowes, was confirmed as overseer of works. Sundry tradesmen were taken on the staff for maintenance of the locks, dams, weirs, lock gates, crabs and divers appurtenances - carpenters, smiths, miners, plumbers, wheelwrights, coopers, painters, et al.⁸⁰

With his great work, the culmination of his career, brought to a successful conclusion, By was vouchsafed a temporary satisfaction on finding himself praised from all quarters for a job well done. Both the legislature of Upper Canada and a group of Montreal merchants paid tribute to his achievement, the latter expressing the wish that the king

would be graciously pleased "to confer upon you some special mark of his Royal favour and approbation."⁸¹

The builder of the Rideau Canal was not left for long to a well-earned euphoria. By must have been aware by July 1832 of the Treasury Board minute dated 25 May in which he was reprimanded for exceeding his estimates and annual appropriations. "It is impossible for My Lords to permit such conduct to be pursued by any public functionary." He was forthwith recalled to England "to afford such explanation as My Lords may consider necessary upon this important subject."⁸² Such was the portent of what By might expect in England, and he must indeed have returned with foreboding.

In August By informed the military secretary of his recall, and recommended that Captain Bolton succeed him as superintendent of the completed canal as of 1 September; the appointment was duly confirmed. Proceeding to Quebec, By booked passage for himself and family on *The Brothers*, a transport clearing for London on 23 October 1832.⁸³ The ramparts and Citadel dropped astern for the last time.

A number of correspondents and pamphleteers sprang to By's defence, as if to make up for all the criticism and vilification he had suffered from so many quarters. One such ascribed By's few faults to a warmth of temperament, leading on occasion to harsh or hasty words. The writer feared that if the many slanderous attacks were not answered it would reflect badly on the colony, and concluded with the perhaps histrionic tribute from Hamlet: "Take him for all in all, we [sic] shall not look upon his like again."⁸⁴

Postscript

Parliamentary Inquiry

Considering the scale of his achievement in the context of time and place, the treatment accorded Colonel By on his return to England was shabby. He himself expected a knighthood, but he was denied even the recognition of a promotion. On the other hand, given the procedure of the times, to regard Colonel By as one abused and pilloried by a bureaucracy would be unrealistic: he had, after all, exceeded his own estimates twice over. Of his service to the province of Upper Canada and his role as the founder of the nation's future capital, there is no dispute.

Colonel John By was recalled to give an account of his stewardship - why the costs of the project had so far exceeded his own estimates, and whether as superintending engineer, he had discharged his duty with integrity. It is sometimes forgotten that such investigations were standard procedure at the time whenever, as in this case, projects cost much more than anticipated. All this notwithstanding, in retrospect the action of the government appears to have been based in part on political expediency, the attempt by a newly appointed administration to impress the Reform parliament with its zealous concern for the public purse. At the same time, the imperial government may be regarded as the victim of its own cumbersome organization, one as difficult to comprehend clearly as it must have been to work in practice.

George Raudzens, in his thesis, "The British Ordnance

in Canada 1815-55," defends the action of the imperial government of the day. Raudzens states that Colonel By took full advantage of his isolation and the slow lines of communication to force his own policies on the government to which he was accredited. Providing Raudzen's premise is accepted - that By should have adhered to his instructions whether he considered them expedient or not, that he should not have spent beyond the limit imposed by parliamentary appropriations at any time - the thesis demonstrates irrefutably that Colonel By, ("the man on the spot") had repeatedly and wilfully exceeded his orders for the gratification of his own ambitious designs. This can hardly be a popular view of Colonel By, but should be considered in order to keep the story in perspective. Without knowledge of the conditions of a site so far removed from Whitehall, it is perhaps not surprising that the Treasury Board became suspicious as costs rocketed at a shocking rate. The Duke of Wellington himself, as mentioned above, was disturbed at By's apparent independence, and urged firm centralized control. Given a complex bureaucracy, an archaic system of accounts and the slow communications at that remove, it is not surprising that centralized control was ineffective, and that of necessity much devolved upon "the man on the spot" if the work was to go forward at all.

The one aspect of the Rideau project never in question was the enduring quality of the workmanship. Even Raudzens attests to this: the cost of subsequent maintenance on the Rideau Canal compared very favourably with that for the Oswego and Erie canals; although one must allow for heavier traffic, the figures for the Erie Canal exceeded those of Rideau thrice over. (The average cost for maintenance of the Rideau Canal ran at \$270 per mile, that of the Oswego \$336, and the Erie no less than \$974 per mile.)¹

The straw apparently that broke the camel's back was

contained in By's progress report of 15 July 1831, in which the estimates called for an additional £26,626 to finish the job. The Ordnance department supported Colonel By in his stand, but the Treasury Board did not. This body contended that an accounting must be demanded, and, as a result, on 4 February 1832, some three months before the opening of the canal, a Parliamentary committee ordered the submission of all relevant papers in order to conduct a thorough inquiry.² The committee was composed of 26 members, some of whom were leading reformers. The Treasury rebuked the Ordnance for its acceptance of By's figures to which the latter submitted to the rebuke, in effect abandoning support for Colonel By. It is of interest to note that By, possibly because of ill health, was never called before the committee to defend his conduct, although he wrote them a full defence of his conduct on the Rideau.

On the prime charge that he had expended large sums without waiting for Parliamentary sanction, By had little difficulty defending himself. In July 1833 he wrote to the committee quoting his orders, contained in a despatch from R.W. Horton, under-secretary of state, dated 18 April 1826: "I was expressly commanded not to wait for a vote of Parliament for any money necessary to carry it on." And further, he had been urged to proceed "with all possible despatch, and to authorize the contractors to commence as early as the season or the circumstances would permit and without waiting for the passing of the annual grant."³ He concluded by maintaining that he had always submitted annual estimates for each succeeding year. These had never been disallowed, and therefore "I must ever maintain that I had the direct sanction of His Majesty's Government for all I did."⁴ His instructions, he insisted, had never been altered or modified from the beginning to the end of the five-year project. Furthermore, he had completed 33 years

service at home and abroad without censure.

Aside from the principal issue of the cost of the project and the manner of incurring it, the Treasury accused By of "conduct unbecoming to an officer" because he had built two private residences on government-reserved land at Bytown, and had speculated in various land transactions.⁵ By replied he had spent £800 from his own pocket to provide a house for his family and a second for Lieutenant Pooley; since both houses had been expropriated, he demanded reimbursement.⁶ At this point the Treasury qualified its charges on land speculation, but rejected By's claim for compensation for the two houses.⁷ Concluding a vigorous defence of his conduct and integrity in this same letter of 22 July 1833, By demanded that the slur upon his character be removed, and that "I may be honored with some public distinction as will show that my character as a soldier is without stain, and that I have not lost the confidence or good opinion of my Government."⁸ Indeed By applied directly to the Master General of the Ordnance for at least some mark of official recognition. The latter considered recommending Colonel By's presentation at the royal levee, but pressure from the Treasury Board and other hostile government elements blocked the proposal.⁹

The findings of the Parliamentary committee were inconclusive, the final report expressing regret that By had not controlled his expenditure more carefully. And there the matter rested insofar as the government of the day was concerned, with neither a conviction or an acquittal.

By's Death

The imputation upon his character as a gentleman and a soldier holding the king's commission pressed heavily upon one of Colonel By's station and principles. His soldierly

honour and pride in the discharge of his duty were basic principles in his make-up. It was not enough that Lord Dalhousie, Sir James Kempt, Colonel Durnford and the men, soldiers and civilians, who had served under him on the Rideau, should believe in his absolute integrity when he had been dishonoured in the eyes of the nation and denied recognition by his sovereign. To one of Colonel By's temperament, whose constitution had been seriously undermined by the rigors he had undergone in his country's service, the nebulous outcome of the Parliamentary inquiry was virtually a sentence of death.

On 13 October 1834 Colonel By suffered a severe paralytic stroke at his recently purchased estate and country house in Frant, Sussex. A second seizure followed on 8 December. By was now reduced to a helpless invalid, bed-ridden for the little time that remained to him. His doctor warned Esther By that her husband's life was in jeopardy.¹⁰ On Christmas Day 1834 Esther By wrote a pathetic letter to the Ordnance department requesting that some honour or recognition be accorded her husband. The Ordnance was sympathetic to the plea, but again inimical counsel within the government prevailed; the file was officially closed on 29 March 1836, shortly after By's death ¹¹

Meantime By lived out his remaining days at Shernfold Park, by now oblivious to praise or censure. Perhaps mercifully he was too far gone to be informed of the Treasury Board's decision regarding his Bytown property in February 1835.¹² At this point he had less than a year to live. Death released Colonel John By, RE, from his troubles on 1 February 1836, in his 58th year, "after a long and painful illness brought on by his indefatigable zeal and devotion in the service of his King and Country in Upper Canada."¹³ So read his epitaph in St. Alban's churchyard,

Frant, where he was buried on 12 February.

Esther survived her husband little over two years, dying on 18 February 1838, aged 40. She had been active in parish and social work in her latter years, and was missed by the villagers. The final unkind twist of fate in By's unhappy tale was the dying out of his line soon after his own passing. It will be recalled that By had no sons. His younger daughter, Harriet Martha, died a spinster on 2 October 1842, and the elder, Esther March (who had married the Hon. Percy Ashburnham) on 7 February 1848 without issue.¹⁴

Commemoration

Colonel By has, on the whole, been forgotten in England. Perhaps this is not altogether surprising. The Royal Engineers were hardly numbered with the cavalry and the fashionable regiments of foot among the military elite of the day. Although acknowledged as an outstanding officer in the Corps of Royal Engineers, By's crowning achievement lay in one of the backwaters of empire, which had never claimed more than its due share of attention from the home authorities, nor the interest of the British public. The durable and soundly-designed works so far away were not of the sort to command public acclaim. Some there were, however, who appreciated the magnitude of By's achievement. Sir Richard Bonnycastle in his travel book, *The Canadas in 1841*, was one:

If ever a man deserved to be immortalized
in the utilitarian age it was Colonel By.
In an unexplored part of the country,
where the only mode of progress was the
frail Indian canoe, with a department to
be organized, workmen to be instructed and
many difficulties to be

overcome, he constructed a truly remarkable work.¹⁵

For several generations after the completion of the canal, its builder was remembered little more in the burgeoning lumber town he had founded than in his native England. A city ward, a Lower Town market, sufficed to honour his memory. By the 1930s, a century later, the waterway designed for gunboats and cargo steamers had become the haunt of pleasure craft. The locks and dams so solidly wrought witnessed the transition from steam to the internal combustion engine; first the railway then the motor road killed the commercial traffic on the canal. The durability of By's handiwork was demonstrated in 1912, when the old Sapper's Bridge at the head of the flight of Bytown locks was demolished to make way for Connaught Place - subsequently Confederation Square.

So hard was the stone, and so clinging and steel-like the grip of the ancient cement that even dynamite failed to wreck it. As a last resort, the contractors used a derrick to hoist up a block of stone weighing about two tons to a height of fifty feet and drop it on the bridge. For three and a half hours it withstood this terrific battering....Finally one last blow carried the entire bridge into the canal; the noise resounding over the city like the boom of a great gun.¹⁶

Such was the craftsmanship of a century and a half ago.

Belatedly Ottawa moved to a more fitting commemoration of its founder. In 1968 the Ottawa Historical Society paid for the restoration of By's grave in St. Alban's churchyard, the parish being unable to do so.¹⁷ On 14 August three years later a life-size statue of Colonel By in bronze, executed by Dr. Emile Brunet, was unveiled by the governor

general, the Right Honourable Roland Mitchener, on the site of By's house in Majors Hill Park. A guard of honour of Royal Engineers was brought out from England to share the ceremony with a detachment of the Royal Canadian Engineers. In attendance were the mayors of Ottawa and neighbouring Vanier, the British high commissioner, Dr. Mackay of the Ottawa Historical Society, and the project's prime mover, Brigadier General J.L. Melville, colonel commandant of the Royal Canadian Engineers.

The statue depicts Colonel By standing in relaxed posture, one hand on his hip and the other holding a plan of the locks, looking out across the river to the Gatineau Hills beyond. In the words of P.A. Camp, writing in the *Royal Engineers Journal*:

It is a very moving statue. In the quiet of the evening one can almost feel the presence of this man standing, as he must so often have done, just a few steps from his verandah and gazing out across the head of the canal.¹⁸

At the same time as the statue in Ottawa was unveiled, two wreaths were laid on By's tombstone in Frant by Commander C.R. Burgess, RN, (the Rector's Warden) on behalf of the Ottawa Historical Society, and by the Corps of Royal Engineers, represented by Brigadier General J.H.S. Lacey, secretary to the Institution of Royal Engineers.¹⁹

One hundred and thirty-five years had passed since the death of lieutenant Colonel John By, whose work finally so properly commemorated in the capital he had founded in the upper province.

Such was Colonel By and such his achievement, an achievement inevitably taken more seriously in the remote and sparsely settled province than in the empire's capital. At home By is remembered, if at all, as an experienced and competent officer of engineers, the victim of time and

circumstance. In the generation following Waterloo engineers in England, however outstanding, did not strike the popular imagination of a nation which had produced both the Iron Duke and Nelson.

In Canada the response to By's memory was understandably quite different, for the proof of By's handiwork was plain for all to see, a guarantor for the future of the boisterous little settlement he had founded. The solid and mellowed masonry of locks and dams is By's true memorial. Perhaps in the end he himself would have had it so.

Biographical Sketches

Brief biographies of men who figured prominently on the Rideau project follow. The career of Colonel By, dealt with in detail previously, appears in summary in this section. John Howard Burgess, having claimed his full share of attention in a previous context, is omitted here. The arrangement of the subject matter follows in an order slightly different from that given above; that is: Lieutenant Colonel John By, the officers of the Corps of Royal Engineers, the prominent contractors, and finally, several individuals associated with the project although not engaged directly on the works.

Royal Engineers

Lieutenant Colonel John By, RE

John By was born on 10 August 1779¹ in London, the second of George By, customs official, and Mary Brian. He was baptised in the church of St. Mary Lambeth. John By was the first of his line to break with family tradition, choosing career of a soldier to that of His Majesty's Customs.

He graduated from the Royal Military Academy, Woolwich, and was commissioned a second lieutenant of artillery on 1 August 1799. He transferred, however, to the Corps of Royal Engineers in December of the same year, and served in that regiment for the rest of his career.

By's first wife was Elizabeth Johnson Baines, who died in 1814 without issue; he then married Esther March, who

bore him two daughters, Esther March and Harriet Martha. By was a devoted father and husband.

From 1802 to 1811 By served in Canada, stationed at the Citadel, Quebec, where he obtained his captaincy in March 1805. He worked on the fortifications of Quebec, which were being strengthened at the time, and gained valuable experience for the future in the construction of the Cedars Canal.²

In 1811 By was recalled to England, and posted to the Peninsula, where he saw active service under Wellington at the first two abortive sieges of Badajoz. Invalided back to England, By commanded the royal gunpowder mills at Waltham Abbey, Faversham and Purfleet from 1812 to 1821.³

In 1821 By found himself on the unemployed list of officers because of the reduction of the military establishment after the Napoleonic Wars. In 1826, however, perhaps on the recommendation of the Duke of Wellington, By was chosen by General Gothar [Gother] Mann, Inspector General of Fortifications, to take command on the Rideau as superintending engineer. He arrived at Quebec on 30 May 1826.⁴

With his initial arrangements completed at Montreal and Bytown in the summer and autumn of 1826, By got the work under way at three locations along the projected canal in the spring of 1827; he travelling the whole line by canoe a number of times. The main burden of his great endeavour was finished by late 1831, but the project was not completed until the spring of 1832. The delay was caused in part by widespread sickness, which brought the work to a virtual standstill during three successive summers, and finally by the untimely action of a mill owner flooding a section of the waterway in order to make repairs to his mill.

By was recalled to England in August 1832 to account for his expenditure before a parliamentary committee.

Actually Colonel By was never called before the committee, perhaps because of his rapidly declining health. In the end the committee exonerated By of all charges of peculation, but expressed regret that he had not managed to keep his expenditure under closer control.

By brooded over his treatment, retiring to his recently purchased estate, Shernfold Park, in Frant, Sussex. His health deteriorated rapidly. He suffered a series of strokes, beginning in the summer of 1834.⁵ He died at Shernfold Park on 1 February 1836; he was survived by his wife Esther, who died two years later. Both his daughters died without issue, so that with their passing, the By family line by 1848 was extinct.

Captain Daniel Bolton, RE

This officer, By's second in command during the building of the Rideau Canal and his successor as its first superintendent, had a long and distinguished military career.

Bolton was commissioned on 14 December 1811 and promoted to the rank of lieutenant the following year. He served in the Peninsula (1813-14) and in Holland (1814-15), and subsequently in France (1818). He was gazetted second captain 7 June 1825.⁶

Captain Bolton arrived in Montreal to report to Colonel By on 9 August 1826, but was so stricken with dysentery that By despaired of his services "for some weeks." A month later Bolton was so ill that By doubted that he would be able to function at all that season,⁷ but by mid-October he had recovered sufficiently to report for duty.

Unfortunately Bolton again fell ill, this time with lake fever and was confined to bed from August to October 1829. He convalesced slowly during the ensuing winter.⁸ Bolton and his wife narrowly escaped death when their quarters in

Bytown were destroyed by fire 26 January 1830.

Through all these vicissitudes Captain Bolton served as Colonel By's senior military assistant, giving such satisfaction that By recommended him to Durnford as his successor in November 1830.⁹ Bolton duly succeeded By as superintending engineer upon the latter's recall to England, serving in this capacity until 1843, during which time he occupied his predecessor's house at Nepean Point (since known as Majors Hill Park).

Early in his tenure Captain Bolton was faced with a crisis when the dam at Long Island went out on 8 June 1836. The Long Island dam was fully restored by 1 August.¹⁰

In 1843 Bolton returned to England. Ultimately he reached the rank of major general (by June 1859) and died in Capetown on 16 May 1860. A street in New Edinburgh is named after him in commemoration.

Lieutenant Robert Boteler, RE

Robert Boteler was commissioned second lieutenant on 11 May 1795. By placed Boteler in charge of the Kingston division, extending from the Narrows, Rideau Lake, to Kingston. His special responsibility was the surveying of land required for defence works.¹¹ Boteler went on half-pay in March 1841, and died on 24 January 1866.¹²

Lieutenant Henry Briscoe, RE

Commissioned on 20 July 1813, Briscoe was posted in command of the Jones Falls detachment. He contracted fever at Kingston Mills in September 1828¹³ after having been engaged on survey work. He proved highly satisfactory in the discharge of his duties, and was given a permanent appointment in 1832.¹⁴ Captain Briscoe died on 17 August 1837 at Demerara, British West Indies.¹⁵

Captain Pennel Cole, RE

Commissioned on 1 February 1810, Pennel Cole served in Holland at the conclusion of the Napoleonic Wars (1814-15). Captain Cole, together with a Captain Gale, was attached to the 15th Company Royal Sappers and Miners, stationed at Bytown.¹⁶ He was transferred to Rideau Lake on 1 January 1830.¹⁷ His name does not appear on the list of the permanent establishment when the construction work was completed in 1832, and so may have chosen to return directly to England.

In any case he had a commendable career thereafter, serving in South Africa (1851-53) and attaining the rank of major-general. He retired on 11 August 1856, and died at the seaside resort of Boulogne-sur-Mer on 25 March 1862.¹⁸

Sergeant Joseph Coombes, Royal Sappers and Miners

Sergeant Coombes served in the Royal Sappers and Miners, although in which of the two companies has not yet been determined.

Sergeant Coombes was a practising Methodist, and was engaged by John Burrows as a lay preacher at the first Methodist chapel built in Bytown in 1827.¹⁹ He has also been described as "a Wesleyan exhorter" who attended meetings in Miss Napps' school-house in Upper Town before the chapel was built.²⁰

Coombes was one of his company who chose to take his discharge in England; he apparently had second thoughts, for he returned to Canada,²¹ to become Bytown's first druggist. Coombes had a frame house, the first on Rideau Street.²² The house was taken down in the early 1900s. Sergeant Coombes is numbered among the early pioneers of Bytown.

Lieutenant John Cromie, RE

Commissioned on 22 September 1826 and posted to Kingston,

Lieutenant Cromie was killed at that place 13 January 1830²³ having been thrown from a sleigh. The young man had been active and was very popular in Kingston social circles.

Lieutenant William Thomas Denison, RE

William Thomas Denison, the third son of John Denison, was born in London 3 May 1804 and educated at Sandbury and Eton. He was to have a very distinguished career, ending with a knighthood and the governorship of two dependencies. Denison graduated from the Royal Army Academy, Woolwich, in 1823, and was commissioned in 1826.

The 23-year-old Lieutenant Denison may well have been the cleverest and most knowledgeable officer By had. Under Colonel By's direction, Denison carried out a series of tests into the relative strengths of different types of timber at Bytown; his report on the subject ranks as one of the earliest scientific treatises written in Canada. On publishing the paper, the Institute of Civil Engineers voted Denison the Telford Silver Medal.

In 1831 Denison returned to England, taking up several instructorships at Woolwich and Chatham. He was in charge of the Woolwich dockyard from 1837 until 1846 when he was appointed lieutenant governor of Van Diemen's Land. His eight-year term was distinguished by the introduction of representative government and by progress in the fields of education and public works. In 1854 he was appointed governor of New South Wales, and finally, in 1861, of Madras. Whether due to advancing age or different circumstances, his tenure there was marked by less liberal policies. In March 1866 he retired from the governorship, and returned to England, where he died at East Sheen on 19 January 1871.²⁴

Lieutenant Edward Frome, RE

Commissioned in 1825, the Rideau was Lieutenant Frome's first assignment in a career that would span half a century. Frome was posted to the 15th Company Royal Sappers and Miners, Bytown.²⁵ We have little detail on Frome's Rideau service, but his clash with John MacTaggart will be recalled. His name does not appear among the permanent appointees in 1832, and presumably he returned to England at that time.

Thereafter he gained steady promotion, attaining the rank of general by the end of 1874. He again commanded a company of Royal Sappers and Miners at Port Adelaide, South Australia, from 1839-50, and became Inspector General of Fortifications in 1868.²⁶ Frome retired 1 October 1877 and died 12 February 1890 at Ewell, Surrey.

Lieutenant Henry Pooley, RE

Commissioned in 1816, Lieutenant Henry Pooley was one of By's most trustworthy officers. As early as September 1826, By noted Pooley as "an attentive zealous officer" and requested his posting to Bytown in place of Captain Bolton, who was laid up in Montreal.²⁷

One of Pooley's early assignments was the building of a bridge, "built wholly of round timber" over what was known as the gully. The unusual but sound nature of the design caused By to expostulate: "Well: Well! we must christen that thing Pooley's bridge."²⁸ And so it was known for a number of years.

Pooley accompanied By in his survey of the waterway in the summer of 1827, the result of which was By's drastically revised estimate of £474,000 for the project. Colonel By, foreseeing the opposition which this figure would arouse in England, dispatched Lieutenant Pooley as his personal emissary that autumn to explain the case to the Board of

Works. Pooley sailed from New York by mail packet on 8 November 1827, with a revised estimate of £474,899.3.2-3/4., a sum considered indispensably necessary to complete the project ²⁹ In writing to the Inspector General of Fortifications, By explained the complete confidence he reposed in Lieutenant Pooley, who "can give the fullest information and explain whatever I may in the hurry of business have omitted."³⁰ It therefore fell to this junior officer to convince the Board of Ordnance that this three-fold increase was unavoidable - even though it, eventually, was only half the final cost.

Lieutenant Pooley superintended the works at Smiths Falls. It will be recalled that it was Pooley who bore the brunt of the Rykert and Simpson imbroglio in 1831, in which he acted with firmness and restraint.

With the completion of the Rideau works Pooley returned to England. He retired in 1840, and died at Bath 6 November 1843, at what would seem to have been an early age.³¹

Captain James Conway Victor, RE

Captain Victor was one of By's senior officers of engineers on the Rideau, commanding, with Captain Savage, the 15th Company of Royal Sappers and Miners based at Bytown. Commissioned in 1810, Captain Victor saw active service in the Peninsula (1813-14) and was posted to the Rideau in 1827.

Captain Victor won the high commendation of Colonel By for his signal and unremitting services at the critical Hog's Back site during the winter of 1828-9. In no small measure the final success of this difficult project, the repair and completion of the 45-foot dam which had failed in April 1829, was attributed to his "assiduous perseverance."³²

Captain Victor returned to England on the completion of the Rideau works, and had a long military career, attaining

the rank of major-general by 1854. He died in Edinburgh ten years later on 4 February 1864.³³

Engineer Department

N.H. Baird

This conscientious and competent official replaced John MacTaggart as Clerk of Works in 1828, at the initial salary of only 7s.6d. per day until his predecessor (still on the establishment as Clerk of Works) had reached England.

Baird arrived at Bytown by steamer from Quebec on 12 July 1828 to take up his duties, and was confirmed as Clerk of Works with the full 14s. per day on 17 October 1828.³⁴ Baird proved an exacting overseer. In October 1828 he ordered the work at Old Sly's, under contract to Bell and Richardson, stopped on the grounds of inferior masonry. The contractors complied, and eventually the works at this location were completed up to the required standard.³⁵ One of Baird's early assignments was the carrying of a line of levels from Kingston to Brewer's Mills, an exacting task, in which datum points with the elevation above sea level were established at intervals along the line of the proposed waterway. Baird's levels checked with those established by Captain Briscoe and John Burrows to within 6 inches in 16 miles. Briscoe had feared that the new Clerk of Works would resent having his work checked, but Baird had had too much experience on surveys to be over-sensitive on such a point.³⁶

Baird was a martinet, judging from the caution he issued his clerks in Bytown before his departure to inspect the line in the spring of 1829. The clerks were to finish each day's assignment before leaving the office, regardless of the time of day - "the bell rings only for the workmen, not for them."³⁷ He could tolerate neither clock-watchers nor insolence; several entries in his field notes make

reference to the insubordination of a master-carpenter, whom he must not fail to report to Colonel By before "the serpent" could affect others.³⁸

Baird was stricken with the lake fever from August 1829 until the following spring, and was confined to his bed for many weeks at a stretch.³⁹ Dr. Tuthill, who tended him, recommended a change of air, but a strong sense of duty did not permit the conscientious Clerk of Works to leave the Rideau.

By the summer of 1830 Baird was looking ahead for a permanent appointment. Writing to Sir James Kempt on 6 August, Baird applied for the position of engineer in the event that the canal was taken over by civilian management on its completion. "There is no situation I would be prouder to fill than Engineer with a corresponding allowance, knowing every point of Construction from the Ottawa to Kingston."⁴⁰

By thought very highly of Baird's competence and thoroughness, assuring him that

should either of the provinces require a Civil Engineer to superintend the construction of Public Works, I shall be most happy to give my certificate of your zeal and ability....The Provinces would be much benefited by employing you in constructing bridges opening roads and improving water communications in various points.⁴¹

Later By recommended Baird for a land grant, but the Secretary of State could not comply since, by that date, free land was no longer granted in the Canadas.

With the completion of the works Baird was retained for a time on the orders of Captain Bolton, By's successor, to undertake a navigational survey of the Ottawa River. Although it had always been his understanding that his appointment was a permanent one, by August 1832 Baird

nonetheless faced the loss of his job. He retained his position as Clerk of Works with the Engineer Department for a few more years, but in November 1835 faced dismissal. He appealed for a retirement pension at two-thirds salary according to the provisions for permanent employees. The Board of Ordnance ruled that none of those engaged on the building of the Rideau Canal had ever been considered permanent appointments, and hence that he was not eligible for any pension.⁴² This ended the matter.

The summary termination of his Rideau appointment, however, did not end Baird's career. In April 1840 he was taken on the staff of the Chambly Canal in the lower province, an appointment he held for little more than a year. The bouts of fever to which he had been subject on the Rideau had undermined his health to the degree that he was unable properly to attend to his duties. Thereafter, throughout the 1840s, he was engaged by the Board of Works as an engineer, but by mid-century By's senior civilian assistant in the construction of the Rideau Canal faded from the scene.

John Burrows

John Burrows was born in Plymouth, Devon, on 1 May 1789, the son of Christopher Honey, JP, and Elizabeth Burrows. At some point Burrows dropped his father's name. He imbibed from childhood pronounced Methodist and Whig principles to which he adhered all his life.

Burrows qualified himself as a land surveyor in Plymouth. At this time he held a commission in a militia unit, the Prince of Wales' Regiment. In 1816, at the age of 27, he married his first wife, Anne Boden, who died about 1825.

Both Blodwen Davies and Robert Legget put Burrows's arrival in Canada in 1819, but H.T. Douglas, a local

historian, fixes the date two years earlier. He provides the additional information that Burrows, in company with his wife and brother Henry, arrived aboard the transport *Thomas & Mary* on 20 October 1817, and reached Perth in the upper province in December of the same year.⁴³ Davies infers that Burrows left England for reasons of conscience. In any case he settled in Nepean township in 1818, building a log cabin at what is now Wellington and Lyon streets.

Burrows began survey work on the Hull side of the river, and got his articles as a provincial land surveyor on 26 December 1820. In 1823 he sold his property to Nicholas Sparks. He must have regretted doing so within a very few years, when Bytown property values zoomed to unforeseen levels with the canal project. He became district land surveyor for Hull township.⁴⁴

It is hardly surprising that so well-qualified and experienced a man should have been one of By's early appointees as one of four overseers of works at 7s.6d. per day. Burrows's activity on By's staff is clearly evident. He took over the duties of Clerk of Works when John MacTaggart was ill, and in addition to his regular duties measuring and assessing contract work with the engineer officers, filled in as a draughtsman as well. In April 1830 By recommended that his pay be increased to 13s. per day, having found him "extremely useful on all occasions."⁴⁵ By renewed his recommendation in October, stating that on MacTaggart's dismissal for misconduct he would have appointed Burrows to the senior position but for his lack of experience. Burrows was certainly worthy of the increase, wrote By, the Clerk of Works and overseers of works being the only staff qualified to help the engineer officers in the measurement of works and the certifying of accounts. The application was nonetheless rejected.⁴⁶

A leading Methodist in rough-and-tumble Bytown, Burrows

had the first chapel built at his expense. When the chapel was burned down Burrows made his house available until another could be built. Burrows's fervor was commemorated by a bit of contemporary doggerel:

John Burrows too, with serious air Sang
hymns, and offered frequent prayers, And
taught a Sunday-school with might, To
spread religion's early light.⁴⁷

With the completion of the project in the spring of 1832, By had no hesitation in appointing Burrows to represent the government before a jury investigating flood claims brought by neighbouring landowners. His broad experience of the project from its beginnings on, assisting in the measurement of the various works, "copying all the plans," and helping with so many of the surveys, made him the ideal witness for the government.⁴⁸

In 1833 Burrows took a second wife, Maria, who bore him three children: William Alfred, Thomas and Annett. In writing to his prospective father-in-law in England to request Maria's hand in marriage, the 44-year-old suitor observed the formal conventions of the time.

Do not think me presumptuous in addressing
you without any shadow of permission or
reason, for while taking a glass of wine
with your daughter Maria to your health,
she said, how I wish my dear parents was
here or I could see them and take wine
with them.

Burrows goes on to observe that he had recovered from the loss of his first wife, and he believed that Providence had seen fit to unite him with Maria. He recommended the new country to her father both for its more healthful climate and the opportunities it offered; in it the poverty and class distinctions of England were unknown.⁴⁹ Whether Maria's parents came out to Canada or not is unknown, but the

couple were duly married, and a very happy union it proved to be.

This is reflected in the affectionate tone of the letters Burrows wrote to his wife when separated from her on business. For example, writing from Oliver's Ferry on 4 May 1834:

Do not think me a child or acting foolish
to write so often, my mind is in By Town
if my body is here. I feel constantly
anxious to know that you are well, to know
if you are happy. Thank our Heavenly
Father I am well, tho rather disfigured
with the black flies. I feel as not quite
awake from not being able to open my eyes
as wide as usual from the mosquito bites,
my forehead is also much bitten and many
bumps are left to vouch for my labours in
the bush....I believe I was not formed for
a wanderer from my own family. - Home is
emphatically home to me, there is no place
like home. I am bringing two more little
ones as an addition to our family.⁵⁰

John Burrows was an upright and very kindly man, and free from the narrowness and pharisiasm which sometimes marked the sectarians. Although he took a sociable glass of wine he was a very temperate drinker. Occasionally he expressed disapproval of the more extreme sects, as when, in a letter to Maria, he expressed his opinion of Egerton Ryerson's having made his Kingston pulpit available to the Irvingites.

The Burrows family prospered. Writing to her sister in England in February 1837, Maria mentioned that they owned 16 houses other than the one they lived in themselves. The rent from these brought in a tidy income in addition to Burrows's salary as clerk of works - for he had at last attained the position for which By had recommended him. The

Burrows raised a large family. According to Mrs. Burrows, their daughter studied piano, a son was following an undisclosed course of study in the Cobourg Academy, a daughter Eliza was in school at Hallowel, and two sons, William Alfred and Thomas were at home. The one adverse aspect of their otherwise happy home life was failing health. Although still in his middle years, John Burrows at 48 was afflicted with lumbago and some manner of intestinal infection, which kept him confined to the house much of the winter. Mrs. Burrows was president of the local temperance society although she herself was not a total abstainer. The letter gives the impression of an active and happy family life.⁵¹ Burrows himself had become a leading citizen of Bytown, being elected to the town council in 1847.

Burrows was not to reach advanced years. He died on 27 July 1848, aged 59, and was buried in Hull. In 1882 his remains were transferred to the Beechwood Cemetery in New Edinburgh. His descendants have taken an active role in the political and social life of Ottawa.

Thomas Burrowes

Thomas Burrowes was born 27 October 1796 in Worcester, England. In June 1818 he arrived in Kingston and in the following year married Grace Rodgers, who bore him three sons. In September 1822 the Burrowes family returned to England. He attracted the notice of Colonel Durnford, who recommended him as a reliable man to Colonel By for the Rideau service.

Burrowes returned to Canada, and was appointed overseer of works. He arrived in Hull on 23 September 1826 and in November sent to Montreal for his family. On 25 November 1826 a fourth son was born to the couple, the first white child born in "Rideau and Ottawa Canal District,"⁵² but the child lived only a year. As happened to so many men in the

last century, Burrowes lost his first wife; he subsequently married Margaret Morrison, who bore him a son, and no fewer than six daughters. The family settled at Kingston Mills.⁵³

During the winter of 1827-28 Thomas Burrowes surveyed the line of the canal from the Ottawa River to Black Rapids, and produced a detailed map or plan of the route at a scale of 600 feet to the inch.⁵⁴ He worked with John MacTaggart and John Burrows on a line of levels to determine the elevation of Dow's Swamp.⁵⁵ In common with so many of his contemporaries, Burrowes was stricken with the lake fever and was confined to his bed more or less continuously from mid-August to December 1829. Although almost completely disabled by the fever, he struggled from his bed occasionally to attend to his duty as best he might.⁵⁶

Burrowes had rather a short temper. In July 1828 he had words with the admittedly acerbic N.H. Baird over some aspect of Burrowes's work which the new Clerk of Works wanted checked. According to Baird's field notes (dated 24 July 1828) Burrowes had replied "in great rage" that he would not give any more explanation on the subject than he had already rendered in writing. Baird noted that he could not accept such insubordination, and that he would report Burrowes's conduct to Captain Bolton. Baird stated that he would resign rather than allow this defiance to pass unchallenged.⁵⁷ The outcome of this confrontation is unknown, but Burrowes later suffered suspension for insubordination to Captain Victor, although he was subsequently reinstated in his position.⁵⁸ His choleric disposition notwithstanding, Thomas Burrowes's work was of such a standard that he was confirmed in 1832 as overseer of works on the permanent staff. Colonel By commended him as being "thoroughly familiar with the line from Kingston to Jones Falls."⁵⁹

James Fitzgibbon

James Fitzgibbon, who came from a prominent Cork family, emigrated to Canada in 1820, and was engaged by Colonel By for the Rideau works as a master carpenter at 7s.6d. per day. Fitzgibbon's name appears on the establishment of the Engineer department for 1827; in the following year his pay went up to 12s.6d. per day.⁶⁰

Fitzgibbon was one of those unfortunate enough to be cited in Burgess's wild allegations. It will be recalled that the unstable and violent Burgess had boarded in Fitzgibbon's house after having been turned out of Formay's. In his attempt to vilify By and to get back at Fitzgibbon for having in turn ejected him, Burgess charged that Colonel By had shown favour in his appointment of the master carpenter. According to Burgess, By made the appointment because Fitzgibbon had married one of By's household servants. In testifying before the Court of Inquiry at Bytown, Colonel By cleared Fitzgibbon of any suspicion that he had gained his post through nepotism. By had found him "a very active intelligent young man, an excellent workman, highly trustworthy when employed under me in altering & repairing the Chateau at Quebec during the Administration of Sir James Craig."⁶¹ Fitzgibbon later secured a position on the permanent establishment in 1832 as master carpenter, although the John By scrap book compiled by E. Taylor (Bytown Museum) records that, on By's departure for England, Fitzgibbon was appointed paymaster for the Engineer Department. According to this source, Fitzgibbon rode the whole line of the canal, with two saddle bags filled with gold, but was never robbed or molested while on his rounds.⁶²

John MacTaggart

John MacTaggart was appointed the first Clerk of Works on the recommendation of John Rennie, a well-known civil

engineer and friend of Colonel By's. More than one associate testified to MacTaggart's abilities, energy and initiative. In a letter of commendation on MacTaggart's behalf, written in 1827, Colonel By wrote: "I have found him remarkably well grounded in his profession and a man possessing much natural genius with great practical knowledge."⁶³ Within two years of his appointment, however, MacTaggart was dismissed. His Achilles' heel was undoubtedly intemperance. Apparently MacTaggart's predisposition was known at the time of his appointment, for the Inspector General of Fortifications, General Gothar [Gother] Mann, sounded a cautionary note:

If, however, Mr MacTaggart after a fair trial should turn out to be unworthy, then I conceive it will be proper for the Lt Colonel to dismiss him without delay, but giving him a passage to return to England, if he so desires it."⁶⁴

MacTaggart had gained recognition in his profession in Scotland (his father had an estate in Kirkcudbright, in the southwestern [part of Scotland]). Despite Mann's reservations about the appointment, MacTaggart, accompanied by his servant, was cleared to board the transport *Lord Melville* at Deptford on 13 May 1826 for passage to Quebec.⁶⁵ On 4 August MacTaggart stepped ashore at Quebec, and within the fortnight had reported to Colonel By in Montreal;⁶⁶ MacTaggart was about 26 years old as he confidently prepared for the major assignment of his career.

MacTaggart was laid up in Montreal with an undisclosed illness before taking up his duties as By's principal civilian aide in the spring of 1827. As such, he was responsible for preliminary surveys of the whole line of the canal, the overall direction of the Engineer Department staff in Bytown, and the planning and layout of field operations. His first assignment on arrival in Bytown was

the design and construction of the bridge across the Ottawa at the Chaudiere Falls joining the upper and lower provinces, and hence named the Union Bridge, which was completed in March 1828.⁶⁷ This structure was considered a considerable engineering achievement.

No small part of MacTaggart's duties entailed arduous and (in late summer) exceedingly unhealthy canoe trips from one end of the waterway to the other, helping By in the selection of work sites and charting the future or projected line of the canal. Provision had to be made for accommodation, stores of food and clothing, a hospital with the requisite medical supplies, and sundry items for the maintenance of a large work force in the wilderness. The job entailed responsibility second only to that of Colonel By and his two senior engineer officers.

MacTaggart possessed a fertile and inventive imagination and plenty of initiative, although his ideas did not always tally with those of Colonel By, whose judgement proved the sounder. For example, MacTaggart suggested carrying the canal across Dow's Swamp by means of a wooden aquaduct, using the trunks of the thickly clustered cedars cut off at the appropriate height as pylons. In fact, MacTaggart foresaw that this scheme might "incur a little ridicule", and indeed it was rejected by Colonel By as fanciful and impractical.⁶⁸ Likewise MacTaggart suggested locating a dam some distance downstream of the Hog's Back, whereas By recognized Hog's Back as the ideal location, despite the formidable nature of the problems entailed. The Hog's Back proved the most challenging of all the works, but By's judgment was borne out in the end.

These instances notwithstanding, the clerk of work's concepts were generally sound. On the subject of contracting, MacTaggart was of the same mind as his superior:

No contractor shall be allowed to contract for any work out of his line and profession. Thus to a mason shall not be given a job of excavation, any more than to an excavator a piece of building or mason-work....Now any one of these branches is quite enough for any contractor to perform properly, and will absorb his utmost attention.⁶⁹

MacTaggart foresaw the difficulties inherent in sub-contracting, but he recognized the necessity of tolerating the system under the circumstances. As mentioned earlier, By dealt only with principal contractors, invariably referring the grievances of subcontractors to their principals. All work projects were designed to proceed simultaneously and with all speed along the line of the canal.

Whatever his faults, MacTaggart's work seems to have been well-done. His 42-page report (dated 5 September 1827) on the considerable portion of the line from Black Rapids to Kingston, opens:

Having surveyed examined and explored with all my industry, attention and ability the nature, character & connections of that stupendous undertaking the Rideau Canal - I fail not to lay before you my ideas of the same and to offer you whatever information I have gathered on this important subject and to do this in a systematic brief manner I divide the work into its natural sections & treat each as they occur in regular order....Having brought the canal into that beautiful bay of Lake Ontario - Kingston Bay - our labors came to a close, and it remains with us to thank Providence for the kindness shown us in one of as rugged &

wild surveys, as man's enterprise hath yet
dated.⁷⁰

In the light of his achievement at the outset of the project, it is a pity that MacTaggart was not to see the work through, but was instead to suffer dismissal and recall, very much under a cloud. It is possible that the hardships and discomforts of the survey induced the over-indulgence in drink which was his undoing. John Borrows recorded as early as July 1827 that MacTaggart was suffering considerable discomfort because of some manner of rash, which he described as being "much like scalded bladders."⁷¹ In August MacTaggart had his first clash with the military. Lieutenant Edward Frome was in command of the survey party on which MacTaggart was engaged at the time. The volatile Scot had a liking for the French-Canadians, whose spirit he admired, particularly for the canoe men, whose folk-songs entranced him. One evening MacTaggart encouraged the boat men to continue their singing round the camp fire long after the rest of the party had bedded down for the night. MacTaggart defied Lieutenant Frome's order that the singing cease, going so far indeed as to urge them on, with cries of "chantez, chantez." Frome then reminded MacTaggart that, civilian or not, on this expedition he was subject to the articles of war, to which MacTaggart replied with a defiant oath. The next morning MacTaggart's tent was not struck with the rest, and his party followed later, several of them drunk.⁷²

Frome could scarcely tolerate such contumacy, and reported the incident to Colonel By, adding that this was not the first occasion on which he had had trouble with MacTaggart. The latter apologized to Frome in writing; he noted that he had not intended to offer insult and pleaded the trying circumstances of the time. On 3 September Colonel By reprimanded MacTaggart for his conduct, stating

that officers were not required to take impertinence from him. MacTaggart's name accordingly was struck off "the committee in consequence of his improper conduct."⁷³ In this way By upheld the authority of his officers of Engineers.

As often happens with tipplers, the first offence was not the last, and, on the second occasion, MacTaggart gave offence to a person of considerably more consequence than Lieutenant Frome. In June 1828 Sir James Kempt, in his capacity as president of the committee appointed to investigate By's mounting expenditure, toured the line of the canal from Bytown to Kingston. Unfortunately for the Clerk of Works, he forgot himself in Kempt's presence. Kempt recommended MacTaggart's dismissal on the basis of "the disgraceful state he was in when on duty at Black Rapids, accompanying the committee of which His Excellency was President."⁷⁴ This ended MacTaggart's career on the Rideau.

In replying to Burgess's charges that MacTaggart had borne the lion's share of laying out the works along the Rideau, Colonel By credited Lieutenant Henry Pooley with a more active role than MacTaggart's. According to By, MacTaggart's illness in Montreal, believed at the time to have been due to a fall caused by some sort of seizure or fit, was actually caused by drunkenness. Again in May 1827 MacTaggart had at first to be left behind in Hull with the ague when By and Pooley set out to survey the waterway. By also faulted MacTaggart for sundry false and exaggerated accounts in his (MacTaggart's) *Three Years in Canada*.⁷⁵ Although obviously MacTaggart fell short of By's standards, there is no evidence in his *Three Years in Canada* that the Clerk of Works resented his superior. In the few passages in which Colonel By is mentioned, he is referred to in commendatory terms. The Catholic bishop of Upper Canada,

Alexander Macdonell, might commend MacTaggart to the Colonial Office "as perhaps the ablest practical engineer & geologist that has ever been in these provinces,"⁷⁶ but Colonel By was in a better position to assess his actual performance.

MacTaggart must have been popular, for a score of wellwishers, including Bishop Macdonell, gathered at Firth's Inn, Nepean Point, to give him a convivial send-off. The chairman proclaimed that MacTaggart's signal services "would for years endear his name to the inhabitants of this colony." Songs and toasts followed one another, as the glasses were filled and refilled, the festivities continuing "until a late hour in the morning."⁷⁷

On his return to England the discharged Clerk of Works had little time to complete his account of his career in Canada. He died on 8 January 1830, in his 31st year, at his father's country house, Torrs, Kircudbright.

Contractors

James Clowes

James Clowes (not to be confused with Samuel Clowes) took the contract at Brewer's Lower Mill, which called for a 10-foot dam and lock. [James Clowes was the contractor at Clowes Quarry, Samuel Clowes was the contractor at Brewer's Lower Mill - kww] His workmanship was not satisfactory, and By terminated his contract [for work at Clowes Quarry] on 13 January 1827.⁷⁸
[13 January 1828 - kww]

Robert Drummond

Robert Drummond, a Scottish-born (1791) immigrant, was one of the four principal contractors on the Rideau Canal, and a recipient of a silver commemorative cup from Colonel By.

One of his earlier jobs was a contract for the construction of a drawbridge at Isle-aux-Noix in the summer of 1824.⁷⁹ His principal work on the Rideau was located at

Kingston Mills, and included four locks of a 9-foot lift each and an 18-foot dam, for which he employed a work force of 20 stonecutters. Extensive swamps had to be cleared and the necessary embankments constructed.⁸⁰ The Kingston Mills works were considered the third most extensive on the waterway; their total cost was estimated at £60,000.⁸¹ The location was unhealthy and many of the workmen (500, according to one estimate), died of the fever.

Six months after the work was begun, Drummond moved his family from Bytown to Kingston. One of his children recalled the family's move:

My father and family lived six months in Bytown, though very young then I remember our departure for Kingston. We had a long line of 5 sleighs, my father and mother in the first, the children in the next with servants then the furniture in the remaining sleighs - it was the month of January 1828 - we made short stages, at night the howling of wolves I will never forget. The family lived at Kingston but my father had a residence at Kingston Mills - he always came home on Saturday night, spent Sunday with us and at six in the morning of Monday he was in the saddle on his way to the works.⁸²

In July 1829 a traveller commented on the progress of the works and the changes effected at Kingston Mills; at that time Drummond expected to complete his work within 18 months.⁸³ The following winter another observer paid tribute to Drummond's skill and persistence in overcoming difficulties that would have defeated one "less endowed with a due share of stern perseverance."⁸⁴

In February 1831 Robert Drummond had a narrow brush with death while at table in his Kingston Mills house. At

noon a blasting charge let off in the excavation for the fourth lock sent a projectile weighing over six hundredweight (about 700 pounds or more) through the wall of his house, a distance of more than 200 yards. The missile struck only six feet from where the company was seated at table. It is not known whether the diners finished their meal. In any case this was not the first incident of its kind, for a few months previously a stone weighing near 20 pounds had gone through the roof.⁸⁵

Robert Drummond also contracted for the works at Brewer's Mills and at Davis Mills. In recognition of the high quality of his workmanship, Drummond was one of the four contractors presented with a silver cup, handcrafted in England, and inscribed:

The Gift

of Lieutenant-Colonel By (John) [Lt Colonel John By] commanding Royal Engineer of the Rideau Canal, Upper Canada to Robert Drummond [Mr. Drummond] The contractor for four locks Dam and waste weir at Kingston Mills One lock dam and waste weir at Brewer's Mills and one lock dam and waste weir at Davis Mills As an acknowledgment of the zeal employed by him in the performance of his contracts and a testament of the works above mentioned having been executed to Lt Colonel John By's complete satisfaction Presented on the opening of the Rideau Canal the 21st August 1831⁸⁶

Robert Drummond's son vividly recalled By's presentation of the cup in Drummond's Kingston house.

Robert Drummond was also a shipbuilder of parts, operating the first steamer, the *Pumper*, on the Rideau; the ship was later renamed the *Rideau* for the ceremonial opening of the canal. Drummond had the steamer fitted up for the accommodation of John By and his party, who were the little craft's first passengers by special invitation. "I remember," continued Drummond's son, "being present and seeing the champagne lunch on board given in honor of Col By. He led me by the hand, my mother leaning on his other arm to the boat. We accompanied the party as far as Kingston Mills and we returned by carriage."⁸⁷

Drummond built the first steamer to enter regular service on the Rideau waterway, the *John By*. The vessel was launched at Kingston in December 1831, to the cheers of an exuberant crowd and the lively strains of the band of the 66th Regiment of Foot.⁸⁸ The *John By*, 200 tons register, was 110 feet long and 26 feet in the beam, and was powered by a 75 horsepower engine. The ladies' cabin measured 22 by 24 feet, and the gentlemen's 41 by 20 feet. With a promenade deck the length of the vessel, the *John By* must have been considered commodious by the standards of the time.⁸⁹ The steamer operated not only on the Rideau but also on the Ottawa River as far east as Grenville.

[NOTE: the *John By* never operated on the Rideau - quoting from Edward Bush's *Commercial Navigation on the Rideau Canal*: "Unfortunately she proved somewhat of an embarrassment to Drummond, for despite her name she could not be operated on the Rideau Canal since she drew too much water, although designed with a draught of only 3.5 feet. The *John By* was confined to the St. Lawrence" - kww]

The enterprising contractor did not long survive his achievements at Kingston and Brewer's Mills. On 20 August 1834, at the comparatively early age of 43, he fell victim to cholera. Drummond was stricken about midnight and was dead by noon of the following day. The *Kingston Whig* paid tribute to the able contractor, who left a wife and young family. "His remains were followed to the grave by every respectable person in the town,"⁹⁰ the cortege being joined on its way to the graveyard by no less a personage than Bishop Macdonell in full vestments - no small tribute in that sectarian age.

Walter Welsh Fenlon

Walter Welsh Fenlon was one of the unsuccessful contractors on the Rideau. Although described as a civil engineer, the term was sometimes casually applied in those times. Fenlon was an American who hailed from Montezuma, New York.⁹¹

Fenlon first took out an excavation contract for the work from the head of the flight of eight locks in Bytown to the north end of Dow's Swamp. He was also to excavate and form the canal from that point to the Hog's Back (a distance of 1,200 feet) and to construct three locks of 10 feet lift each. Fenlon met his Waterloo in taking on the construction of the very difficult Hog's Back Dam, a structure designed to be 45 feet high and fully 240 feet in length.⁹² This project proved beyond Fenlon's capacity, and in June 1828 By relieved him of his contract at his own request. Captain Victor and Lieutenant Denison carefully measured Fenlon's work and paid him off. By testified that much of his work had subsequently to be torn down and rebuilt.

At the time this settlement was made Fenlon expressed himself as quite content with his treatment. Nevertheless he had second thoughts, and, on his arrival in Quebec, brought an action for £25,000 against the crown.⁹³ He lost the action "upon the broad principles of law and equity"⁹⁴ in the words of Joseph W. Hagerman, Solicitor General for the upper province, who was retained by the crown. In testimony before the Select Committee examining the conduct of the Rideau project, Lieutenant Colonel Edward Fanshawe, RE, attributed the collapse of the Hog's Back Dam to Fenlon's faulty workmanship.⁹⁵ He must be accounted a failure on the Rideau, whatever he may have accomplished elsewhere.

Haggart

Very little is known - even to his Christian name - of this

contractor. [note: full name was John Haggart, father of John G. Haggart, MP for Lanark South - kww] Haggart had the contract at Chaffey's Mills, which called for a 12-1/2-foot lock of freestone together with a small dam. The stone was quarried 7 miles from the site, approached by a rough road through thick tamarack and hemlock bush.

Haggart seems to have had a pleasant, affable personality. A traveller described him as a "jolly old bachelor, well known for his convivial hospitality to all who travel by this route;" and again as "an experienced practical mason, long acquainted with the erection of public works and the style in which the thing is done."⁹⁷

William Hartwell

William Hartwell was another contractor who got beyond his depth through underestimating the scope of the job.

Hartwell began excavation work in the region known as The Isthmus, cutting a channel between Clear and Indian lakes, and between Mud (since renamed Newboro) and Rideau (now Upper Rideau) lakes in July 1827.⁹⁸ Within six months Colonel By had lost confidence in Hartwell. Although he had cleared the land and got the excavation under way. By doubted that he had "sufficient energy to carry on so extensive a Work" and accordingly warned Hartwell that if he had not improved at By's next visit, he would lose his contract.⁹⁹ By October 1828 Hartwell had surrendered his contract, having expended £2,000 more on the work than he had made from it.

Hartwell had his explanations: he had encountered more rock than he had anticipated, the summer of 1828 had been a very sick season (which was quite true), water had been a constant handicap, and By had only allowed him 6d. per cubic yard rather than the 1s. to which he considered himself entitled by his contract.¹⁰⁰ It was an old tale on excavation work, with many of the men underbidding in order

to secure their contracts and then being unable to cope with the work.

Colonel By had another version: Hartwell would have been paid a full 1s. per cubic yard had he excavated to the proper depth; he had not done so, although fully aware of this requirement from the start. Therefore, he was paid 6d. per yard. As early as July 1828 By had advised Hartwell to give up his contract, since he was manifestly making little progress and losing money; at that time there was little fever, hence Hartwell could not plead that as an excuse for his lack of performance. If Hartwell had reached the stage of erecting coffer dams to keep out the water, he would then have been paid a higher rate for excavation, but the unfortunate contractor had not progressed that far.¹⁰¹ Not surprisingly the Commissary General ruled that Hartwell had no further claim on the crown beyond what he had received from By in the first instance.¹⁰²

Thomas McKay

Thomas McKay, partner of John Redpath, was one of the four leading contractors on the Rideau Canal and the founder of New Edinburgh.

Thomas McKay was born in Perth (Scotland) in 1792. In 1813 he married Ann Crichton in Perth, who bore him no fewer than 16 children. By an unkind twist of fate, his sons all died young and unmarried.¹⁰³ In 1817 the young couple emigrated, first settling in Montreal (29 St. Urbain Street). There he formed a partnership with a fellow Scot, John Redpath, and before leaving Montreal for Bytown (then known as Nepean) in 1826, had become prosperous through sundry construction works, including the fortifications at Fort Lennox and at Ile-aux-Noix, and the Lachine Canal (1821-25). During these years (or perhaps on the passage over) McKay had formed a friendship with A.J. Christie, whom

he accompanied to Bytown. No doubt he scented opportunity in the great project, which had become common knowledge. The following summer, on 5 July 1827, Mrs. McKay gave birth to the first white child born in Bytown.¹⁰⁴

McKay secured the contract for building the impressive flight of eight locks rising 81 feet in all from the level of the Ottawa River to the canal basin in Bytown. The contract was drawn up on the assumption that stone would have to be fetched from a quarry across the river in Hull. McKay, however, persuaded Colonel By (not without difficulty) that suitable stone was to be had on the site. By finally concurred in this arrangement, at no little profit to the contractor, of course. The George Pringle Drummond scrap-book in the Bytown Museum contains an item stating that the stone quarried in Entrance Valley was of slightly inferior quality, and that some of the facing stone had later to be replaced.¹⁰⁵ Nonetheless the work was well done - there was never any complaint over the quality of McKay's work. This lucrative contract, so local legend runs, was the foundation of the McKay fortune; the partners "had to cart home, in Mexican silver dollars, etc., their part of the profits of the contract."¹⁰⁶ With some of his profits from this contract, McKay bought 1,200 acres in Gloucester Township.

Colonel By celebrated the completion of McKay's contract in the autumn of 1830 with a banquet and ball in Bytown, at which, according to Robert Legget, "an ox, properly prepared and roasted whole, was fixed in a standing posture," and so served to the exuberant company.¹⁰⁷

In addition to the flight of eight locks, McKay had the contract for the construction of the Union Bridge spanning the Ottawa at the falls of the Chaudière. Five of the spans measured 60 feet, two 70 feet, and the centre span 200 feet over a turbulent cauldron known as the Big Kettle 'where

sounding line hath not yet found a bottom at 300 feet deep."¹⁰⁸ A good Presbyterian, McKay put his masons to work on the building of the first St. Andrew's Church during a lull in the construction work on the locks. According to an article by F.J. Audet published in 1932, the little stone church built in 1828, was heated by

box stoves and long stretches of stove pipes. The pews were high-backed and closed in. The pulpit was elevated and the precentor, with his tuning fork, was visible from all parts of the church.¹⁰⁹

McKay's integrity and the quality of his workmanship were respected by all who knew him. According to one worker on the Rideau:

Our master mason is M'Kay, from Montreal, he who built the locks of the Lachine Canal, from the plans of poor Burnett, the engineer. Mac is a good practical mason, and scorns to slim any work; this is to my liking, as I cannot suffer sloping and shuffling on any account ¹¹⁰

As a tribute to his skill and craftsmanship, Thomas McKay, in company with his partner John Redmond and Robert Drummond, was honoured by Colonel By with the presentation of engraved silver cups.

The last quarter century of McKay's life after the completion of the Rideau Canal was an active and productive period. He first secured a large tract of land on the east bank of the Rideau River extending to the falls at the confluence of the Rideau and Ottawa. Here he built a large flour mill, followed by a textile factory, whose products won a prize at the London Exhibition of 1850. In 1837 he added a distillery to the thriving little community of New Edinburgh.¹¹¹ Along with his son-in-law, McKay was one of the principal promoters of the Prescott and Bytown Railway,

completed in 1854.

Probably one of his most signal contributions to the future capital was the fine stone mansion, completed in 1838, on 65 acres of woodland, known at the time as "McKay's Bush." Originally a 75 foot by 47 foot, 11-room house, built of limestone, this property was leased to the government in 1865 by the McKay estate, and was purchased outright three years later as a residence for the governor general; thereafter it was known as Rideau Hall.¹¹² McKay's Bush has long since become the exclusive village of Rockcliffe.

In addition to laying out the lots for the village of New Edinburgh, McKay built the first courthouse and gaol on Nicholas Street in 1842; these buildings were subsequently destroyed by fire. Through all these activities McKay found time for public life; he served on Bytown's first municipal council, and sat for Russell in the Upper Canada House of Assembly (1834-41) and in the Legislative Council (1841-55). McKay supported Nicholas Sparks's petition for the restoration of his property, which had been expropriated by Colonel By; he opposed the Rebellion Losses Bill, and worked for the improvement of roads to outlying settlements and the incorporation of the Bank of Montreal¹¹³

About the year 1846 John McKinnon married one of the McKay daughters, and father and son-in-law formed a partnership, McKay and McKinnon. Their first project was the building of a gabled stone mansion perched on a cliff overlooking the Ottawa. Earnescliffe was McKay's wedding gift to his daughter. This handsome residence later became the home of Sir John A. MacDonald and subsequently (1930) of the British high commissioner.¹¹⁴

Thomas McKay died in 1855, in his 64th year, of stomach cancer. Andrew Wilson paid him a generous tribute some twenty years later:

He was a straightforward, upright honourable man; he was a plain, humble man, quite accessible even to the humblest, nevertheless he had a dignified bearing, and knew his place as a gentleman. He was an Elder in the Scotch Church, and on a Sabbath eve would be heard the songs of melody floating on the breeze from his dwelling, Rideau Hall.¹¹⁵

Few pioneers contributed more to the future capital than Thomas McKay.

McKay was survived by his wife, who died at the advanced age of 85 in 1879. McKay's direct line died out shortly after his own death; two of his sons drowned near New Edinburgh, one died in India on army service, and one of consumption while attending Queen's University.

John Pennyfeather

Little is known of John Pennyfeather (Pennefeather, Pennyfather) who had the excavation contract in Entrance Valley for the first eight locks. Pennyfeather's deadline originally was 1 August 1827, but numerous underground springs and cave-ins slowed the work,¹¹⁶ which was not completed until the following winter.

Pennyfeather, with Daniel O'Connor, was a responsible leader of the Irish community in Bytown at a time when such men were needed. Pennyfeather was active in a group known as the Society of the Friends of Ireland, which sought to alleviate the distress and grievances in Ireland. There is record of Pennyfeather chairing a meeting of this society at the Mansion House Hotel, Bytown, on 25 March 1829. The meeting drew up an address to the people of Upper Canada on behalf of the people of Ireland. At a second meeting, at which subscriptions were taken up for the cause, Pennyfeather contributed £1.5.0.¹¹⁷ With the redress of

some of the more onerous Irish grievances about this time, the Society was short-lived. Pennyfeather, with Daniel O'Connor, served on a committee charged with the construction of the first Catholic church in Bytown. The influence of such men as O'Connor and Pennyfeather declined during the riotous period following completion of the canal, when the roughest elements among the poorer Irish came to the fore.¹¹⁸

John Redpath

John Redpath was born in Earlston, Berwickshire, in 1796. He emigrated to Canada in 1816 and settled in Montreal. A stone-mason by trade he found plenty of work in early 19th-century Montreal.

He formed an early friendship with Thomas McKay, with whom he formed a partnership on the construction of the Lachine Canal, which was completed in 1824. The following year Redpath secured a contract for the masonry work on Notre Dame Church in Place d'Armes, the earliest, and generally considered the finest, example of gothic architecture on the continent. He also had a hand in construction of the early buildings for McGill University.¹¹⁹

With the advertisement for tenders for the construction of the Rideau Canal late in 1826, Redpath and McKay formed a limited liability association with two other contractors, Thomas Phillips and Andrew White; finances were pooled and profits shared on an equal basis. The association was dissolved only with the completion of the works on 27 March 1831¹²⁰

Redpath took sole responsibility for the formidable project at Jones Falls, leaving the Bytown work entirely to his partner McKay. Apart from the Hog's Back, the Jones Falls works posed the most challenging assignment for designers and contractors alike. At Jones Falls, foaming

rapids descended through a vertical drop of 61 feet. The contract called for an arched key-work dam and for no fewer than six locks with a lift of 10 feet 2 inches each. Two excellent quarries within easy hauling distance provided the sandstone and freestone used in the work. Accommodations had to be built in this wilderness, for an estimated labour force of 200 men, besides smiths and carpenters' workshops, and sick quarters, Redpath employed 40 stone-cutters at Jones Falls.¹²¹

The 62-foot dam, some 350 feet long, was described by an enthusiastic contemporary who passed that way shortly after the job was finished as "without exception the most stupendous and perfect of its kind in the world."¹²² The total cost of the work, he recorded, was something in the order of £100,000 sterling. The design was Colonel By's and the result more than justified his concept.

Although Jones Falls was one of the most picturesque locations on the line, it was also extremely unhealthy, as the sick returns of the time amply attest. Redpath himself fell victim to the ague on no fewer than five occasions, and the effects of his illness remained with him the rest of his life. John Redpath indeed merited one of Colonel By's commemorative cups at the end of it all. Certainly the scale of his achievement at Jones Falls was considerable, and compares with that at the Hog's Back.¹²³

With the completion of the Rideau works, Redpath returned to Montreal, where he led a busy enterprising life and moved rapidly to the fore in the commercial and public life of the city. He is best known for his founding of Canada's first sugar refinery in 1854 on the banks of the Lachine Canal; this plant is still in operation today, but has been known as the Canada Sugar Refining Company since 1930 (following a merger in that year with the Dominion Sugar Company of Wallaceburg, Ontario).¹²⁴

Richardson

Little is known of this man, even to his Christian name [William - kww]. Described by the *Brockville Recorder* of 11 May 1830 as a "plain blunt Englishman," he was apparently one of a host of sub-contractors, whose principal project at Old Snie (or Old Slys), called for a 35-foot dam and two locks of 8-foot lift each. He obtained his sandstone from a quarry 11 miles distant.¹²⁸ E.C. Frome cites Richardson as having had a hand in the works at Edmonds, Smiths Falls and the Narrows.

James Simpson

A young Irish immigrant from Londonderry who acquired his initial experience in canal work in New York, James Simpson, in partnership with Rykert, had the contract at Smiths Falls, comprising a 23-foot dam and three locks with a lift of 11 feet 2 inches each. The deadline for the job was 1 June 1829.¹²⁹

By the spring of 1830, reports of inferior workmanship appeared in the newspapers.¹³⁰ (The details of the dispute between Simpson and By are set out above.) Colonel By relieved Simpson of his contract, which was taken over by one Mr. Richardson. Simpson brought a suit for damages against the crown but did not obtain a judgment.

Thomas Phillips and Andrew White

Thomas Phillips held the contract for the works at Black Rapids and at Long Island. The Black Rapids project involved a 10-foot dam and a lock with a 10-foot lift. In order to bypass the Long Island rapids White had to put up a 27-foot dam, and three locks of 9-foot lift each.¹³¹ The first passage of the Black Rapids lock took place in festive style on 25 September 1830. The party proceeded on horseback from Bytown to Black Rapids, and from there by canoe through the lock, and on to Phillips's house for a

celebration, returning to Bytown in the evening. This passage was the first test of the lock operation on the canal.¹³²

Colonel By thought very highly of the work of Thomas Phillips, though he noted that Phillips was a man of a testy disposition. In a letter to Sir James Kempt, By observed that Phillips's work "is some of the best on the whole line of the Rideau Canal, and he being perfect master of my mode of constructing locks & dams, could carry on the work with very little superintendence."¹³³ McKay and Redpath agreed that Phillips was not of an easy disposition. When his services were requested by the Royal Staff Corps for work on the Grenville Canal, Phillips was no doubt wise to decline; he observed that the Royal Staff Corps "had not been accustomed to conduct works on a large scale, and that he felt confident he should be interfered with more than he would like. "¹³⁴

With the completion of the Rideau works, Phillips and White returned to Montreal. Phillips invested in real estate, donating to the city the square named in his honour. White purchased property near the Chats, and in 1832 was reported building a steamer to operate between that point and Bytown.

A.C. Stevens

Stevens contracted for works at Nicholson's Rapids, Clowes and Merrickville (also known as Merrick's Mills and, at first, as Colborne). With three locks under construction in the spring of 1829, the latter community was reported to be flourishing. Where a few months previously there had been a few straggling huts, the village boasted several general stores, "three or four respectable taverns," and over 50 houses. In the words of the *Brockville Gazette*, "Mr Stephens [sic] and his coadjutors who have the contract for

that part of the Canal, are conducting the work with such ability as has not been surpassed in any part of America."¹³⁵ Such was the expansion in the community and its environs under the stimulus of canal construction, that in January 1829 Colonel By supported Stephens's request for duty-free importation of flour and grain from the United States. His immediate need was for 350 to 400 barrels of flour and 1,000 to 1,200 bushels of grain. The region did not grow nearly enough grain to meet the needs of the expanding population.¹³⁶

Stevens must have done as well from this contract as McKay from his, for again local legend, probably apocryphally, tells of his hauling away his profits in gold coins in a cart hauled by a yoke of oxen.¹³⁷

Philemon Wright and Sons

The founder of Hull is too well known to require elaborate treatment here. Born in Woburn, Massachusetts on 3 September 1760, he first came up the Ottawa with a party of 25 men in 1800 and founded the little community of Wrightsville.

According to John MacTaggart (who was inclined to exaggerate) Wright was the earliest advocate of the Rideau Canal in the district.¹³⁸ The Wrights took the contract for an 8-foot dam and lock with an 11-foot lift at Burritt's Rapids.¹³⁹ They also contracted for the construction of a massive mound of earth across Dow's Great Swamp.¹⁴⁰ through which the canal had to pass. This contract, under the direction of Wright's son Tiberius, caused them trouble. It transpired that the costs for this work were greater than anticipated, but Colonel By insisted on holding them to the terms of their contract.¹⁴¹ Not surprisingly the Wrights found themselves out by £2,739,¹⁴² for which they were never compensated.

On 19 December 1828, N.H. Baird, the Clerk of Works,

informed them that they had reached the expiry date of their contract for the Dow's Swamp job, and that they would not be paid for any more work.¹⁴³ The Wrights replied that they had carried on the work a little beyond 16 December to keep their men in employment, but that they were content to leave their claim for payment for excavation work after that date to By's good judgment.¹⁴⁴

The matter did not, however, rest there. On 20 September 1832 the Wrights petitioned the governor for payment of £2,739.10.0 allegedly owing them for work at Dow's Swamp and Burritt's Rapids. Their claim was disallowed by the Commissary General's ruling that since Colonel By had already left Canada, his decision in all fairness should not be overruled.¹⁴⁵

Miscellanea

Reverend A. Ansley, chaplain

The Reverend A. Ansley was appointed chaplain to the forces at Bytown from 25 October 1828 with a stipend of 15s. for each service conducted. At the outset Colonel By lacked the authority to pay this allowance, and indeed it was not until 4 October 1830 that the arrangement was confirmed. On the other hand, stipends for marriages and baptisms were not a public charge, but payable by arrangement by the parties concerned. In the case of funerals, where the sale of the deceased's effects proved insufficient to meet final expenses, the captain of his company made up the difference. Payment for services conducted were made by the military secretary by order of the commander of the forces.¹⁴⁶

Alexander James Christie, "physician"

Born on 14 October 1787 in the parish of Fyvie, Aberdeen, Christie studied mathematics at Marischal College, Aberdeen.

No evidence has been found (according to C.C.J. Bond) that Christie ever studied medicine, but in 1814 he was practicing medicine in Taine, Ross-shire.

In 1817 Christie came out to Canada, settling in St. John's, Lower Canada, where a friend had secured for him a medical practice. Christie's license "to practice physic in Lower Canada" was dated 22 July 1814. In 1818 Christie was in Montreal, editing the *Montreal Herald* in partnership with George Gray. The partnership soon foundered in litigation, with Gray securing a court order against Christie's goods and chattels. In May 1821 Christie was gaoled. On his release he settled for a time in March township, Carleton County, and then returned to Montreal to edit the *Montreal Gazette*.

In 1827 he came back to Bytown, attracted by the activity of the canal works, and secured an appointment as "assistant to the medical staff corps." In the words of John MacTaggart, the Clerk of Works, Christie was "to bleed away and blister."

A harsh critic observed of Christie that he was "unfit for any public office, he is continually at the bottle." Nonetheless during the cholera epidemic of 1832 Christie acted vigorously and effectively, securing compulsory medical examination of all immigrants. Had he had his way he would have had Bytown entirely isolated, but in this he failed.¹⁴⁷

Christie is perhaps best known for his founding of the *Bytown Gazette*, which he owned and edited until his death. He brought out the first issue on 9 June 1836. A few years after his death the paper passed into other hands, and became the *Ottawa Citizen*. Christie campaigned for the union of the upper and lower provinces, with Bytown as the capital. He was also the author of *The Emigrant's Assistant*, published in Montreal in 1821.

Alexander Christie died in Bytown on 13 November 1843, aged 56.

Thomas Jenkins, tailor

Thomas Jenkins was the regimental tailor at Bytown during canal construction; later he was appointed lockmaster at Nicholson's Locks.¹⁴⁸

Dr. John Edward Rankin, physician and surgeon

An army surgeon. Dr. Rankin took his degree in medicine at St. Andrews, with post-graduate work at Edinburgh. In 1829 he was licensed by the Upper Canada Medical Board and set up practice in Bytown. He served on the Rideau Canal under Dr. Tuthill, the senior surgeon.

Rankin later served with the British Army in the Crimea, after which he returned to Canada and settled in Picton, Canada West. He died in 1878.¹⁴⁹

Dr. M.H. Tuthill, physician and surgeon

Little is known of Dr. M.H. Tuthill, Ordnance surgeon and chief medical officer on the Rideau project. He joined By's staff in 1826. His skill and selfless devotion along the line of the canal, particularly during the lake fever epidemics, and his probable saving of By's life during one of his bouts of fever, have been detailed above. Tuthill was in charge of the military hospital at Bytown until 1832, when he moved to Grenville County.¹⁵⁰

Appendix A.**Engineer Department; Suspensions and Dismissals¹**

<u>Name</u>	<u>Circumstance</u>
John MacTaggart	Dismissed for intemperance on the recommendation of Sir James Kempt.
Scott	Master mason; dismissed for neglect of duty on the recommendation of Lieutenant Pooley.
Thomas Burrowes	Suspended for impertinence to Captain Victor; reinstated.
R. Johnson	Suspended for impertinence to Mr. Blair; reinstated.
Sterling	Dismissed because of poor script.
Martin	Hired as temporary office help at 5s. per diem; dismissed for intemperance.
Brown	Dismissed for ridiculing H.H. Burgess and upsetting office routine.
Foy	Employed briefly in office; not suitable.
Taylor	Employed briefly in office; not suitable.
A. Burnett	Son of the civil engineer who died on the Lachine Canal; brother of a deceased overseer; reinstated because of his destitute condition and good behaviour under Lieutenant Briscoe at Kingston Mills.

Appendix B.**Land Petitions, Royal Sappers and Miners**

The following discharged Royal Sappers and Miners submitted petitions for land, according to records in the Public Archives of Canada. Where the notation "order issued" appears, it may be assumed that the land was granted, but proof of this may be established only by reference to the relevant land grant papers, few of which are in the custody of the Public Archives. Therefore research has not been pursued past the petition stage. The text of the petitions, which is fairly standard and formal, has been summarized.

The primary purpose of the land grants, which had been instigated by Colonel By, was to reduce desertion - an endemic problem in the British army of the time. A soldier who served his time and received an honourable discharge received 100 acres, something he could never expect if repatriated to the British Isles. Land grants to discharged soldiers aided in the settlement of a still relatively unpopulated region and relieved the crowded United Kingdom of the additional burden of discharged soldiers. On the whole, there is reason to believe that Colonel By's measure kept desertion at a reasonable level by the standards of the time, in an area where conditions might otherwise have induced a high rate of desertion.

William Adam

Adam submitted his petition on 15 March 1832; he was recommended for a grant of 100 acres in the south half, Lot

No. 15, in the 5th concession from the Ottawa River in the township of Gloucester. Adam had served 19 years and 352 days, most of it as a non-commissioned officer of "high rank;" he had been reduced in rank shortly before being discharged, which "had preyed heavily on his spirits." The order was issued on 21 March 1832.¹

William Addison

Addison's petition was submitted on 15 March 1832. He was a discharged sergeant and had served 19 years (less 22 days) in France, Flanders, West Africa and Bermuda. He had been ordered from Chatham for service on the Rideau, and was discharged on 31 December 1831. Addison was married with three sons and a daughter. He was recommended for 200 acres in Lot No. 14, 5th concession, Gloucester township. The order was issued on 21 March 1832.²

Robert Bray

Bray was recommended for 100 acres. He was a native of England, and had served 9 years and 163 days. He was a lock labourer at Kingston Mills. The order for his land was issued on 1 May 1835.³

William R. Broad

Broad submitted his petition on 28 April 1834. The order for his land, in Lot No. 21, 5th concession, Pittsburg, was issued on 15 July 1835.⁴

John Burgoyne

Burgoyne petitioned for land in the west half of Lot No. 21,

6th concession, in "the Rideau Township of Gloucester." The order was issued on 21 March 1832.⁵

James Callaway

Callaway submitted his petition on 28 February 1833. He was "a native of old England now of the town of Point Henry near Kingston." The order for his land was issued on 8 March 1833⁶

Philip Clogge

Clogge petitioned for land in the east half of Lot No. 24, 3rd concession, township of Gloucester, on 8 November 1832. The order was issued on 4 February 1833.⁷

Thomas Duffy (1)

Thomas Duffy was the 19-year-old eldest son of a private of the same name in the Royal Sappers and Miners. The elder Duffy was killed on 24 August 1829; he had been "an old servant of His Majesty." Duffy petitioned for land on the basis that he was the sole support of his widowed mother and her four children. His petition was rejected on the grounds that his father had died in the service.⁸

Thomas Duffy (2)

Duffy, a bugler, had been discharged "last December" (1831). He submitted a petition for land in the front half of Lot No. 29, 3rd concession, Montague, on 5 July 1833. He was recommended for 100 acres. Duffy was a native of England whose trade was carpentry. The order for his land was issued on 11 July 1832.⁹

James Dykes

Dykes, a native of England, had served 6 years and 160 days with the Royal Sappers and Miners. The order for his land was issued on 26 December 1832.¹⁰

Thomas Finn

Finn submitted his petition at Kingston on 5 February 1835. The order for his land was issued two days later.¹¹

William Fleming

Fleming petitioned for 50 acres in each of the north quarters of Lot No. 14, 5th and 6th concessions, South Crosby; his petition was submitted on 28 February 1835. He was a bricklayer with a wife and two children and a native of England. The order for his land was issued on 23 July 1835.¹²

William Flowers

Flowers petitioned for land in the south half of Lot No. 21 in the 1st concession, township of North Gower. His petition was recommended, but whether or not it was confirmed is unknown.¹³

William Fraser

Fraser, a native of Scotland, submitted his petition for land on 30 March 1835. He had served 5 years and 60 days in the regiment. His petition was not recommended. Captain Cole wrote:

I can trace only one alteration in the
discharge of William Fraser, Formally
[sic] of

the 7th Comp Royal Sappers and Miners to have been made by him subsequently to [the issuing of the] certificate; viz: the word "good" which was "bad" as to character.... the colour of the eyes is remarkably light grey with very light eyelashes, and face considerably pockmarked. He is a very powerful man, with a light Scotch accent. He is now and has been working for two years past at Point Henry.

In spite of Cole's comments, the order for Fraser's land was issued on 30 April 1835.¹⁴

Robert Gilvear

Gilvear submitted his petition jointly with Samuel Patrick. He had enlisted in the Royal Sappers and Miners in Edinburgh in 1822, and served in the regiment for 9 years and 113 days. Gilvear was discharged on the Rideau Canal in 1831 and petition for 100 acres. His discharge papers were sent to the Surveyor General in 1836 and nothing was heard of them thereafter. His petition was not granted.¹⁵

George Hamilton

Hamilton submitted his petition for land in the west half of Lot No. 21, 1st concession, in the township of North Gower. The order for his land was issued in June 1832.¹⁶

George Hay

Hay submitted his petition on 2 August 1832. He had been born in Scotland and had served for 5 years. The order was issued on 3 August 1832.¹⁷

Thomas Jenkins

Jenkins submitted his petition on 10 October 1835. He was a Cornishman who had served 18 years and 21 days. The order for his land was issued on 13 October 1834.¹⁸

John Jones

Jones petitioned for 100 acres in the west half of Lot No. 28, 8th concession, Montague, on 10 April 1834. The order for his land was issued on 16 April 1834. Jones had been a corporal in the Royal Sappers and Miners and, after his discharge, was employed as a lockmaster at Old Slys.¹⁹

Thomas Jones

Jones petitioned with John Smith for 100 acres each in "lot 21 4th concession from river Rideau Township of Gloucester located many years ago in name of David Henshaw son of a UEL for which no descript...issued." The petition was recommended in council, but no confirmation was noted.²⁰

Thomas Little

Little, a native of England, submitted his petition on 20 December 1832. The order was issued on 24 December 1832.²¹

Daniel MacDonald

MacDonald was a corporal before his discharge and served as lockmaster at the Isthmus. He petitioned for land in Lot No. 27 and in the 2d and 3rd concessions, township of South Crosby; this land was, however, given to Mr. Sherwood. Captain Bolton testified that Lot No. 2, 3rd concession, North Crosby was not needed for canal service, although it

was a clergy reserve. The order for MacDonald's land was issued on 3 July 1837.²²

David Mitchell

Mitchell petitioned on 12 March 1833 for land in the west half of Lot No. 8 in the 2d concession of Felladoe. The order for his land was issued on 14 March 1833.²³

William Mitchell

Mitchell had been a corporal in the Royal Sappers and Miners before his discharge. He petitioned for land in the east half of Lot No. 24, 6th concession of Marlborough, and the order for his land was issued on 6 November 1838. Presumably he received his grant, for he built a house and cleared upward of 5 acres.²⁴

William Muchmore

Muchmore was a native of England and served 9 years with the Royal Sappers and Miners as a private. He worked as a lock labourer at Chaffey's Mills. The order for his land was issued on 22 July 1835.²⁵

John Newman

Newman, a native of Scotland, petitioned on 5 September 1833 for 100 acres in the west half of Lot No. 24, 4th concession, township of Marlborough. The order was issued on 18 September 1833.²⁶

Thomas Newman

Thomas Newman was born in England. On 5 September 1833 he petitioned for 100 acres in the east half of Lot No. 24, 4th concession, township of Marlborough. The order for his land was issued on 9 September 1833.²⁷

Edward Pascoe

Pascoe served with the Royal Sappers and Miners for 5 years and 352 days. He submitted his petition jointly with one Harrington. The order was issued on 12 December 1832.²⁸

Hugh Patrick

Patrick was Scottish-born and served with the Royal Sappers and Miners for 5 years. The order for his land was issued on 9 February 1833.²⁹

Samuel Patrick

Samuel Patrick submitted his petition jointly with Robert Gilvear on 12 June 1844. Patrick had enlisted in Glasgow in 1826 and served 5 years and 29 days. His discharge, like Patrick's, was sent to L.B. Hurd, the surveyor general, and not heard of thereafter. There is a notation that Patrick "may be allowed script, 1 May 1843."³⁰

Robert Peck

Peck petitioned for land in the east half of Lot No. 21, 6th concession from the Rideau River, township of Gloucester. The order for his land was issued on 24 April 1832.³¹

John Porteous and Robert Clements

Porteous and Clements petitioned jointly for land in the east halves of Lots 14 and 15, 5th concession from the Rideau River, township of Gloucester. Both had served in the 15th Company, Royal Sappers and Miners. The order for their land was issued sometime in February 1832(?).³²

Michael Rowe

Rowe served with the Royal Sappers and Miners for 6 years and 234 days. He was discharged at Bytown on 24 December 1831 to work on the Rideau Canal. He submitted his petition for land in the southeast half of Lot No. 29, 6th concession, township of Gloucester, but the lot was already granted and he was told to find land elsewhere. Presumably he did, for the order for his land was issued in February 1833.³³

Archibald Sands

Sands was a native of Scotland who had served 9 years and 271 days with the Royal Sappers and Miners. He was discharged with the rank of corporal and submitted his petition on 20 January 1835. The order for his land was issued on 5 March 1835.³⁴

Stephen Simmonds

Simmonds had served in the 15th Company, Royal Sappers and Miners, before his discharge. On 8 August 1833 he submitted his petition for land; in Lot 8, 2nd conc. Gloucester. Whether this petition was confirmed has not yet been determined.³⁵

George Sims

Sims petitioned on 15 March 1832 for land in the south half of Lot No. 16, 6th concession from the Ottawa River, township of Gloucester. The order for his land was issued on 21 March 1832.³⁶

John Smith

Smith served in the 7th Company, Royal Sappers and Miners. A carpenter by trade, he had been ordered from Woolwich to Canada in 1827. He petitioned with Thomas Jones for land in Lot No. 21 in the 4th concession from the Rideau River in the township of Gloucester. Both men were recommended for 100 acres each, but it is not known whether this was granted.³⁷

Robert Snowdell

Snowdell had served for 6 years. His petition was "not recommended as it appears by his discharge that his general conduct as a soldier has been bad," (27 November 1834).³⁸

Samuel Spry

Spry stated that, under an order in council of 21 February 1832, he had settled on the south half of Lot No. 11 in the 4th concession of North Gower, that he had more than 10 acres under cultivation, and had settled his family there. It has not been determined from the documents whether his petition was granted or not.³⁹

John White

White had been a private in the 15th Company, Royal Sappers and Miners. He was enlisted by Captain Wright, RE, on

22 June 1828 in Dungarvon, County Londonderry, Ireland. He was by trade a smith and armourer. White submitted his petition for land on 1 August 1828, but the outcome is unknown ⁴⁰

The breakdown of settlement of townships, based on the foregoing land petitions follows:

Gloucester (Carleton County)	12
North Gower (Carleton County)	3
Marlborough (Carleton County)	3
Pittsburg (Frontenac County)	1
Montague (Lanark County)	2
South Crosby (Leeds County)	2
Felladoe	1

"Felladoe" township has not been identified. Four petitions were not recommended and 13 specified no location; one petition bears no notations, affirmative or negative.

Based on the foregoing records, 41 of the 71 discharged soldiers (approximately 58 per cent) petitioned for land, more than half of them for land in Carleton County.

Appendix C.

List of Soldiers of the Corps of Royal Sappers and Miners
disbanded at Bytown, December 1831.

Company

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Head Quarters,

Royal Sappers & Miners,

Woolwich 28 July 1831,

Nominal List of Now Commissioned Officers, Privates and Buglers
of the Companies of Royal Sappers and Miners, disbanded at
the Rideau Canal, Upper Canada, in December 1831. —

Rank	Names	Company	Remarks.
Sergeant	William Addison	7 th	Discharged at the Rideau Canal 24 th 31 st Decemb. 1831.
Corporal	Thomas Jenkins	"	
"	William Clyma	15 th	
2 ^d Corporal	Archibald Sands	7 th	
"	George Hay	"	
"	Daniel McDonald	"	
"	John Rickard	15 th	
"	John Jones	"	
Private	William Mitchell	"	
	Thomas Jones	7 th	
	Alexander Burns	"	
	Henry Day	"	
	John McDonald	"	
	Thomas Green	"	
	George Webb	"	
	Charles Taylor	"	
	Robert Beay	"	
	Cornelius Connor	"	
	Andrew Gray	"	
	William Muchmore	"	
	William R. Broad	"	
	Thomas Finn	"	
	Robert Gillocar	"	
	Henry Davis	"	
	James Hume	"	
	John Fraser	"	

179 Rank	Names	Company	Remarks
Private	James Bondrey	4 th	
"	Thomas Little	"	
"	Joseph White	"	
"	Robert Mitchell	"	
"	David Nesbitt	"	
"	James Callaway	"	
"	William Drasen	"	
"	John Serjeant	"	
"	William Fleming	"	
"	James Murdoch	"	
"	John Smith	"	
"	Samuel Patrick	"	
"	John Ayres	"	
"	Hugh Patrick	"	
Drum	Thomas Duffy	"	
Private	William Adams	15 th	Discharged at the Rideau Canal 24 th Dec. 1831.
"	William Harvers	"	
"	Thomas Dickson	"	
"	Robert Peck	"	
"	Robert Snowdell	"	
"	John Newman	"	
"	Philip Blogge	"	
"	David Mitchell	"	
"	Thomas Newman	"	
"	William Smith	"	
"	Michael Row	"	
"	Roderick McKay	"	
"	Henry Bullen	"	
"	William Fielding	"	
"	James Lykes	"	
"	Robert Clements	"	
"	Edward Pascoe	"	
"	George Sims	"	

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Rank	Names	Company	Remarks
Private	Patrick Patten	15 th	
"	Robert Jones	"	
"	Stephen Simmonds	"	
"	James Decey	"	
"	John McLaren	"	
"	Thomas Smith	"	Discharged at the
"	James Coll	"	Rideau Canal 24 th 31
"	John Burgoyne	"	December 1831
"	John White	"	
"	George Hamilton	"	
"	John Porteous	"	
"	Samuel Spry	"	

Appendix D.

Royal Sappers & Miners who Returned to England on disbandment of the two Companies.¹

The following men returned to England on the disbandment of the Companies

Rank	Names	Company	Remarks
Color Sergeant	John Eads	4 th	Now serving at Gibraltar
	John Johnston	15	" " " " at Woolwich
Sergeants	Joseph Coombs	"	Discharged 9 th March 1832 & gone to Canada,
Corporals	George Roff	7	Now serving at Chatham
"	Henry Ryan	15	Discharged 31 Jan'y 1832 & to reside at Thurles Ireland
"	Thomas Simmonds	"	Now serving at Purfleet
Private	James Burrell	4 th	Disch. 31 Jan'y 1832 & to reside at Dumfermlin
"	Andrew Kinross	"	" D ^o " " " " at Sterling
"	Charles Turner	"	" D ^o " " " " at Haywood
"	Edward Council	"	" D ^o 31 March 1832 " " at Dublin
"	William Smith	"	" D ^o 31 Oct ^r 1833 " " at Torres
"	William Boud	"	" D ^o 31 Jan'y 1832 " " at Probus
"	Thos. Edrington	"	Now serving at Woolwich
"	James Burlace	"	Disch. 31 March 1832 to reside at Banamport
"	George Cook	"	" D ^o 14 Jan'y 1832
"	William Kemshaw	"	Now serving at the Mauritius
"	John Milford	"	" D ^o " " " " at the Cape
"	Arthur Kelly	15	Disch. 31 Jan'y 1832 to reside at Omagh
"	William Trusk	"	} Now serving at the Cape
"	John Cooke	"	
"	William Colwell	"	" D ^o " " " " at Woolwich
"	Owen McElrath	"	Discharged 16 January 1832
"	William Harris	"	} Now serving at Woolwich -
"	Henry Sobey	"	
"	John Baird	"	Discharged 7 th September 1833.
Bugler	William Cameron	"	Now serving at Bermuda

Appendix E.

"Proposed Establishment of the Royal Engineers Department at the Rideau Canal for the Year 1828."1

Proposed Establishment of the Royal Engineer Department at the Panama Canal for the Year 1885-

[illegible]

Amount to One thousand, Seven hundred and Sixty seven pounds, fifteen shillings, sixpence and 4/8 and
 Royal Engineer's Office, Rangoon Canal 20th November 1884

at 4 1/2 cents.
Royal Engineers Office, Palace Canal 20th November 1884

John By
A. C. Elliott Esq. Secy.
Genl. & Pleasant
Upper Canada

Appendix F.

Works Sheets, Philemon Wright & Sons Contract Labour, November
1827 - April 1829.¹

Antoine Lemoine 17 days work

67537

John Snow 1 " "

E. Brooks 1 " "

226 days work per horses on the Embankment

24 do do per C. E. Wright's horse teaming &c

An of work from the 15th Dec to 14th January 1828 — 67538

Names	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	day	Notes
John O'Brien	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Dan Carver	1	1	1	1	1	0	0	1/2	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21		
So ^r Davis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24		
M. Woodcock	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Most Hogan	1	1	0	1	1	0	0	1	0	0	1	0	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	7		
For ^r Magville	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1/2	21		
Louis Lenoir	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21		
Bapt. Boivert	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24		
Fr ^r Mirand	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Fr ^r St Antoine	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Sac ^r Libberson	1	1/2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1/2		St. Pierre
Bapt. Renault	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18		
Ch ^r Villeneuve	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Ch ^r Leveillé	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Ant. Bodouin	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Patr ^r M. Namore	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
St. Rancour	0	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1/2	19		
For ^r Matouin	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20		
John White	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Sill ^r Tardif	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
And ^r Lachapelle	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Moris Lambert	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Beloni Lenoir	1	1/2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1/2		St. Pierre
St. Leveillé	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Isaac Leveillé	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Jean Dorion	1	1	1	1	1	0	1/2	1	1	1	1/2	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25		
Ala ^r Montgomery	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
So ^r Hevrie	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23		
Bapt. Buequet	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23		
Ther ^r Archambault	1	1/2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1/2		St. Pierre
So ^r Chailly	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Pierre Archambault	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Fr ^r Laporte	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Bapt. Bruneau	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23		
Alais Brabant	1	1/2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	1/2		St. Pierre
Fr ^r Hémon	1	1	1	1	1	0	1	1	1	1/2	"	"	"	"	"	"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1/2		
Lion Mirand	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
Lion Leveillé	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22		
C. C. Wright	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23		
Edw. Wright	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
Richard	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23		
John Davis	"	"	"	"	"	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17		

67539

Antoine Lamoine 6 days work
 John Snow 6 " "
 St. Melvin 18 " "
 Bapt. Levilli 24 " "
 C. Brooks 6 " " with 1 span of horses drawing provisions &c
 L. Smith & 2 yoke of oxen 6 days work Logging &c
 Ovid Belanger & 1 horse 2 days work drawing barge
 200 days work per horses on the Embankment
 24 do do for C. C. Wright's horse taming &c

Names	January			February											No Days	Remarks
	29	30	31	1	2	4	5	6	7	8	9	11	12			
Paul Mashot	1	1	1	1	1	1	1	1	1	1	1	1	1	12		
Louis Mashot	1	1	1	1	1	1	1	1	1	1	1	1	1	12		
Pierre Allard	1	1	1	1	1	1	1	1	1	1	1	1	1	12		
Joe Guin	1	1	1	1	1	1	1	1	1	1	1	1	1	12		
Joe Bibrau	1	1	1	1	1	1	1	1	1	1	1	1	1	12		
Denis Caplet	1	1	1	1	1	1	1	1	1	1	1	1	1	12		
Pierre Cornille	1	1	1	1	1	1	1	1	1	1	1	1	1	12		
Fred Laplante	"	"	"	"	"	"	"	"	"	"	"	1/2	1 1/2	2		
Monon Guilmont	"	"	"	"	"	"	"	"	"	"	"	1/2	1 1/2	2 1/2		

C. Brooks 2 days work with 2 yoke of Oxen Logging
 C. Brooks 3 do do " 1 Span of horses tanning
 Sprawls 3 " " 1 do do do
 J. Smith 9 " " 2 yoke Oxen Logging
 Drouin at Wyman 8 do - 1 Span horses tanning
 John Snow 3 do Repairing cart
 3 1/2 days work for horses on the Embankment
 18 do do for C.C. Wright's horse tanning &c
 10 do 10 do do making & repairing harness

1828
 Dogblack
 Superintendent

An acc of work from the 12th February to the 10th March 1828

67542

Names	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	1	3	4	5	6	7	8	10	No days away
John Brian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Dan Carver	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Darnais	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
M. Woodcock	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Monville	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
L ^e Jiroux	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Bapt. Boissert	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For St Antoine	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Bapt. Renaud	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Ch ^e Villeneuve	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Ch ^e Livielli	1/2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Ant. Boudin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Patt Mcnamara	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
L ^e Mancour	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Malouin	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1											
John White	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Self Tardif	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Andri Lachapelle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Moris Lambert	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
L ^e Livielli	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Seane Livielli	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
San Dorion L ^e	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Alta Montgomery	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Fleming	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Bapt. Busquet	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Chaille	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Pierre Archambault	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Laporte	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Bapt. Brucan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Leon Mirond	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Simon Livielli	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
John David	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Mirond	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Bapt. Dorion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Bapt. Piche	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Bastonard	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Paul Washot	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Louis Washot	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Pierre Altard	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Lunn	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Bibian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Denis Caplet	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Pierre Cornuillier	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For Laplancha	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Herman Guilmont	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Navier Patric	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
C. C. Wright	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
T. Wright	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
Barbar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
For	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											
John Snow	1/2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"											
For	16	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17											
For St Denis	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"											

Baptiste Lefair 1 day on 27th
Sol Perrier 1 " " "

67543

Names	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Baptiste Plante	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Andre Cardinal	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Bapt. Lavallée	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Chas. Taillon	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Chas. Dabire	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Christie Sylvestre	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Fort Lacombe	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Pierre Turie	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Alexis Lapierre	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Abel Poirier	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Milou Harnet	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Paul Deschênes	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Henri Cloutier	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Vincent Pellerin	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Ed. Guilmette	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Bapt. Constantin	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
Christmas Lavoie	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

67545

67546

All up of work from 27th March to the 23rd of April 1825

Names - - -	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Remarks
John Obrian	/	/	/	/	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Dan ^r Carver	/	/	/	/	1/2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Sol ^r Davis	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Louis Giroux	"	"	"	"	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Fr ^r J. Antoin	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Bapt ^r Menaut	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Ch ^r Vithaux	"	"	"	"	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Ch ^r Livelli	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Patr ^r Mcnamara	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Fr ^r Maturin	/	0	/	/	/	/	/	0	/	/	/	/	/	/	/	0	0	0	0	0	0	/	/	/	/	/	/		
Will ^r Tardif	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
And ^r LaChapelle	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Moris Lambert	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	3/4	0			
J ^r Livelli	/	/	/	/	/	/	/	/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3/4	0			
Isaac Livelli	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	3/4	1/2			
Ivan Dorion Jr	/	/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Ala ^r Montgomery	1/2	1/4	/	/	/	/	/	/	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Sol ^r Hénris	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Bapt ^r Bussant	"	"	"	"	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Fr ^r Chelle	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
P. Archambault	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Fr ^r Laporte	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Bapt ^r Roux	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Leon Mirond	/	/	/	/	/	/	/	/	/	/	/	/	/	1/2	/	/	/	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2		
Simon Livelli	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
John David	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	3/4	1			
Fr ^r Mirond	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Bapt ^r Dorion Jr	/	/	/	/	/	/	/	/	/	/	/	/	/	1/2	/	/	/	/	/	/	/	/	/	/	/	/	/		
B. Potard	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
L ^r Macbot	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Pierre Allard	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Ch ^r Guin	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Pierre Cormick	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Fr ^r Laplante	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Simon Guilmet	/	/	/	/	/	/	/	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0	1	1		
Edward Laro	/	/	/	/	1/2	/	/	0	/	/	/	/	/	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2		
Sol ^r Dorion	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Louis Landry	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Ignace Blanchard	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Bagin Laplante	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
And ^r Cardinal	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Ch ^r Taitton	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Ch ^r Sakie	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Fr ^r Lacombe	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Sol ^r Caplan	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Ala ^r Charrier	/	/	/	1/2	/	/	/	/	/	/	/	/	/	/	/	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2		
L ^r Andeveau	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Nimi Laffrere	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Tou ^r Peltier	/	/	/	1/2	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Fr ^r Guilbert	/	/	/	/	1/2	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
Bapt ^r Constantineau	/	/	/	/	/	/	1/2	0	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	0			
Christmas Laro	/	/	/	/	/	/	1/2	1/2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	1/2			
Pierre Guerin	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
C. P. Wright	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
(B. Laro)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		

Discharged

Discharged

Discharged

Discharged

Discharged

An $\frac{1}{2}$ of Work from the 26 th of April to the 25 th of May 1828 67548																																		
N ^o	Names	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Remarks
1	John O'Brien	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
2	Dan. Carvins	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
3	Jos. Canais	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
4	Louis Giroux	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
5	Fol. St. Vrain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
6	Bapt. Renaud	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
7	Ch. Villeneuve	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
8	Ch. Leveillé	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
9	Patt. McNameara	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
10	Fol. Malouin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
11	Bill. Parry	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
12	Andri. Lachapelle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
13	Abel. Lambert	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
14	Louis Leveillé	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
15	Abel. Leveillé	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
16	Bapt. Desion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
17	Fol. Henri	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
18	Bapt. Desion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
19	Abel. Chaille	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
20	Pierre Lechumbe	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
21	Fol. Laporte	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
22	Bapt. Desion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
23	Lion. Moreau	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
24	Simon Leveillé	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
25	John David	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
26	Fol. Moreau	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
27	Bapt. Desion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
28	Fol. Petrait	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
29	Fol. Dupin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
30	Simon Gullmond	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
31	Abel. Chaille	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
32	Fol. Desion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
33	Louis Leveillé	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
34	Abel. Chaille	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
35	Fol. Thillon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
36	Ch. (Dale)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
37	Fol. Lechumbe	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
38	Fol. Cukson	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
39	Abel. Chaille	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1			
40	Louis Lechumbe	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																	

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1 An $\frac{1}{2}$ of Work from the 1st January 1829 to the 28th 67563

No	Names	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	No Days	Remarks
1	John Brian	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
2	Louis Giroux	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
3	Bapt. Dorian	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
4	Jos. Culpom	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
5	Jerias Paradis	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
6	Bapt. Prud'homme	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
7	Louis Siméon	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
8	Isaac Chuteau	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
9	Narcisse Culpom	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
10	Gill. Tardif	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
11	Xavier. c. Horan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
12	Narcisse Dufaut	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
13	Joseph Grand	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
14	Alfred Grand	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Run away	
15	Etienne Leclair	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
16	St. Brindamm	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
17	St. Petras	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
18	Louis Darrell	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
19	Nicolas Guillemont	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
20	Ant. Couvillon	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
21	David Lemaire	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
22	Stan. Luvillie	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
23	Joseph Luvillie	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
24	Lion. Maschet	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
25	Fouquet Dupin	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
26	Bapt. Major	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
27	Joseph Dorian	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
28	Estienne Lorgin	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
29	Pierre Dorian	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
30	Pierre Flecher	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
31	Sam. Guindon	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Went to change of form	
32	Etienne Major	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
33	David Dufaut	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
34	Chement Dubault	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
35	Pierre J. Martin	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
36	Joseph Bonnellin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
37	Pierre Bonnellin	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
38	Ant. Bonnellin	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
39	Bapt. Dorian	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
40	Joseph Allard	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
41	Joseph Chénouet	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Left in the morning	
42	L. Dufaut	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Hours & Cost	

3 men staying the last day by waiting after the morning day

An of Work from the 26 th February to the 25 March 1829. Inclusive																																	
67567																																	
No	Names	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Shap	Remarks
1	John Brian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2	Louis Giroux	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	Bapt. Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	Chas. Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
5	Thomas Paradis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
6	Bapt. Poulin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7	Louis Simard	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
8	Chas. Chouin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
9	Marcel Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
10	Will. Paré	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1	Marie Morin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	Marcel Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	Joe. Forville	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	Etienne Leduc	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
5	Joe. Boudreau	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
6	Joseph Petras	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7	Louis Laroche	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
8	Alphonse Guilbert	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
9	Ante. Courville	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
10	David Laroche	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1	Jean Laroche	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	Joe. Laroche	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3	Leon. Washot	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	Bapt. Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
5	Bapt. Major	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
6	Chas. Perrin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7	Alphonse Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
8	Pierre Perrin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
9	Pierre Leduc	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
10	Alphonse Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
11	David Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
12	Clement Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
13	Pierre St Martin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
14	Joe. Cormier	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
15	Pierre Cormier	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
16	Ante. Cormier	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
17	Bapt. Dorian	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
18	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
19	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
20	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
21	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
22	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
23	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
24	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
25	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
26	Joe. Alford	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1												

Appendix G.

Requisition Lists September 1826 - December 1829.

Montreal 30th Sept. 1826

101

Requisition of articles required for prosecuting the Works
of the Rideau Canal. C-42

Anvils for Smiths—misting	1
Augers Carpenters without shafts 2 inch and $\frac{3}{8}$	50
Axes Broad—unkelwed	50
D ^r . Felling	50
D ^r . D ^r . round eyed	25
D ^r . Pick	50
Belows Smith	1
Bills Hand	50
Chisels Carpenters Mortise $\frac{3}{4}$ inch & $\frac{1}{8}$	25
D ^r . D ^r . Socket—2 $\frac{1}{4}$ do & $\frac{1}{2}$	25
Files rough 16 inch & 4 inches	25
Hand Saws Files	100
Files Warding 3 $\frac{1}{2}$ and 2 $\frac{1}{4}$	25
Stable Forks	25
Gimblts. Nails	50
Gauges scribing 2 in & $\frac{1}{4}$	25
Beitch Hammers Smiths	10
Claw Hammers large	20
Hammers small	25
Kilves for Axe Felling	100
Pick Axes Helves	200
Garden Hoes	100
Brush Hooks	200
Reaping Hooks	25
Kettles O. P. Flanders	25
Drawing Knives Coopers	25
Padlocks	5

10 th Small	C-42
Locks Iron - dead ward complete	25
Locks Stock common	25
Mattocks	100
Cut Nails - Rose - 28 per M	20 cent
Cut Spikes - 9 & 5 inches	1/2 cent
Dr. Brads 20 th & 10 th	1 cent
Rakes common	50
Rasps coarse and fine	10
Hand Saws	50
Scythes	25
Smearers for Scythes	100
Shades Iron	250
Stocks and Dies	3
Harrow Teeth	25
Hedges large and small	100
Dr. for Scythes	25
Table Hinges - Pairs	25
Strap Hinges	10
Sickles	25
Palliases single	50
Pot Hooks	25
Dog Irons Pairs	25
Iron Pots	25
Handles Scythe	

Dr. W. L. W. L.
Capt. W. L. W.
or Wm. J. W. L.

52

C-44

Home or Foreign (Form No. 1)

Office of Ordnance
Montreal 5th Oct. 1826.

Received out of His Majesty's Stores at this place,
under the charge of Francis Simpson Esq^r the undermentioned
Articles, pursuant to Col^l Byss Requisition dated 30th
September 1826 for Prosecuting the works of the Rideau
Canal — herewith —

Anvils Smiths Midling	1
2 Inches	7
1 3/4 — "	9
1 1/2 — "	7
1 1/4 — "	7
Augers	
Carpenters	
1 — "	5
3/4 — "	5
5/8 — "	5
1/2 — "	5
Axes unfiled	
Broad	50
Felling	75
Pick	50
Bellows Smiths Pairs	1
Bills Hand	50
Chisels Marice	
3/4 inch	4
5/8 — "	4
1/2 — "	4
3/8 — "	4
1/4 — "	6
1/8 — "	3
2 inches	5
1 3/4 — "	5
Chisels Socket	
1 1/2 — "	5
1 — "	5

53 Baskets & Cases Packing of Tools — 5. 13. C-44

Chisels Socke	{	3/8 inches	2
		1/2 — "	3
Files	{	16 inches	6
	Rough	14 — "	6
		12 — "	6
	Hand	7 — "	7
		Saws	100
		3 1/2 inches	6
	Wardings	2 3/4 — "	7
		2 1/4 — "	6
		2 1/4 — "	12

Forkes Stable ————— 25

Forks for Ditto ————— 25

Gun blades Nails ————— 50

Gauges Scirbing	{	2 inch	3
		1 3/4 — "	3
		1 1/4 — "	3
		1 — "	3
		1/2 — "	6
		3/8 — "	3
		1/4 — "	4

Hammers	{	Bench Smith	10
	Claw —	Large	20
		Small	25

Sieves for Axes —	{	Felling	100
		Pick	200

Hoes Garden ————— 100

Hooks Brush ————— 200

Ditto Reaping ————— 25

Kettles O.P. Spin ————— 25

Knives Drawing Hoofes ————— 25

Pad Singth Commth bottles ————— 5

Locks	{	10 inches	12
	Rin dead —	7 — "	13
		12 — "	10
	Stock —	14 — "	15

Handles for Sythes	48	54
Hinges pairs	25	
Matlocks	10	C-44
	100	
Rose 28" p the Cut	20	
Nails	9 inches	16
Spikes lbs	8 "	10
	7 "	10
	6 "	10
	5 "	10
	28 " #	56
	14 " "	56
Plates Iron Common	50	
Trivets for Stable Forks	25	
Rasps	Course 8 inches	5
	Fine 8 "	5
Saws Hand	50	
Sythes	24	
Stones Rub	24	
Stones Rag	24	
Spades Iron	250	
Hocks and Dies	3	
Scikles	25	
Teeth Harrow	25	
Wedges	Large	50
	Small	50
Wedges for Sythes	72	
Pallasses	50	
Hooks Pts	25	
Iron Dog Pairs	25	
Pts Iron 3 Gallons	25	
Sumands for Sythes	100	

Signed D. Bollow
 Captain Roy Evans
 in the absence of L. Cole Esq.

True Copy of Receipt
 J. P. Jones
 Store

C-44

75.27932

Index 1st Vol. 1827

Index of Revisions

Required the following Articles for the use of the
Commissariat at the Rideau Canal. 1827. C-44

- 1 Set Beams & Scales for Weighing Silver.
- 2 Strong Brass flat Office Candelsticks Complete.
- 1 Small Desk ditto — ditto — for the Candle.
- 2 Stoves, Stands, Fans & Fire Shovels complete.
- 60 Lengths of Rope.
- 1 Set Beams & Scales for Provision Store with Hooks and Chains or Ropes complete.
- 1 Copper Siphon.
- 2 Lanterns, strong Tin and Horn.
- 50 Fathoms 2 1/2 inch White Rope.
- 4 Double Blocks of 4 inches.
- 12 Fathoms 3 1/2 inch White Rope for Slings with Hooks to complete 2 Sets of Tackle Fall.
- 1 Cross Cut Saw.
- 1 Frame ditto.
- 1 Grind Stone, 30 inches with Handle and Axle.
- 2 Iron Spades.
- 2 Ditto Shovels.
- 1 Pickaxe.
- 2 Felling Axes. (American)
- 2 Hand Trucks.
- 2 Wheel Barrows.
- 1 Set Coopers Tools complete.
- 300 Feet 2 inch Pine Plank.
- 300 ditto 1 1/2 — — — ditto
- 1,000 ditto 1 — — — Boards.
- 300 ditto 3/4 — — — ditto
- 1,000 4 inch Nails.
- 1,000 3. ditto — ditto

P.T.O.

13000	2 1/2 Inch Nails.	C-44
1000	2 - ditto - ditto.	
1000	1 1/2 ditto - Brads.	
1000	1 - ditto - ditto.	
1000	Iron Tacks.	
1	prop 1 1/2 Inch Screws.	
1	ditto 1 - ditto - ditto.	
4	Pounds glue.	
6	ditto Putty.	
1	Reg White Paint.	
1	ditto Red - Do.	
1	Lan Linseed Oil.	
1	ditto Spirits Turpentine.	
3	Pounds Lamp Black.	
3	Paint Brushes assorted.	
1/2	Quire Sand Paper.	
2	Feuders.	
2	Pairs Dog Irons.	

Commissariat, Hull.
4th October, 1827.

Signed/
C. Miller
D.A. Ch.

Recommended for the approval of the Commander of the Forces. - The Articles in the Ordnance Stores at Monheal to be issued in kind, and the remainder to be purchased by the Commissariat.

Signed/
R. J. Roub.
Com Genl.

Approved by Command
Signed/
H. C. Darling
12th Oct. 1827.
Comd^g Insp

Attest
J. Adamson

Materials continued			98
For higher shoring 1/8 of an inch thick			Boards 50
Boards, Newcastle for Smiths use, One hundred boards equal to			Boards 3600
Large powder, large quantity, for business use, not over 100 barrels to be forwarded at one time, barrels 100 lb each			Boards 400
Boards (1 1/2" crown) boxes to contain 100 feet each 7/8 x 8 1/2			Boards 10
Hammer, Lines			Boards 35
Hemp, Thread			Boards 12
Iron Flat Swedish			
	6 x 1 1/4	140 600	
	5 1/2 x 3/4	30 "	
	5 x 3/4	35 "	
	4 x 3/4	25 "	
	3 1/2 x 3/4	20 "	
	3 x 1	40 "	
	3 x 3/4	30 "	
	2 1/2 x 3/4	15 "	
	2 x 1/2	40 "	
	1 1/2 x 3/4	30 "	
	1 x 1/2	20 "	
	1 x 1/4	10 "	
	3 x 3	50 "	
	2 1/2 x 2 1/2	30 "	
	2 x 2	50 "	
	1 1/2 x 1 1/2	50 "	
	1 1/2 x 1 1/4	50 "	
	1 1/4 x 1 1/4	40 "	
			Cost 365

"	"	1 x 1	50 "	
"	"	Scrap for raggad bolts for the lock gates	6 x 1/2	40 "
"	"	Scrap from charcoal, bolts, scrap 3/4 inch iron, eight piece and 1/2 inch for rivets of iron work of lock, 50 "		60 "
"	"	1/8 "		20 "
"	"	1/2 "		40 "
"	"	5 x 1	50 "	60 "
"	"	5 x 3/4	40 "	50 "
"	"	4 x 3/4	50 "	60 "
"	"	3 x 3/4	50 "	60 "
"	"	2 1/2 x 3/4	50 "	60 "
"	"	2 x 3/4	50 "	60 "
"	"	1 1/2 x 3/4	50 "	60 "
"	"	1 x 3/4	50 "	60 "
"	"	3/4 x 3/4	50 "	60 "
"	"	5/8 x 3/4	50 "	60 "
"	"	1/2 x 3/4	50 "	60 "
"	"	3/8 x 3/4	50 "	60 "
"	"	1/4 x 3/4	50 "	60 "
"	"	3/16 x 3/4	50 "	60 "
"	"	1/8 x 3/4	50 "	60 "
"	"	1/16 x 3/4	50 "	60 "
"	"	1/32 x 3/4	50 "	60 "
"	"	1/64 x 3/4	50 "	60 "
"	"	1/128 x 3/4	50 "	60 "
"	"	1/256 x 3/4	50 "	60 "
"	"	1/512 x 3/4	50 "	60 "
"	"	1/1024 x 3/4	50 "	60 "
"	"	1/2048 x 3/4	50 "	60 "
"	"	1/4096 x 3/4	50 "	60 "
"	"	1/8192 x 3/4	50 "	60 "
"	"	1/16384 x 3/4	50 "	60 "
"	"	1/32768 x 3/4	50 "	60 "
"	"	1/65536 x 3/4	50 "	60 "
"	"	1/131072 x 3/4	50 "	60 "
"	"	1/262144 x 3/4	50 "	60 "
"	"	1/524288 x 3/4	50 "	60 "
"	"	1/1048576 x 3/4	50 "	60 "
"	"	1/2097152 x 3/4	50 "	60 "
"	"	1/4194304 x 3/4	50 "	60 "
"	"	1/8388608 x 3/4	50 "	60 "
"	"	1/16777216 x 3/4	50 "	60 "
"	"	1/33554432 x 3/4	50 "	60 "
"	"	1/67108864 x 3/4	50 "	60 "
"	"	1/134217728 x 3/4	50 "	60 "
"	"	1/268435456 x 3/4	50 "	60 "
"	"	1/536870912 x 3/4	50 "	60 "
"	"	1/1073741824 x 3/4	50 "	60 "
"	"	1/2147483648 x 3/4	50 "	60 "
"	"	1/4294967296 x 3/4	50 "	60 "
"	"	1/8589934592 x 3/4	50 "	60 "
"	"	1/17179869184 x 3/4	50 "	60 "
"	"	1/34359738368 x 3/4	50 "	60 "
"	"	1/68719476736 x 3/4	50 "	60 "
"	"	1/137438953472 x 3/4	50 "	60 "
"	"	1/274877906944 x 3/4	50 "	60 "
"	"	1/549755813888 x 3/4	50 "	60 "
"	"	1/1099511627776 x 3/4	50 "	60 "
"	"	1/2199023255552 x 3/4	50 "	60 "
"	"	1/4398046511104 x 3/4	50 "	60 "
"	"	1/8796093022208 x 3/4	50 "	60 "
"	"	1/17592186044416 x 3/4	50 "	60 "
"	"	1/35184372088832 x 3/4	50 "	60 "
"	"	1/70368744177664 x 3/4	50 "	60 "
"	"	1/140737488355328 x 3/4	50 "	60 "
"	"	1/281474976710656 x 3/4	50 "	60 "
"	"	1/562949953421312 x 3/4	50 "	60 "
"	"	1/1125899906842624 x 3/4	50 "	60 "
"	"	1/2251799813685248 x 3/4	50 "	60 "
"	"	1/4503599627370496 x 3/4	50 "	60 "
"	"	1/9007199254740992 x 3/4	50 "	60 "
"	"	1/18014398509481984 x 3/4	50 "	60 "
"	"	1/36028797018963968 x 3/4	50 "	60 "
"	"	1/72057594037927936 x 3/4	50 "	60 "
"	"	1/144115188075855872 x 3/4	50 "	60 "
"	"	1/288230376151711744 x 3/4	50 "	60 "
"	"	1/576460752303423488 x 3/4	50 "	60 "
"	"	1/1152921504606846976 x 3/4	50 "	60 "
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Material	Quantity	Unit	Price	Total
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Shoe	1/2	1/2	20	
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"	1/2	1/2	8	
"	1/2	1/2	8	
"	2	1/2	8	
"	1/2	1/2	8	
"	1	1/2	8	
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"	1	1/2	8	

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Royal Engineer Store
Rideau Canal 15 September 1829

Enter AMH

Received from His Majesty's Store in charge of Francis Simpson Esquire, Ordnance Store Keeper at Montreal, the Undermentioned Tools and Materials, being for the service of the Rideau Canal.

48	Augers New, Flashed 1 inch					
30	D ^s d ^s d ^s 2 1/2 d ^s					
✓ 6	Anvils, Large, for Smiths					
8	Prises, for Carpenters, with 42 Bits					Can be supplied by other
4	Billows, for Smiths, Large size					Cut with 18 Bits each.
* 6	Cramps, for Carpenters, Common size					
✓ 36	Compasses, for Carpenters					
✓ 144	Files, Hand Saw					
✓ 72	D ^s Trench d ^s					
* 144	D ^s Crook Cut d ^s					
288	D ^s Bit d ^s					
100	D ^s Flat for Smiths 18 inches long					
100	D ^s d ^s " d ^s 16 " d ^s					
100	D ^s d ^s " d ^s 15 " d ^s					
150	D ^s d ^s " d ^s 14 " d ^s					
125	D ^s d ^s " d ^s 13 " d ^s					
115	D ^s d ^s " d ^s 12 " d ^s					Coarse Cut
100	D ^s d ^s " d ^s 11 " d ^s					
80	D ^s d ^s " d ^s 10 " d ^s					
70	D ^s d ^s " d ^s 9 " d ^s					
60	D ^s d ^s " d ^s 8 " d ^s					
50	D ^s d ^s " d ^s 7 " d ^s					
150	D ^s d ^s " d ^s 16 " d ^s					
140	D ^s d ^s " d ^s 15 " d ^s					Coarse Cut
120	D ^s d ^s " d ^s 14 " d ^s					
100	D ^s d ^s " d ^s 13 " d ^s					
100	D ^s Three Square d ^s 16 " d ^s					
100	D ^s d ^s " d ^s 15 " d ^s					
100	D ^s d ^s " d ^s 14 " d ^s					Coarse Cut
100	D ^s d ^s " d ^s 13 " d ^s					
100	D ^s d ^s " d ^s 11 " d ^s					
170	D ^s Half Round d ^s 16 " d ^s					
160	D ^s d ^s " d ^s 15 " d ^s					Coarse Cut
120	D ^s d ^s " d ^s 14 " d ^s					

60,000 Nails, Throught, best quality 12 dy
 ✓ 60,000 D^o " " 10 dy
 60,000 D^o " " 16 dy
 200,000 D^o Shingle, best cut
 60 Gallons Oil, Train
 * 4000 Port-Pies, or Tugs for Miners
 600 Shovels, Spish, Long Handles, with pointed Mouths
 600 D^o " English, Short Handles
 ✓ 1000 Spades, Short Handles, with Bow Heads, Square Mouthed
 * 12 Axes, Pit with Boxes and Fellers, Complete
 * 36 D^o Hand, best East Steel
 * 36 D^o Saxon " " "
 ✓ 25 D^o Edge Cut " " "
 50 D^o Frame, Canadian, for cutting Fir Wood 2 1/2 Feet long
 20 Stoves, Single, 3 Feet long
 20 D^o " 2 1/2 " "
 10 D^o " 2 " "
 20 Boxes Sheet Iron, finished, for stove Pipes in Boxes
 10 D^o " " Single in Boxes
 * 10 D^o " " Double in "
 * 6 Ties Large, for Smiths
 ✓ 6 D^o " " " Carpenters
 * 6 Rims Wire, for stove pipes
 12 Wrenches, Screw, 18 in; long
 6 Iron Ankle Blocks, with Wreath Sheaves to take 2 in ^{1/2} dia diameter
 6 D^o Double " " " "
 100 Chalkstone Newcastle coals, best quality for Smiths

Encl J. D.

P. W. B.
 Capt. Roy. Engineers
 C³ in charge of P. W. B.

Note The articles marked thus ✓ can be supplied from Montreal.

The articles marked thus * can be supplied from Quebec.

J. Francis Lefan Esq.
 Ordnance Store Keeper
 Montreal

Duplicate

15
 Royal Engineers Office C-50
 Rideau Canal 22nd Dec^r 1829

Required for carrying on the Service of the Rideau Canal for the Year 1830. the undermentioned tools & Materials.

No. 4	Anvils for Smiths large	
455	Axes felling American Make	
150	Baw Pumping for Miners 3 feet long	
3	Bellows large for Smiths. with Metal Backs <i>Blue Iron complete</i>	
X 24	Brushes Painters large pound (1000)	
8	itto Sash Tools Sizes No 5	
X 6	itto " " " " 6	
4	itto " " " " 7	
X 3	itto " " " " 8	
X 24	itto Camel Hair Pencils for lettering or writing in oil	
✓ 12	itto Whitewash stock or flat 6 Inches wide Leather bound	
50	Chisels Masons best cast steel $\frac{3}{4}$ Inch	
50	itto " " " " 1	
50	itto " " " " $1\frac{1}{4}$	
50	itto " " " " $1\frac{1}{2}$	
50	itto " " " " $1\frac{3}{4}$	
50	itto " " " " 2	
50	itto " " " " $2\frac{1}{4}$	
50	itto " " " " $2\frac{1}{2}$	
50	itto Points " " " $1\frac{1}{4}$ lbs Weight each	
50	itto " " " " $1\frac{1}{2}$ " "	
100	Drills Hand Miners 6 feet long double ends and built in the middle well shod 23 lbs each	
100	itto " 5 feet " 18 lbs " "	
576	Files Hand Saw best cast steel 6 Inches long $\frac{1}{3}$ Squared	
255	itto Whip Saw " " " 7 " " $\frac{1}{2}$ Round	
X 144	itto Tennon Saw " " 4 " " $\frac{1}{3}$ Square	

		C-50	
No 50	Hammer Sledge for Smiths	10 th	Weight each
50	ditto " " "	12 th	"
12	ditto for Masons or Blocking Ham ^{rs}	8 th	each
X 12	ditto for Miners	2 1/2 th	each
Hammer 96	Lines Maschard for Masons		
Net 100	Mattocks common with the cutting part set or reversed		
50	Maxim Miners. Swedish Iron, with Eyes or Bricks		
	from 1/2 inch thick to a point 4 feet long		
25	Pick Miners with 2 points 1 1/2 feet " 8 th		each
36	Rules 2 feet Carpenters with 6 inch Joints		
12	ditto 3 feet " 3 rd with 8 inch joints or parts		
25	Shovels Irish or long handles pointed mouths		
X 100	ditto English or short ditto with Bow heads square		mouths
X 1	Views large Iron for Smiths		
X 12	Views Hammers		
Materials			
Barrel 400	Gunpowder large grain for Miners use not more than		
	100 Barrels to be forwarded at one time in Barrels of 100		each
Box 10	Glass (4 th Crown) Boxes to contain 100 feet 7 1/2 x 8 1/2		
Iron 10	English Iron	Flat 5 In x	1 In
8	ditto " "	" 5" x	7/8
6	ditto " "	" 5" x	1/2
10	ditto " "	" 5" x	3/8
6	ditto " "	" 2" x	3/8
6	ditto " "	" 2 1/2 x	3/8
5	ditto " "	" 2 x	1/2
4	ditto " "	" 2 x	1/4
5	ditto " "	Round 1 3/4 inch	
10	ditto " "	" 1 1/2 "	
10	ditto " "	" 1 1/4 "	
6	ditto " "	" 1 1/8 "	
15	ditto " "	" 1 "	
4	ditto " "	" 5/8 "	
4	ditto " "	" 1/2 "	

9 1/2 x 10 1/2 inch & 10 1/2 x 10 1/2 inch
 4 inch to 10 1/2 x 10 1/2 inch

No. X 25	Leather Bagel Skins for Aprons for Carpenters	C-50
" X 25	ditto " " for " for Smiths	
" X 25	ditto " " for " for Masons	
X 12	Santons Tin large	
6	Ladles Iron to hold one quart each	
Iron X 11	Lead Pig	
200,000	Nails Spike 7 inch long common	(7 1/2 inch can be supplied from Quebec)
X 15,000	ditto " - 6 " - "	
200,000	ditto Shingle best cut	
X 51,000	ditto Clash assorted sizes and of each an equal No	
" 15,000	ditto Brads 3/4 of an inch	
15,000	ditto " 1/2 " "	
15,000	ditto " 3/4 " "	
✓ 15,000	ditto " 1 inch	
X 15,000	ditto " 1 1/4 "	
✓ 15,000	ditto " 1 1/2 "	
✓ 40,000	ditto Wrought best quality	28 th
40,000	ditto " " "	20 th
30,000	ditto " " "	16 th
41,000	ditto " " "	12 th
X 10,000	ditto " " "	10 th
but ✓ 12	Oilum	
Gallons 20	Oil Linseed Boiled	
" X 20	ditto Sweet	
" 100	ditto Turp	
No. 1000	Post fixed, or Tubes for Minors	
lbs 448	Patty best quality made with Linseed Oil in Bladders of 14 each	
Hogs 100	Paint White Lead ground in oil, in Hogs of 28 lbs each	
" 25	ditto Spanish Brown " " " of 28 lbs each	
to X 224	Resin	
but 4	Span Yarn	

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Quires X2	Sand Paper	No 1	one y ^d from Montreuil
" X2	ditto ditto	" 2	" " "
" X2	ditto ditto	" 3	" " "

Gallons 5 X Spirits of Turpentine
lbs 3.56 X Whiting

Fathom ~~44~~ Chains for Capstans of Lock Gates 1/2 Inch Steel
" " " " " Reven Patent
~~" 44 ditto~~ " " " " 5/8 inch

The Chain not required as per Letter
of the 15 May from L^t Col By us as
Pattern of the chain required will
be sent the towing? at Montreuil

Wm By
Lt Colonel Royal Engineer
Commanding Bureau Canal

27 July 1830 -
Submitted for Approval
in consequence of Lt Col By's
Letter of 15 May 1830 stating that
the wheels are wanted immediately.
The requisition is expedited & shall
be sent in as soon as received
from the Ordnance.

The wheels mounted there ✓ can be supplied from
Duckee

The wheels mounted there ✓ can be supplied from Montreuil

J. J. Colclough On Perm
L. Colclough 10d Per
Approved by Commanding W. Dunsford
1st & Commr E. W. Dunsford
M. L. J. Colclough
Comd. W. A.

M. L. J. Colclough is requested to state in place
what he can supply from Montreuil that a
demand may be made on England for the
remainder with the piece price of such stores
as can be obtained at Montreuil from Purchases
that are not in the Ordnance Depot

Duckee 16 Jan^y 1830
S. Edw. 10 Oct.

B. S. 1399

Endnotes

Prologue

- 1 McGill University, McLennan Library, Hardinge mss., M, Canada, Wellington to Bathurst, 1 March 1819.

- 2 Great Britain. Parliament. House of Commons. Select Committee on Papers Relating to the Rideau Canal, *Report from the Select Committee Appointed to Take Into Consideration the Accounts and Papers Relating to the Rideau Canal...*, Parliamentary Papers, 1830-31, No.395.([London: n.p., 1831]) (hereafter cited as Great Britain, *Report from the Select Committee*, 1831) p. 3.

- 3 Canada. Parliament. House of Commons, "Canal Commission: - Copy of the Instructions Given to the Commissioners Appointed to Enquire Into the Subject, &c., and Their Report," Sessional Papers, 1871, Vol. 14, No. 54 (Ottawa: [Queen's Printer], 1871) (hereafter cited as Canada, "Canal Commission," 1871), P. 13.
 Length of system: 126-1/2 miles
 Locks: 47
 Lockage rise, Kingston to height of land: 164 feet
 Lockage drop, height of land to Ottawa River: 282-1/4 feet
 Depth of water on sills: 5 feet navigable depth, 4-1/2 feet through canal
 Bottom width of canal: 80 feet
 Lock dimensions: 134 feet by 33 feet.

- 4 Canada. Public Archives (hereafter cited as PAC), RG8, C series, Vol. 426, p. 156.

- 5 P.A. Camp, "Canada's Tribute to Lieut-Colonel John By, Royal Engineers," *The Royal Engineers Journal*, Vol. 85 (1971), p. 242.
- 6 PAC, MG12, W044, Vol. 15, p. 5.
- 7 Sir James Edward Alexander, *Transatlantic Sketches; Comprising Visits to the Most Interesting Scenes in North and South America, and the West Indies, with Notes on Negro Slavery and Canadian Emigration* (London: R. Bentley, 1833), Vol. 2, pp. 179-80.
- 8 Charles S. Blue, "John By: Founder of a Capital," *The Canadian Magazine*, Vol. 38, No. 6 (April 1919), pp. 573-9.
- 9 H.R. Morgan, "The Story of Colonel By, Founder of the City of Ottawa," *Saturday Night*, 29 Aug. 1925, general section, p. 3.
- 10 C.S. Blue, op. cit.
- 11 PAC, MG12, W044, Vol. 18, pp. 9-10.
- 12 Ibid., Vol. 16, pp. 24-5. The Commissariat officer, acting for the crown, let all contracts. The Commissariat was a branch of the Treasury, and the Commissariat officer was a civilian, stationed (in this instance) at Quebec City. The Engineer department was under the command of the Board of Ordnance.
- 13 Ibid., p. 26.
- 14 PAC, MG11, C042, Vol. 379, p. 134.
- 15 PAC, MG12, W044, Vol. 24, p. 506.
- 16 Ibid., Vol. 19, p. 105.
- 17 Whitworth Porter, *History of the Corps of Royal Engineers* (London: Longmans, Green, 1889), Vol. 1, p. 143.
- 18 Edward Charles Frome, "Account of the Causes which led to the Construction of the Rideau Canal, Connecting the Waters of Lake Ontario and the Ottawa; the Nature of the Communication Prior to 1829; and a Description of

- the Works by Means of which it is Converted into a Steamboat Navigation," *Papers on Subjects Connected with the Duties of the Corps of Royal Engineers*, Vol. 1 (1844), pp. 69-98.
- 19 Thomas William John Connolly, *The History of the Corps of Royal Sappers and Miners* (London: Longman, Brown, Green and Longmans, 1855), Vol. 1, pp. vi, 1-3.
 - 20 Ibid., Vol. 2, Appendix I, p. 291.
 - 21 Ibid., Vol. 1, p. 252.
 - 22 PAC, RG8, C series, Vol. 44, pp. 138-9.
 - 23 PAC, MG12, W044, Vol. 19, pp. 88-9.
 - 24 PAC, RG8, C series, Vol. 435, p. 159.
 - 25 Charles M. Clode, *The Military Forces of the Crown: Their Administration and Government* (London: J. Murray, 1869), Vol. 2, p. 34. The Royal Staff Corps was on the establishment of the Horse Guards and reported to the Quartermaster General, whereas the Royal Engineers answered to the Board of Ordnance.
 - 26 Robert Ferguson Legget, *Rideau Waterway* (Toronto: University of Toronto Press, 1955), p. 41, quote from a newspaper advertisement of 1827.
 - 27 PAC, RG8, C series, Vol. 79, pp. 112-3.
 - 28 John MacTaggart, *Three Years in Canada: An Account of the Actual State of the Country in 1826-7-8, Comprehending its Resources, Productions, Improvements, and Capabilities; and Including Sketches of the State of Society, Advice to Emigrants, &c.* (London: H. Colburn, 1829), Vol. 1, p. 324.
 - 29 PAC, RG8, C series, Vol. 47, p. 251.
 - 30 E.C. Frome, op. cit., pp. 69-98.
 - 31 R.F. Legget, op. cit., pp. 166-7. Phillips's services were sought by the government for work on the Grenville Canal, but he refused on the grounds that the Royal Staff Corps had not sufficient experience for a work of

that scope and that he would be subject to too much interference.

- 32 Great Britain, *Report from the Select Committee*, 1831, p. 47. Legget quotes a contract taken out by William Hartwell, a document which is said to be in the Public Archives of Canada. Since Legget's work is not documented, this cannot be verified. I was unable to find the contract in any of the likely sources.
- 33 Great Britain. *Parliament Reports, Returns, and Other Papers, Presented to the Imperial Houses of Parliament of Great Britain and Ireland relating to Canada....* (London: P.G. King, pr. [1830]) (hereafter cited as Great Britain, Imperial Blue Books), Vol. 3, Appendix 10, Ordnance office, 13 June 1832, p. 43.
- 34 A number of writers refer to Irish labour. Colonel By referred to trouble "with the lower class of Irish"; see PAC, RG8, C series, Vol. 43, pp. 13-4. The Reverend William Bell in his diaries (Queen's University, Vol. 70, p. 70) describes Irish labourers at Kingston Mills, as does J.E. Alexander, a contemporary observer (op. cit., passim). The granddaughter of James Fitzgibbon, the adjutant general, described the pick-and-shovel men as Irish. Thomas McKay, one of the principal contractors, recalled in 1837 that two-thirds of his 100- to 300-man labour force at Bytown were Irish (see Lucien Brault, *Ottawa Old and New* [Ottawa: Ottawa Historical Information Institute, 1946], passim). Other secondary sources which document Irish labour include Andrew Haydon, *Pioneer Sketches in the District of Bathurst* (Toronto: Ryerson Press, 1925), passim, and Wilfrid Eggleston, *The Queen's Choice; a Story of Canada's Capital* (Ottawa: Queen's Printer, 1961), passim. In the absence of comprehensive pay lists or nominal

rolls, however, a definitive statement on the subject cannot be made.

- 35 V.A. George, "The Rideau Corridor, 1832-98," unpublished M.A. Thesis, Queen's University, 1951.
- 36 *U.E. Loyalist* (York), 24 Feb. 1827, from *Montreal Herald*.
- 37 PAC, RG8, C series, Vol. 52, p. 72.
- 38 Edward John Barker, *Observations on the Rideau Canal* (Kingston: Office of *British Whig*, 1834), p. 31.
- 39 Queen's University Archives, William Bell diaries, Vol. 6, p. 176.
- 40 Ibid., Vol. 8, p. 28.
- 41 Ibid., Vol. 7, p. 70.
- 42 PAC, RG8, C series, Vol. 43, pp. 13-4.
- 43 A. Haydon, op. cit., p. 161.
- 44 PAC, MG24, A12, Dalhousie Papers, Vol. 13, part 2, Pooley to Dalhousie, 10 June 1827.
- 45 L. Brault, op. cit., p. 65.
- 46 *Kingston Chronicle*, 3 Nov. 1826, p. 2.
- 47 Ibid.
- 48 Ontario. Public Archives (hereafter cited as Ontario Archives), Baird Papers, Part I, A-2, field notes by John Burrows, Aug. 1827.
- 49 Ibid., 5 July 1828-30 March 1829.
- 50 PAC, RG8, C series, Vol. 53, pp. 146a, 146.
- 51 J. MacTaggart, op. cit., Vol. 2, pp. 245-6.
- 52 Queen's University Archives, Bell diaries, Vol. 7, P. 6.
- 53 *Gazette* (Brockville, Ont.), 4 Dec. 1829.
- 54 Jacob Edward Schmidt, *Medical Discoveries: Who and When; a Dictionary Listing Thousands of Medical and Related Scientific Discoveries in Alphabetical Order....* (Springfield, Ill.: Thomas, 1959), p. 284.
- 55 Hugh Ernest MacDermott, *One Hundred Years of Medicine in*

- Canada (Toronto: McClelland and Stuart, 1967), p. 22.
- 56 Mark F. Boyd, "An Historical Sketch of the Prevalence of Malaria in North America," *The American Journal of Tropical Medicine*, Vol. 21 (1941), pp. 236-7.
- 57 J. MacTaggart, op. cit., pp. 17-8.
- 58 Isabel Skelton, *A Man Austere: William Bell, Parson and Pioneer* (Toronto: Ryerson Press, 1947), p. 257.
- 59 *Canadian Freeman* (Toronto), 18 Jan. 1827, p. 3.
- 60 PAC, RG8, C series, Vol. 297, p. 37.
- 61 PAC, MG12, W044, Vol. 15, p. 36.
- 62 Ibid., pp. 22-3.
- 63 Ibid., p. 34.
- 64 PAC, MG29, B6, Vol. 1, Drummond papers, p. 9.
- 65 V.A. George, op. cit., pp. 70-1.
- 66 *U.E. Loyalist* (York), 22 Dec. 1827, reprinted from *Gazette* (Montreal).
- 67 Charles Pope, *Incidents Connected with Ottawa City and Vicinity* (Ottawa: Hunter, Rose, pr., 1868), p. 23.
- 68 *Canadian Courant* (Montreal), 20 Oct. 1830.
- 69 *Gazette* (Brockville, Ont.), 1 Sept. 1831.
- 70 Queen's University Archives, Bell diaries, Vol. 8, p. 62.
- 71 Ibid., Vol. 17, p. 112.
- 72 Ibid., p. 114.
- 73 Ibid., p. 121.
- 74 Michael S. Cross, "The Shiner's War: Social Violence in the Ottawa Valley in the 1830s," *Canadian Historical Review*, Vol. 54 (1973), p. 10.
- 75 *Independent Examiner and Bathurst District Advertiser* (Perth, Ont.), 11 Sept. 1829.
- 76 Ibid., 1 Jan. 1830.
- 77 Ibid., 22 Jan. 1830.

The Canal and Its Builders

- 1 PAC, RG8, C series, Vol. 42, p. 151.
- 2 Great Britain, Imperial Blue Books, Vol. 3, Canada Canal Communication, copies of correspondence, No. 28, Smyth to Mann, 17 Aug. 1826.
- 3 PAC, RG8, C series, Vol. 42, p. 103.
- 4 Ibid., Vol. 43, pp.215-6.
- 5 H.R. Morgan, op. cit., p. 3.
- 6 PAC, MG24, H12, John Burrows's sketchbook, p. 104.
- 7 Ibid., p. 156.
- 8 PAC, RGB, C series, Vol. 44, pp. 80, 83.
- 9 PAC, MG24, E6, John MacTaggart papers, file No. 1, document No. 2.
- 10 *Kingston Chronicle*, 25 May 1827, p. 3.
- 11 PAC, MG24, A12, Dalhousie Papers, Vol. 14, cornerstone ceremony, 3 October 1827.
- 12 Great Britain, Imperial Blue Books, Vol. 3, No. 325.
- 13 PAC, MG12, W044, Vol. 19, pp. 143-5.
- 14 PAC, RG8, C series, Vol. 44, p. 142.
- 15 PAC, MG12, W044, Vol. 2, pp. 197-8.
- 16 George Raudzens, "The British Ordnance Department in Canada, 1814-55," Ph.D. thesis, Yale University, 1970.
- 17 PAC, RG7, G2, Vol. 1, p. 55.
- 18 Great Britain, Imperial Blue Books, Vol. 3, No. 38, p. 48.
- 19 PAC, MG24, A12, Dalhousie Papers, Vol. 30, Kempt to Dalhousie, 16 April 1828.
- 20 Queen's University Archives, Bell diaries, Vol. 6, p. 51.
- 21 PAC, MG12, W044, Vol. 15, pp. 17-8.
- 22 Ibid., pp. 19-20.
- 23 Gazette (Montreal), 2 Oct. 1828.
- 24 PAC, MG12, W044, Vol. 15, p. 23.
- 25 PAC, MG24, A12, Dalhousie Papers, Vol. 17, part 2, By

- to Col. Ramsay, 7 Dec. 1828.
- 26 PAC, RG8, C series, Vol. 46, P. 119.
 - 27 Great Britain, Imperial Blue Books, Vol. 3, No. 72.
 - 28 J.E. Alexander, op. cit., Vol. 2, pp. 182-3.
 - 29 Great Britain, Imperial Blue Books, Vol. 3, No. 72.
 - 30 PAC, MG24, A12, Dalhousie Papers, Vol. 18, part 1, Couper to Dalhousie, 20 Aug. 1829.
 - 31 PAC, RG8, C series, Vol. 50, p. 6.
 - 32 Ibid., p. 5.
 - 33 *Gazette* (Brockville), 5 Feb. 1830.
 - 34 *Canadian Courant* (Montreal), 20 Feb. 1830.
 - 35 Great Britain, Imperial Blue Books, Vol. 3, No. 124.
 - 36 PAC, MG12, W044, Vol. 27, pp. 239-40.
 - 37 PAC, RG8, C series, Vol. 53, pp. 84-5.
 - 38 PAC, MG12, W044, Vol. 27, p. 426.
 - 39 PAC, RG8, C series, Vol. 52, pp. 151-2.
 - 40 Great Britain, Imperial Blue Books, Vol. 3, No. 123.
 - 41 Since MacTaggart continued to draw his pay as Clerk of Works until he had returned to England, his successor was not entitled to this increase until that time.
 - 42 PAC, RG8, C series, Vol. 52, P. 83.
 - 43 *The Vindicator and Canadian Advertiser* (Montreal), 4 Nov. 1831, P. 3.
 - 44 Edith J. Hind, "Troubles of a Canal-BUILDER: Lieut.-Col. John By and the Burgess Accusations," *Ontario History*, Vol. 58 (1965), p. 143.
 - 45 PAC, MG12, W044, Vol. 26, p. 179.
 - 46 Ibid., p. 183.
 - 47 Ibid., pp. 147-8.
 - 48 Ibid., Vol. 27, p. 130.
 - 49 *Gazette* (Brockville), 1 March 1832.
 - 50 PAC, MG12, W044, Vol. 27, p. 52.
 - 51 Ibid., pp. 78, 83.
 - 52 Ibid., pp. 27-8.

53 Ibid., pp. 9-11.

54 *Canadian Courant* (Montreal), 1 May 1830.

55 PAC, MG12, W044, Vol. 18, P. 482. The return of sick from 1 Aug. to 15 Sept. 1830 is as follows:

Station	Type	Number employed	Number sick	Deaths
Kingston Mills	Engineer	1	1	-
	Contract	388	217	16
Brewer's Lower Mills	Engineer	--	--	-
	Contract	84	37	1
Brewer's Upper Mills	Engineer	2	2	--
	Contract	133	55	1
Jones Falls	Engineer	1	1	--
	Contract	250	130	2
Davis Mills	Engineer	5	5	--
	Contract	40	26	3
Chaffey's Mills	Engineer	--	--	--
	Contract	70	70	--
Isthmus	Engineers	2	1	1
	Commissariat	1	--	--
	7th Company	59	32	8

It should be noted that the figures for those employed are maximum figures in a fluctuating total; also, the fatality figures include dependents, who are not separately listed for lack of space.

During this period (1 Aug. to 15 Sept.) of a total work force of between 324 and 1,316, no fewer than 787 people fell ill of the ague, 55 died (27 men, 13 women, 15 children) and there were 89 relapsed cases. Hence the mortality rate was 4.1 per cent and the proportion sick 59.8 per cent.

56 *Kingston Chronicle*, 16 Oct. 1830, p. 3.

- 57 PAC, RGB, C series, Vol. 50, p. 217.
- 58 Ibid., Vol. 47, pp. 279-82, passim.
- 59 Queen's University Archives, Bell diaries, Vol. 8, p. 19.
- 60 Harry James William Walker and Olive Walker, *Carleton Saga* (Ottawa: Carleton County Council, 1968), pp. 119-20.
- 61 Canada. Department of Indian and Northern Affairs. National Historic Parks and Sites Branch, letterbook, "Construction of the Rideau Canal," on file, letter of 3 Jan. 1831.
- 62 Ibid., 14 Jan. 1831.
- 63 Ibid., 19 April 1831.
- 64 *Gazette* (Brockville), 11 Aug. 1831.
- 65 *Upper Canada Herald* (Niagara and Toronto), 16 Nov. 1831.
- 66 *Canadian Courant* (Montreal), 4 and 11 May 1831.
- 67 Ibid.
- 68 E.J. Barker, op. cit., p. 10.
- 69 *Gazette* (Brockville), 13 Oct. 1831.
- 70 PAC, RG8, C series, Vol. 141, pp. 278-9.
- 71 William Lyon Mackenzie, *Sketches of Canada and the United States* (London: E. Wilson, 1833), p. 320.
- 72 PAC, MG12, W044, Vol. 16, p. 95. Of the 71 Royal Sappers and Miners discharged on the Rideau, 49 petitioned for land.
- 73 Ibid., p. 100. While 71 Royal Sappers and Miners chose to be discharged in Canada, 26 opted for returning to England. In 1834 11 of the latter were still with the regiment.
- 74 Ibid.
- 75 T.W.J. Connolly, op. cit., Vol. 1, p. 266.
- 76 Ibid., Vol. 2, pp. 320-1.
- 77 *Recorder* (Brockville, Ont.), 31 May 1832.

- 78 H.R. Morgan, op. cit., p. 3.
- 79 Canadian Watchman (Kingston), 7 June 1832.
- 80 PAC, MG12, W044, Vol. 20, pp. 65-70, passim, and pp. 158-60. The following staff appointments were made in 1832 on the completion of the canal:

Capt. Bolton	succeeded By
J. Burrows	Overseer of Works
Fitzgibbons	master carpenter
Formay	master smith
Clegg	Clerk of Cheque
William Addison	lockmaster, Bytown (sgt., 7th Company)
William Clyma	lockmaster, Hartwells (cpl., 15th Company)
Thomas Jenkins	lockmaster, Hogs Back (cpl., 15th Company)
William Newton	lockmaster, Black Rapids (had lost a hand)
William Mitchell	lockmaster, Burritt's Rapids (cpl., 15th company)
Richard Frayne	lockmaster, Nicholson's (good workman)
Daniel Buck	lockmaster, Clowe's (carpenter)
Thomas Buck	lockmaster, Merrick's Mills
James Maitland	lockmaster, Maitland's Rapids (former sgt.)
Edward Mills	lockmaster, Edmund's Rapids
John Jones	lockmaster, Old Slys (cpl., 15th Company)
J. White	lockmaster, Smiths Falls (pvt., 15th Company)
Alex. Kirminmouth	lockmaster, Smiths Falls
James Rutly	lockmaster, First Rapids

A Sands	lockmaster, Narrows
D. McDonald	lockmaster, Isthmus (cpl., 7th Company)
William Flemming	lockmaster, Chaffey's Mills (cpl., 7th Company)
G. Monin	(or Morin) lockmaster, Davis Mills
Thomas Gunn	lockmaster, Brewer's Lower Mills (cpl., 7th company)
Capt. Briscoe	Engineer officer, Kingston Mills
G. Hay	lockmaster, Kingston Mills (cpl., 7th Company)
John Sergeant	miner
Thomas Fenn	carpenter
Robert Gray	miner
Alexander Burns	plumber
James Boundy	miner
George Sims	mason, Bytown (pvt., 15 th Company)
Robert Clements	miner, Bytown
John Porteous	wheeler, Bytown
Michael Howe	miner, Bytown
John Smith	carpenter, Bytown (pvt., 7th Company)
Thomas Hunter	sgt., 71st Regt., Bytown
Daniel Boyle	miner, Bytown
Martin McPherson	paymaster (presumably)
Henry Bullin	Hartwell's (pvt., 15th Company)
Roderick McKay	cooper, Bytown
Robert Jones	cooper, Hogs Back (pvt., 15th Company)
David Mitchell	miner, Hogs Back
Stephen Simmonds	miner, Hogs Back

John Newman	miner, Merrick's Mills (pvt., 15th Company)
Thomas Newman	miner, Merrick's Mills (pvt., 15th Company)
Samuel Spry	miner, Merrick's Mills (pvt., 15th Company)
Thomas Burke	Maitland's Rapids
Aaron Davis	Maitland's Rapids
Michael Roche	Edmund's Rapids
Michael Smith	Edmund's Rapids
Christopher Foster	Edmund's Rapids
James Hume	miner, Davis Mills (pvt., 7th Company)
Robert Gilvear	stonecutter, Jones Falls (pvt., 7th Company)
John McDonald	collar maker, Jones Falls (pvt., 7th Company)
Robert Mitchell	cooper, Jones Falls (pvt., 7th Company)
Thomas Duffy	carpenter, Jones Falls (pvt., 7th Company)
John Ayres	wheelwright, Brewer's Upper Mills (pvt., 7th Company)
William Fraser	block maker, Brewer's Upper Mills (pvt., 7th Company)
David Nesbit	painter, Brewer's Upper Mills (pvt., 7th Company)
John Fraser	miner, Brewer's Lower Mills
George Hay	lockmaster, Kingston Mills (cpl., 7th Company)
Thomas Finn	carpenter , Kingston Mills (cpl., 7th Company)
Peter Connie	labourer, Smiths Falls
Archibald Sands	Narrows

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|------------------|---|
| William Mitchell | bricklayer, Burritt's Rapids |
| William Flowers | collar maker, Burritt's Rapids (pvt., 15th Company) |
| James Dykes | painter, Burritt's Rapids (pvt., 15th Company) |
| George Hamilton | painter, Burritt's Rapids, (pvt., 15th Company) |
| William Burke | labourer, Nicholsons Rapids |
| Anthony Owen | labourer, Nicholsons Rapids |
| Patrick Real | labourer, Nicholsons Rapids |
- 81 Robert Christie, *A History of the Late Province of Lower Canada, Parliamentary and Political, from the Commencement to the Close of Its Existence as a Separate Province...* (Quebec: T. Cary, 1848-55), Vol. 3, pp. 420-1.
- 82 Great Britain, Imperial Blue Books, Vol. 3, copy of Treasury minute, 25 May 1832.
- 83 Gazette (Quebec), 26 Oct. 1832, p. 1.
- 84 PAC, MG24, E6, John MacTaggart, file No. 1, item No. 1.

Postscript

- 1 V.A. George, op. cit., p. 60.
- 2 G. Raudzens, op. cit., pp. 180-1.
- 3 PAC, MG12, W044, Vol. 16, p. 34.
- 4 Ibid., p. 36.
- 5 Ibid., Vol. 15, pp. 360-3.
- 6 Ibid., p. 355.
- 7 Ibid., p. 372.
- 8 Ibid., Vol. 16, p. 19.
- 9 G. Raudzens, op. cit., p. 194.
- 10 PAC, MG12, W044, Vol. 16, p. 39.
- 11 Ibid., p. 30.
- 12 Ibid., Vol. 15, p. 39.

- 13 PAC, MG24, 19, Hill Collection, Vol. 12, P. 3756.
- 14 Personal communication from Mrs. J.A. Brent, East Sussex Record Office, Lewes, Sussex.
- 15 PAC, MG24, 19, Hill Collection, Vol. 12, p. 4072.
- 16 Robert Bruce Haig, *Ottawa, City of the Big Ears; the Intimate, Living Story of a City and a Capital* (Ottawa: n.p., 1970), p. 73, quoting *Ottawa Free Press*, 23 July 1912.
- 17 E. Taylor, "Colonel John By Scrapbook," on file, Bytown Museum, Ottawa.
- 18 P.A. Camp, op. cit., p. 238.
- 19 Ibid. , p. 242.

Biographical Sketches

- 1 PAC, MG24, 19, Hill Collection, Vol. 28, p. 6713.
- 2 R. Legget, op. cit., pp. 69-70.
- 3 P.A. Camp, op. cit., passim.
- 4 Canadian Courant (Montreal), 7 June 1826, p. 2.
- 5 PAC, MG12, W044, Vol. 16, pp. 31, 39.
- 6 Richard Fielding Edwards, ed., *Roll of Officers of the Corps of Royal Engineers from 1660 to 1898, compiled from the Ms. of T.W.J. Connolly, and Brought Up to Date in the Office of the R.E. Institute, Chatham....* (Chatham: Royal Engineers Institute, 1898), p. 20.
- 7 PAC, RG8, C series, Vol. 42, p. 69.
- 8 PAC, MG12, W044, Vol. 26, p. 211.
- 9 PAC, RG8, C series, Vol. 51, pp. 244-5.
- 10 R. Legget, op. cit., p. 165.
- 11 PAC, RG8, C series, Vol. 50, p. 6.
- 12 R.F. Edwards, op. cit., p. 21.
- 13 PAC, MG12, W044, Vol. 15, pp. 19-20.
- 14 Ibid., Vol. 20, pp. 68-72, passim.
- 15 R.F. Edwards, op. cit., p. 21.

- 16 R. Legget, op. cit., pp. 44-5.
- 17 PAC, MG12, W044, Vol. 27, P. 404.
- 18 R.F. Edwards, op. cit., pp. 44-5.
- 19 R. Legget, op. cit., pp. 211-2.
- 20 Andrew Wilson, *A History of Old Bytown and Vicinity, Now the City of Ottawa* (Ottawa: Office of the Daily News, 1876), p. 27.
- 21 PAC, MG12, W044, Vol. 16, p. 100.
- 22 R.B. Haig, op. cit., p. 72.
- 23 R.F. Edwards, op. cit., p. 24
- 24 *The Dictionary of National Biography*, ed. by Leslie Stephen and Sidney Lee (London: Smith, Elder, 1885-1901), Vol. 14, pp. 355-7. See also R.F. Legget, op. cit., pp. 145-6.
- 25 Ibid., p. 44.
- 26 R.F. Edwards, op. cit., p. 24. See also E.C. Frome, op. cit., passim.
- 27 PAC, RG8, C series, Vol. 42, pp. 77-8.
- 28 A. Wilson, op. cit., pp. 9-10.
- 29 PAC, RG5, A1, Upper Canada Sundries, Vol. 86, p. 47020.
PAC, RG8, C series, Vol. 44, p. 204.
- 30 R.F. Edwards, op. cit., p. 23.
- 32 *Recorder* (Brockville), 11 May 1830; see also Great Britain, Imperial Blue Books, 1830-33, Vol. 3, No. 72. -3
- 33 R.F. Edwards, op. cit., p. 19.
- 34 Ontario Archives, Baird Papers, Part 1, A-2, field notes, 5 July 1828-30 March 1829.
- 35 Ibid.
- 36 Ibid.
- 37 Ibid.
- 38 Ibid.
- 39 PAC, MG12, W044, Vol. 26, p. 210.
- 40 PAC, RG5, A1, Upper Canada Sundries, Vol. 105, p. 59544.

- 41 Ibid. , p. 59542.
- 42 Ontario Archives, Baird Papers, Part 1, A-2, correspondence file.
- 43 H.T. Douglas, "'Bits and Pieces, That's All,' John Burrows Honey: An Early Resident of Bytown," manuscript on file, Bytown Museum, Ottawa, passim.
- 44 Ibid., pp. 9-13, passim.
- 45 PAC, MG12, W044, Vol. 23, pp. 251-2.
- 46 Ibid., pp. 249-50.
- 47 F. Gertrude Kenny, "Some Account of Bytown," *Women's Canadian Historical Society of Ottawa, Transactions*, Vol. 1 (1901), p. 27.
- 48 PAC, RG5, A1, Upper Canada Sundries, Vol. 11607, p. 65430.
- 49 PAC, MG24, I106, Keefer Collection, documents relating to Ottawa, p. 15.
- 50 Ibid., p. 14.
- 51 Ibid., p. 15.
- 52 Alexander Herbert Douglas Ross, *Ottawa Past and Present* (Toronto: Musson Book, 1927), p. 55.
- 53 Ibid., p. 56.
- 54 Ibid., p. 59.
- 55 Ibid., p. 60.
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- 57 Ontario Archives, Baird Papers, Part 1, A-2, field notes, 5 July 1828-30 March 1829.
- 58 PAC, MG12, W044, Vol. 27, p. 266.
- 59 Ibid., Vol. 20, pp. 68-72.
- 60 Ibid., Vol. 24, p. 506.
- 61 Ibid., Vol. 27, p. 364.
- 62 *Citizen* (Ottawa), 21 July 1923.
- 63 PAC, RG5, A1, Upper Canada Sundries, Vol. 83, p. 44818.
- 64 PAC, MG12, W044, Vol. 19, pp. 111-2.
- 65 Ibid. , p. 113.

- 66 PAC, RG8, C series, Vol. 42, pp. 69-70.
- 67 R. Legget, op. cit., p. 40.
- 68 J. MacTaggart, op. cit., Vol. 1, p. 108.
- 69 Ibid., pp. 159-60.
- 70 PAC, MG24, E6, John MacTaggart, file No. 2
- 71 PAC, MG24, H12, John Burrows, sketchbook, p. 142.
- 72 PAC, MG24, E6, John MacTaggart, file No. 1.
- 73 Ibid.
- 74 PAC, RG8, C series, Vol. 52, pp. 102-4.
- 75 Ibid.
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- 77 PAC, RG8, C series, Vol. 45, p. 27.
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- 82 *Upper Canada Herald* (Niagara) , 8 July 1829.
- 83 *Kingston Chronicle*, 1 May 1830, p. 3.
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- 93 Ibid., p. 551.
- 94 Great Britain, Imperial Blue Books, 1830-33, Vol. 3, minutes of evidence before the Select Committee on papers relating to the Rideau Canal, 21 March 1831, examination of Lt. Col. Edward Fanshawe, p. 19.
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- 98 Ibid.
- 99 Ibid., Vol. 47, pp. 29-31.
- 100 Ibid., pp. 32-5, passim.
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- 102 Francis J. Audet, "Thomas McKay, Rideau Hall and Earnescliffe," *Canadian Historical Society, Historical Papers*, 1932, p. 6.
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- 104 George Pringle Drummond, comp., "Bytown in the Forties with Glimpses of the Thirties," scrapbook on file, Bytown Museum, Ottawa, p. 10.
- 105 F.J. Audet, op. cit., p. 5.
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- 118 Queen's University Archives, Redpath Sugar Company records, Series 4, Box 16.
- 119 R. Legget, op. cit., pp. 116-7.

- 120 PAC, RG8, C Series, Vol. 45, p. 22.
- 121 E.J. Barker, op. cit., pp. 24-6.
- 122 PAC, MG29, B6, Drummond Papers, Vol. 1, file 2, pp. 13-4.
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- 124 PAC, MG24, B6, Drummond Papers, Vol. 1, file No. 2, pp. 14-5.
- 125 Queen's University Archives, Redpath Sugar Company records, Series 4, box 16.
- 126 The Presbyterian Free Church movement originated in Scotland in the early 1840s. In the course of the movement, a number of synods broke away from the Church of Scotland. The movement gained considerable force among Scottish Presbyterians in British North America, many of whom were recent emigrants from Scotland.
- 127 *Recorder* (Brockville), 11 May 1830, p. 1.
- 128 PAC, RG8, C series, Vol. 435, p. 168.
- 129 *Recorder* (Brockville), 11 May 1830.
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- 131 *Canadian Courant* (Montreal), 2 Oct. 1830, p. 2.
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- 135 PAC, RG8, C series, Vol. 47, pp. 77-8.
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- 139 Ibid., p. 22.
- 140 John Ward Hughson and Courtney C.J. Bond, *Hurling Down the Pine; the Story of the Wright, Gilmour and Hughson Families, Timber and Lumber Manufacturers in the Hull*

and Ottawa Region and on the Gatineau River, 1820-1902, 2d ed. (rev.) (Old Chelsea, P.Q.: Historical Society of the Gatineau, 1967), P. 16.

- 141 Ibid., p. 19.
- 142 PAC, MG24, D8, Wright Papers, Vol. 17, P. 6554.
- 143 Ibid., Vol. 33, p. 14824.
- 144 PAC, RG8, C series, Vol. 55, p. 97.
- 145 PAC, MG12, W044, Vol. 8, pp. 376, 378-9.
- 146 Courtney C.J. Bond, "Alexander James Christie, Bytown Pioneer: His Life and Times, 1787-1843," *Ontario History*, Vol. 65 (1964), pp. 16-36, passim. Bond maintains that there is no evidence that Christie studied medicine, while the Encyclopedia Canadiana (Vol. 2, pp. 365-6) contends that he did. In any case, there is no doubt that Christie practiced, whether or not he was qualified to do so.
- 147 R. Legget, op. cit., p. 95.
- 148 H.B. Small, "Medical Memoirs of Bytown," manuscript on file, Bytown Museum, Ottawa.
- 149 Ibid.

Appendix A

- 1 PAC, MG12, W044, Vol. 27, pp. 265-6.

Appendix B

- 1 All the material given in this appendix is drawn from the Upper Canada Land Petitions and Books (PAC, RG1, L3) . For simplicity's sake, each individual is not documented separately. In specific instances, the reader is advised to consult the indexes to these collections. It should, however, be noted that duplication of names in these papers is very far from

Uncommon, and the researcher should take care to determine which "Alexander McDonald" or "George Smith" is involved in each case.

Appendix C

1 PAC, RG8, C series, Vol. 632, pp. 178-80

Appendix D

1 PAC, RG8, C series, Vol. 632, pp. 181

Appendix E

1 PAC, MG12, WO44, Vol. 15, fol.11

Appendix F

1 PAC, MG24, D8, Vol. 127

Appendix G

1 PAC, RG8, C series, Vol. 42, pp. 101-2, Vol. 44, pp.52-4, 122-3, Vol. 47, pp.98a-98h, Vol. 49, pp. 126-8, Vol. 50, pp. 15-8.

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MG29, B6, Drummond Papers, Vol. 1

MG24, D8, Wright Family Papers

MG24, E6, John MacTaggart Papers

MG24, H12, John Burrows, sketchbook

MG24, 19, Hill Collection, Vol. 12

MG24, 1106, Keefer Collection

MG24, 1107, Daniel O'Connor Papers

RG1, A1, Upper Canada Sundries

RG1, L3, Upper Canada Land Papers (Petitions and Books)

RG7,G2, Supplementary Dispatches from the Colonial Office

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2. Esther By. (Metropolitan Toronto Public Library).



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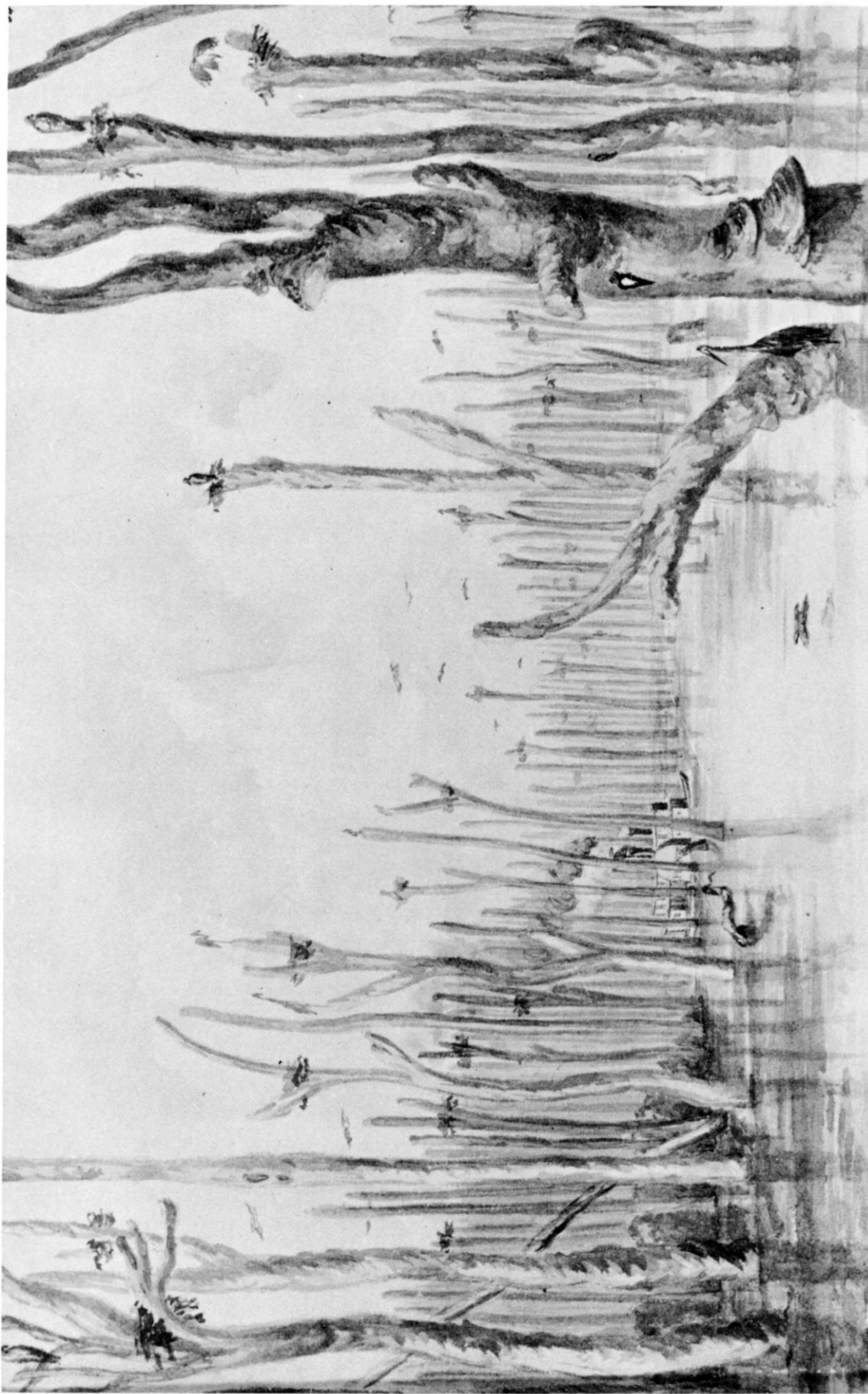
[Note: The sketch of John By on page 227 is an artistic rendering done in 1891 (for "The Dominion Illustrated") which is based on the original silhouette of John By shown below]



[Lt.] Colonel John By (1779-1836) by unknown, McCord Museum, Montreal

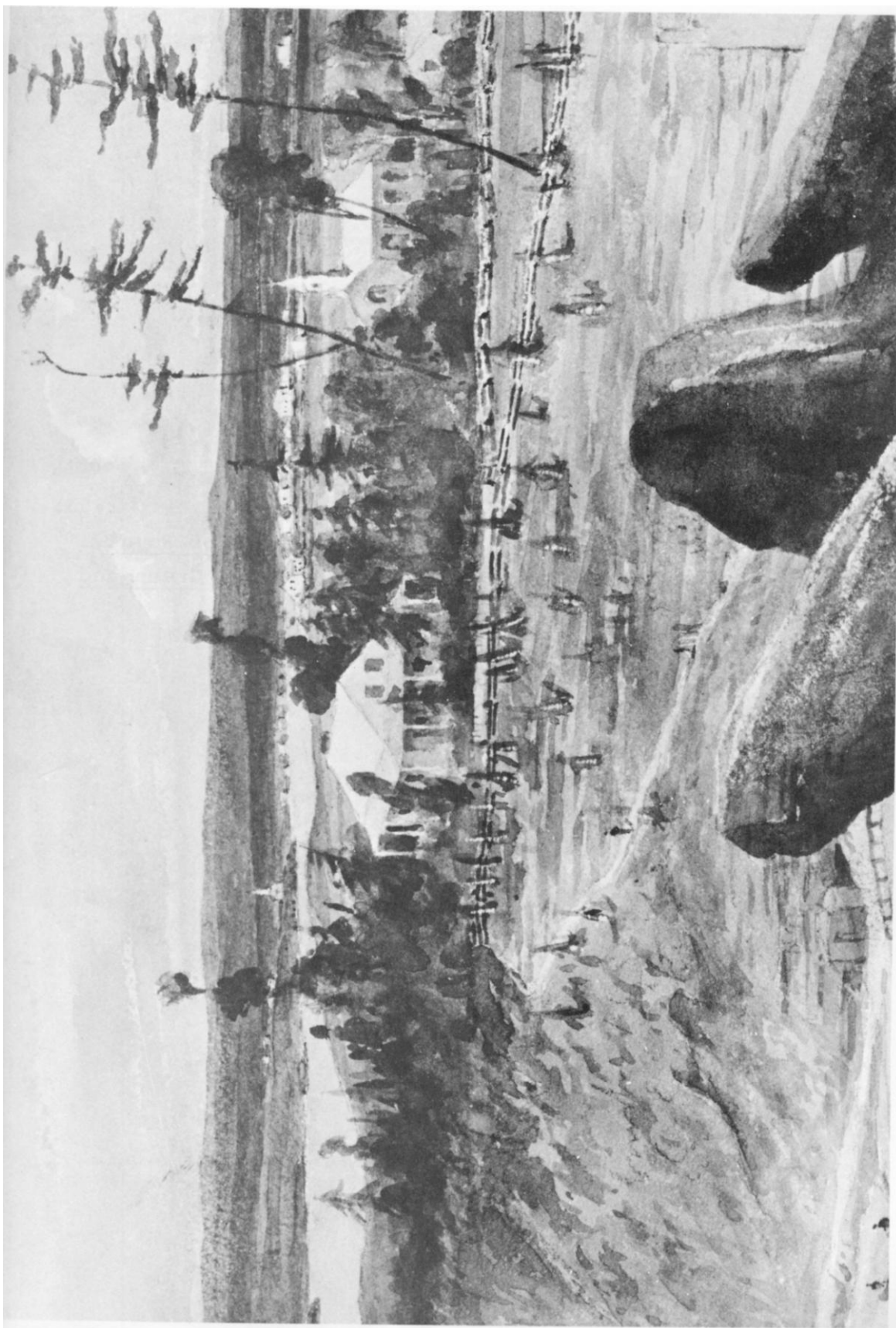


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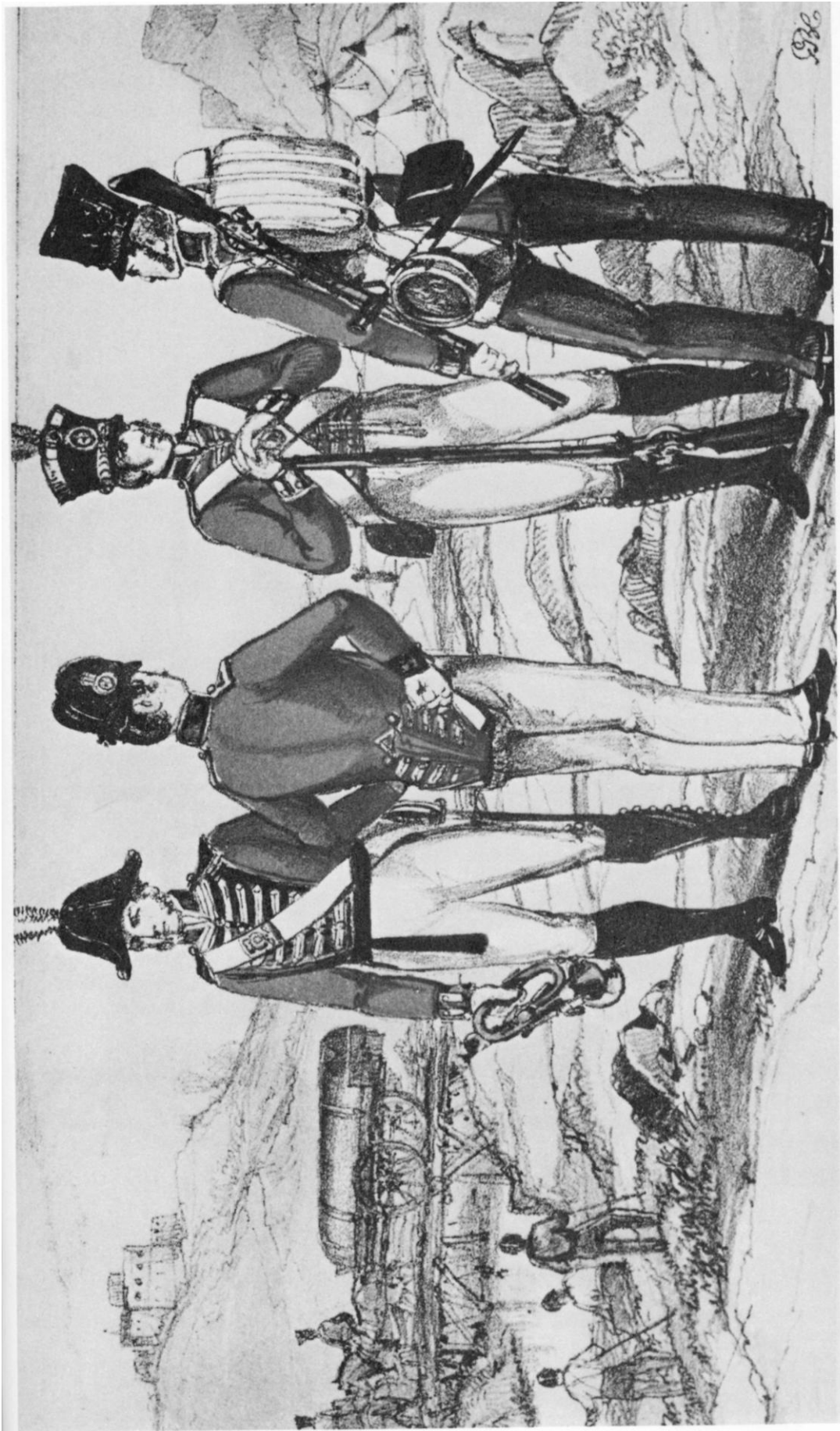


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- 5 Lower Bytown, now Ottawa, May 1841, by P.J. Bainbrigge.
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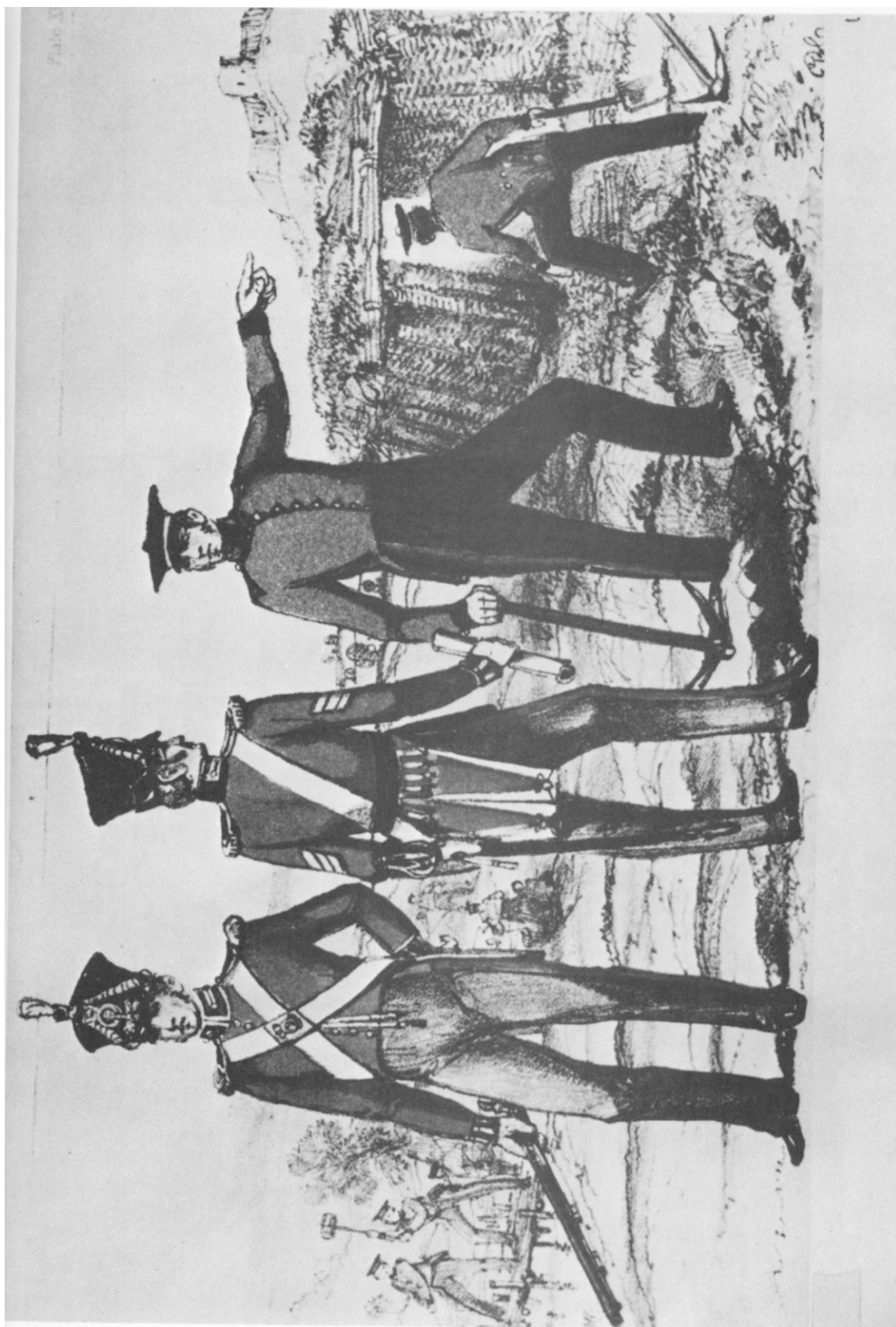


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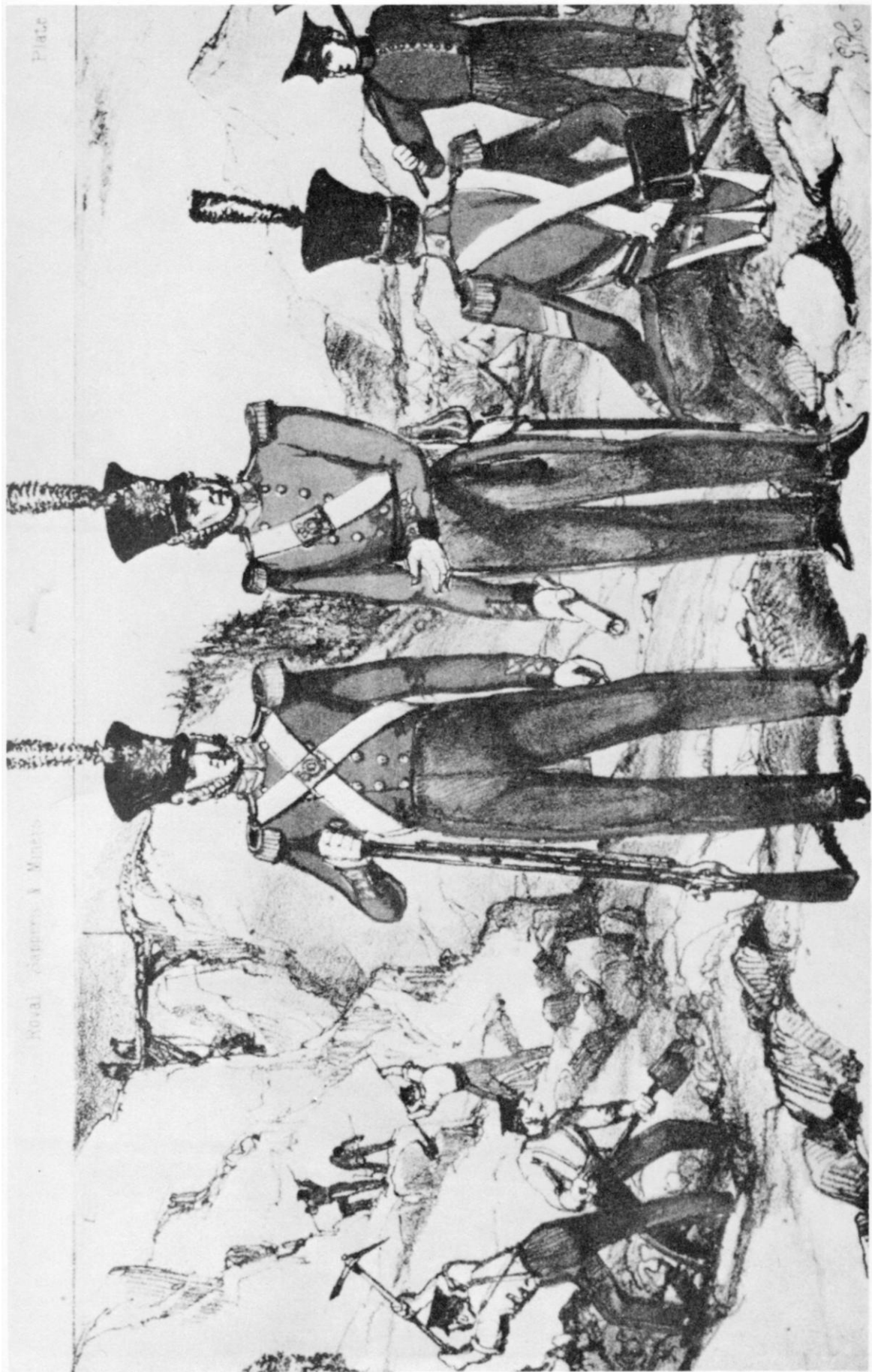


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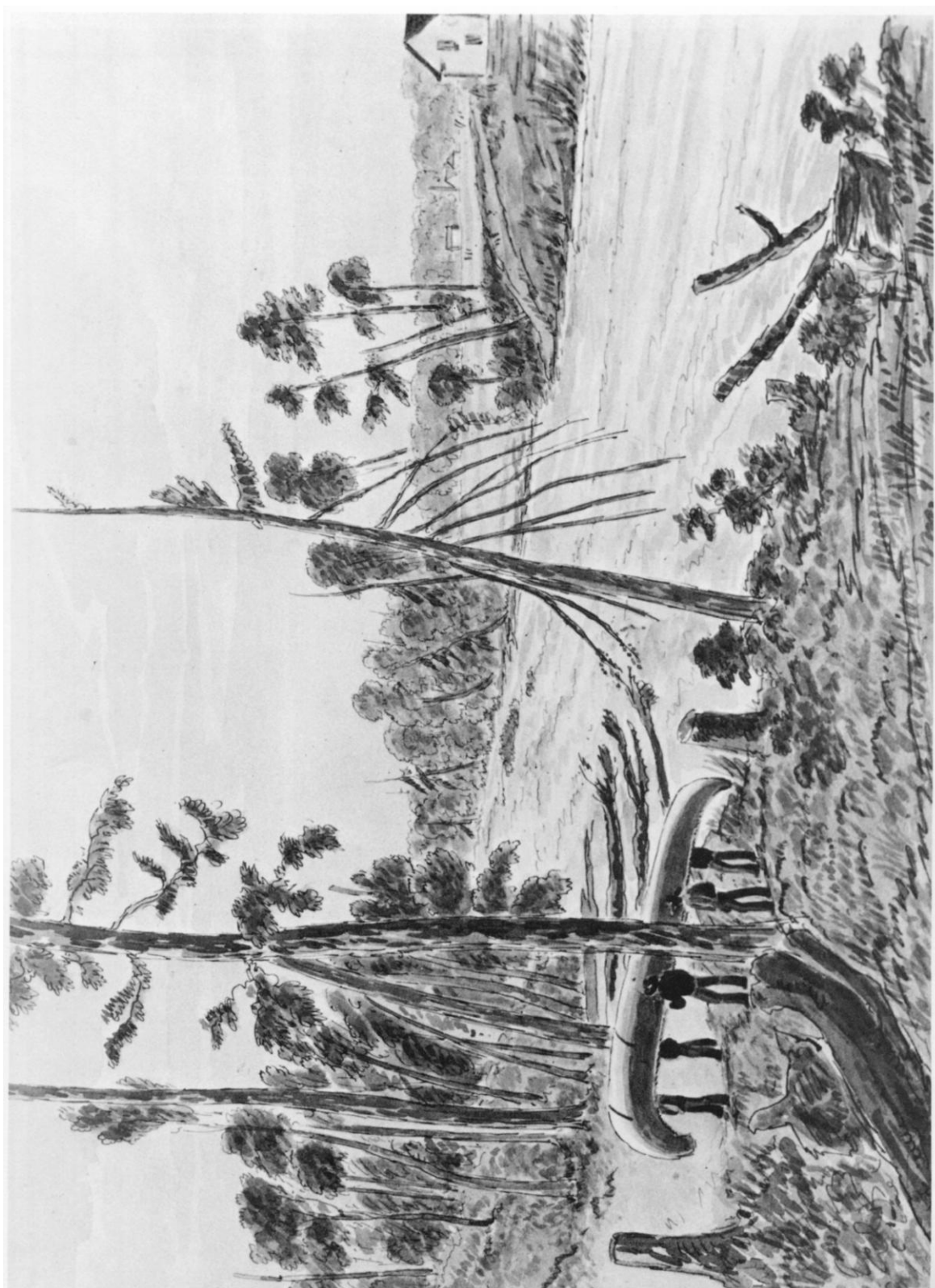


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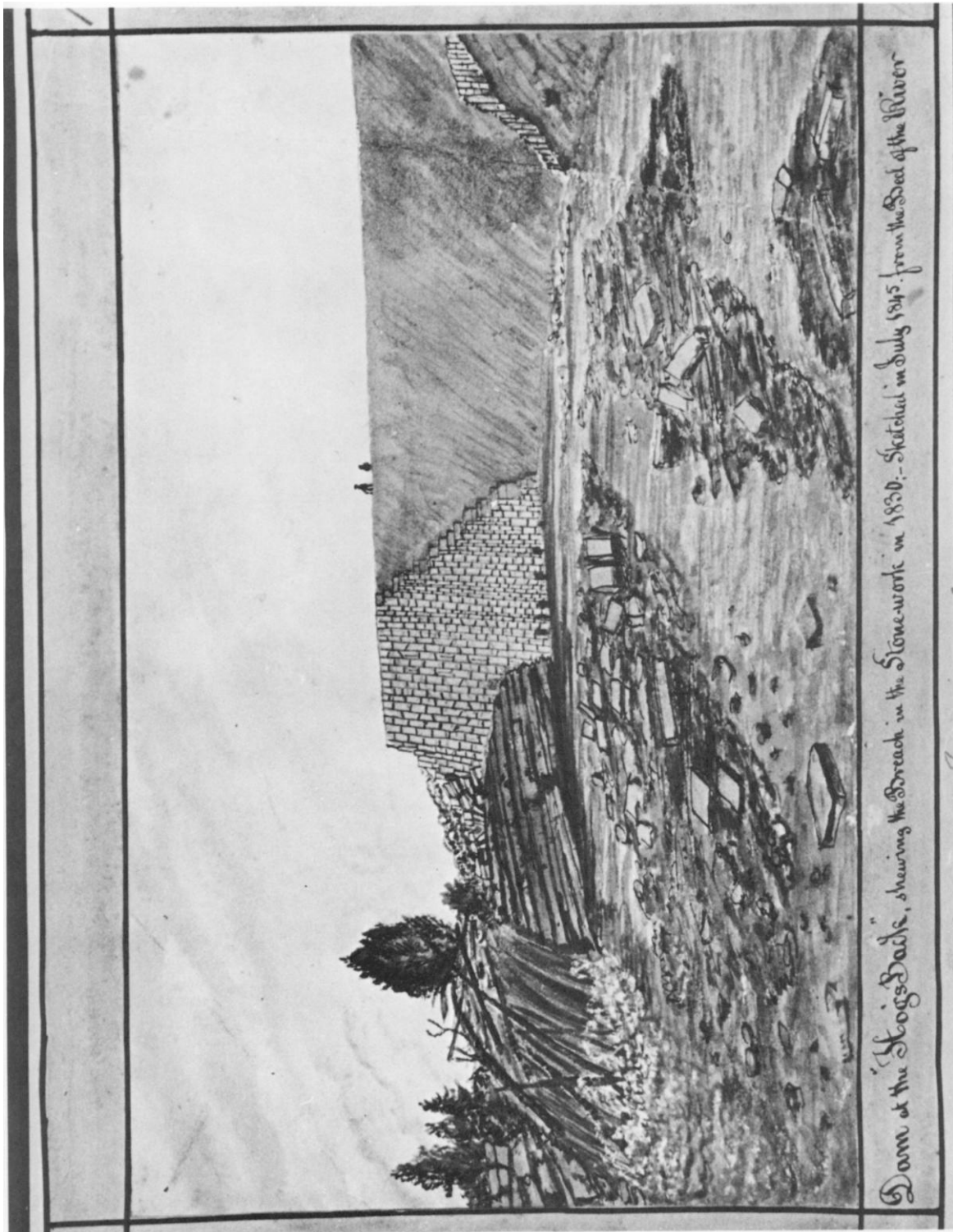


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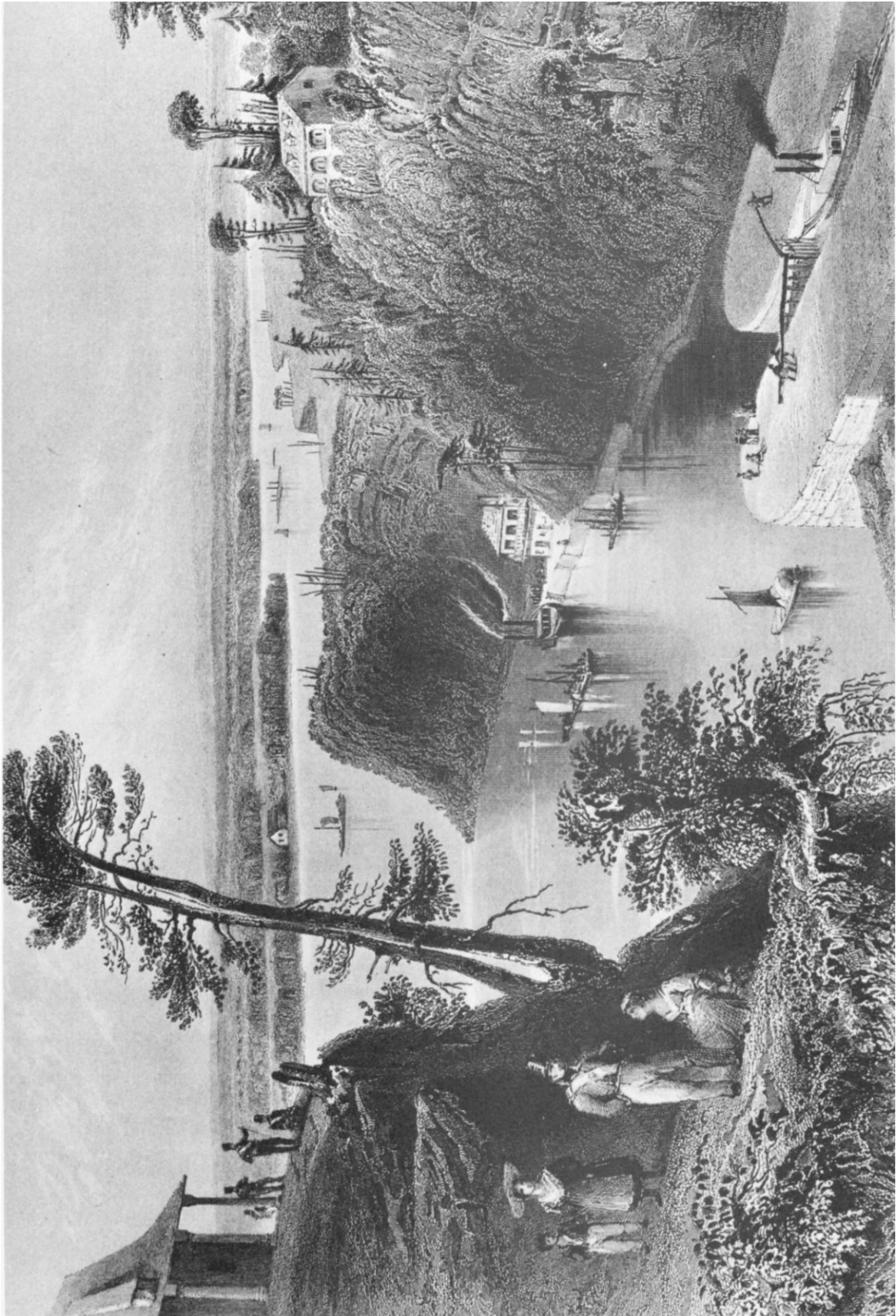
9. "Smith's Falls - Rideau. My Canoe Portage," by J.P. Cockburn. (Public Archives of Canada.)



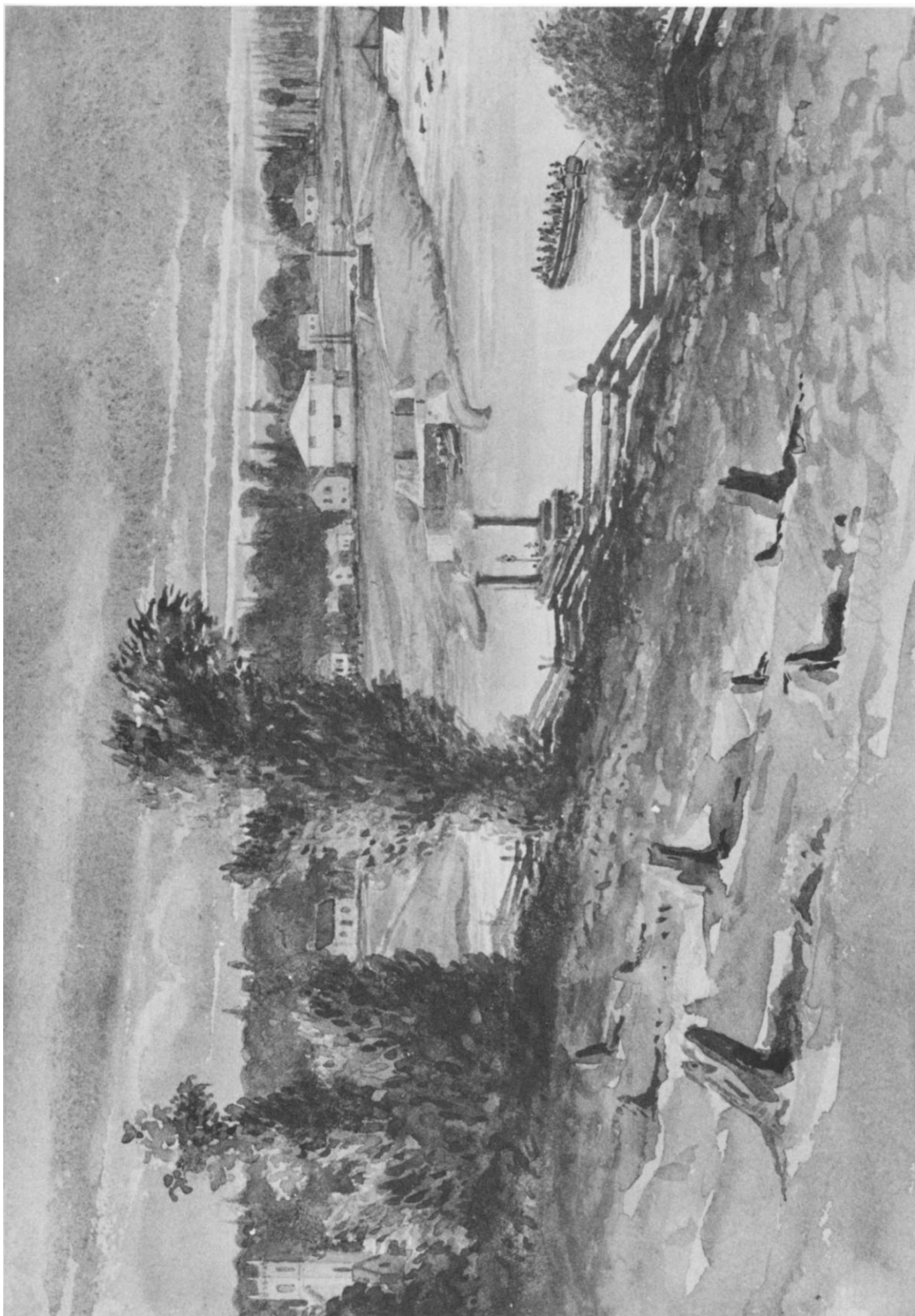
- 10 "Dam at the 'Hog's Back,' shewing the Breach in the Stone-work in 1830....," by Thomas Burrowes, 1845. (Public Archives of Ontario.)



- 11 "The Rideau Canal, Bytown," by William Henry Bartlett.
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- 12 "Merricksville - Rideau," 1838, by P.J. Bainbrigge.
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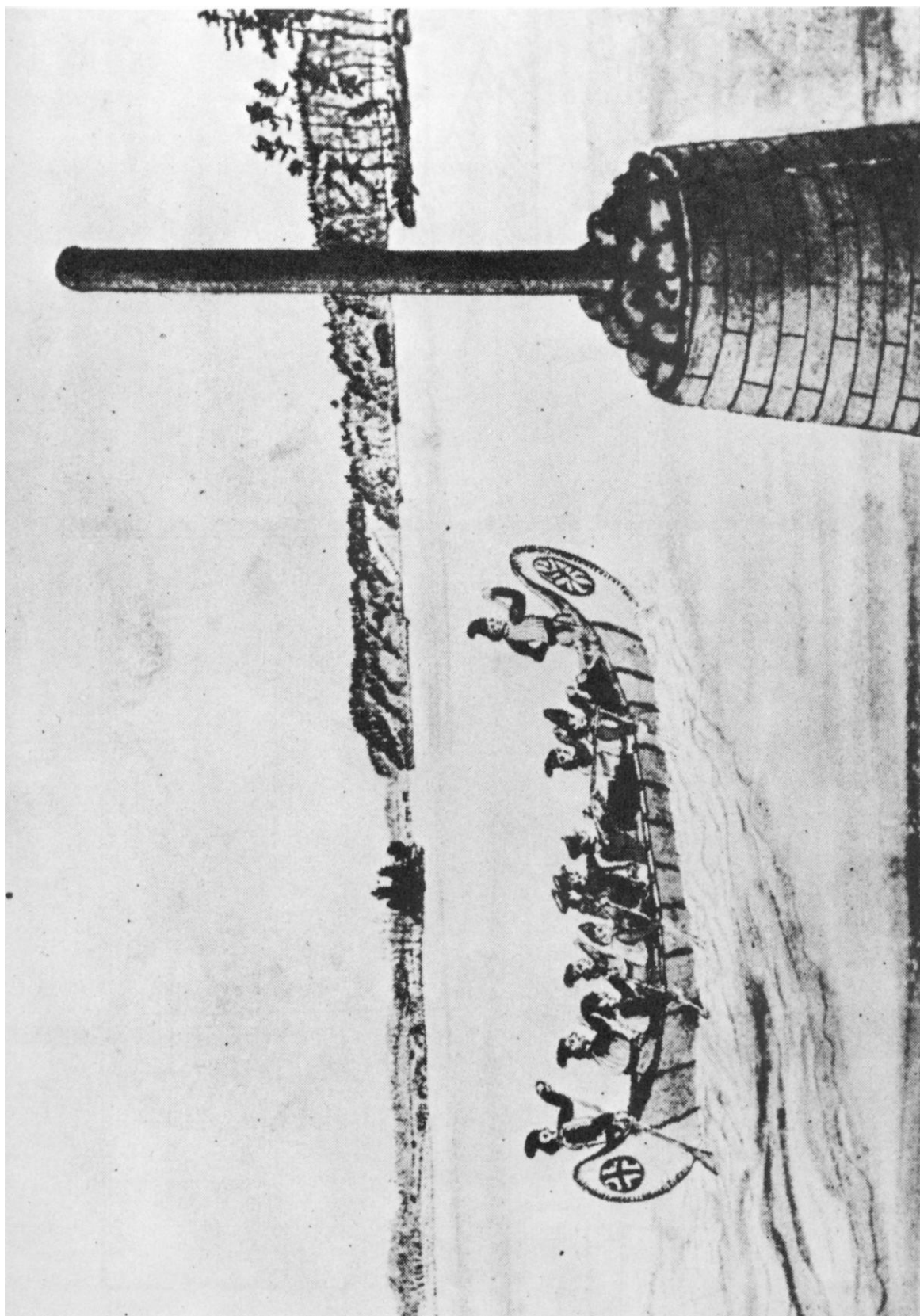


- 13 "Near Nicolson's Rapids. Rideau Aug^t. 18th. 1830," by
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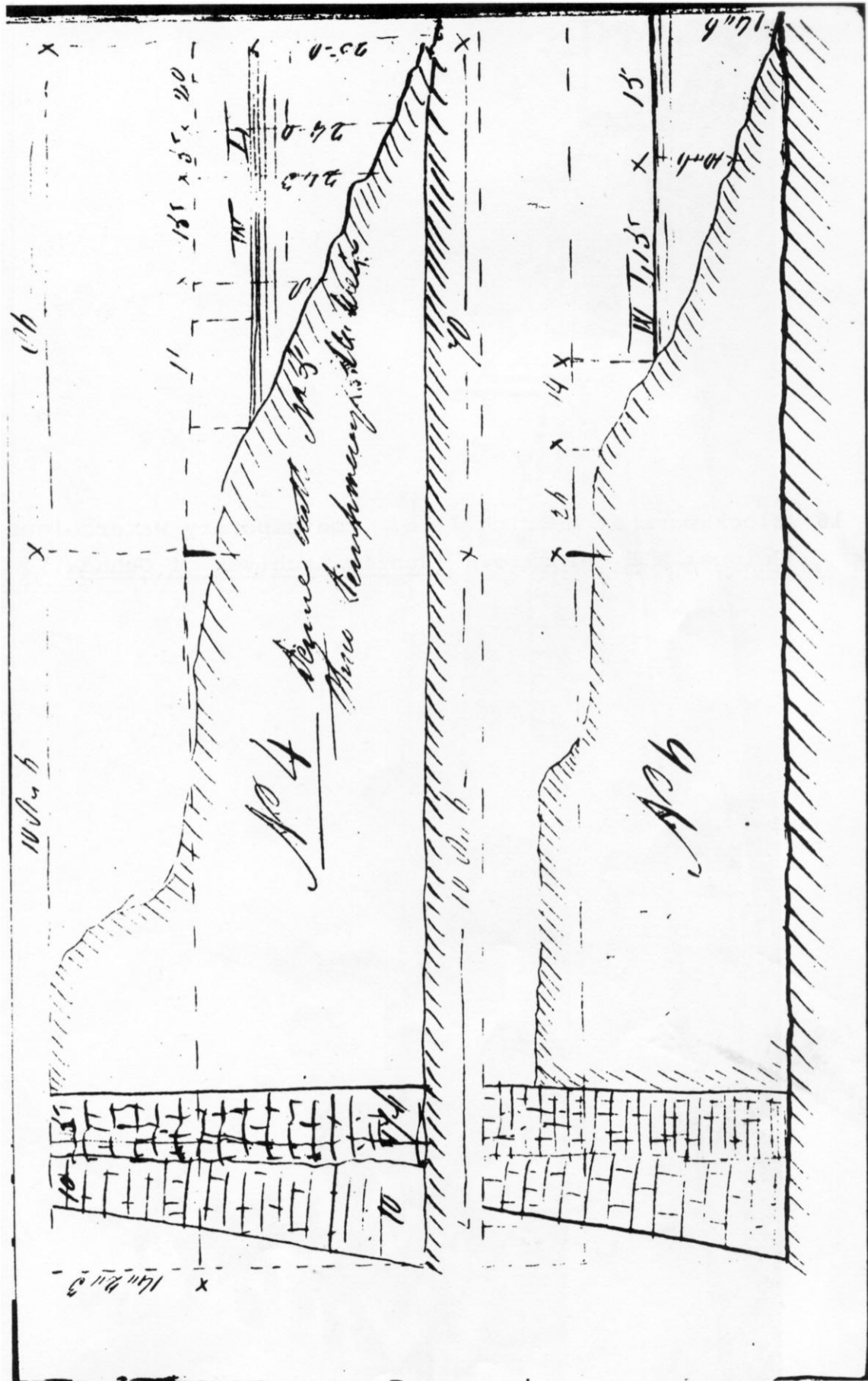


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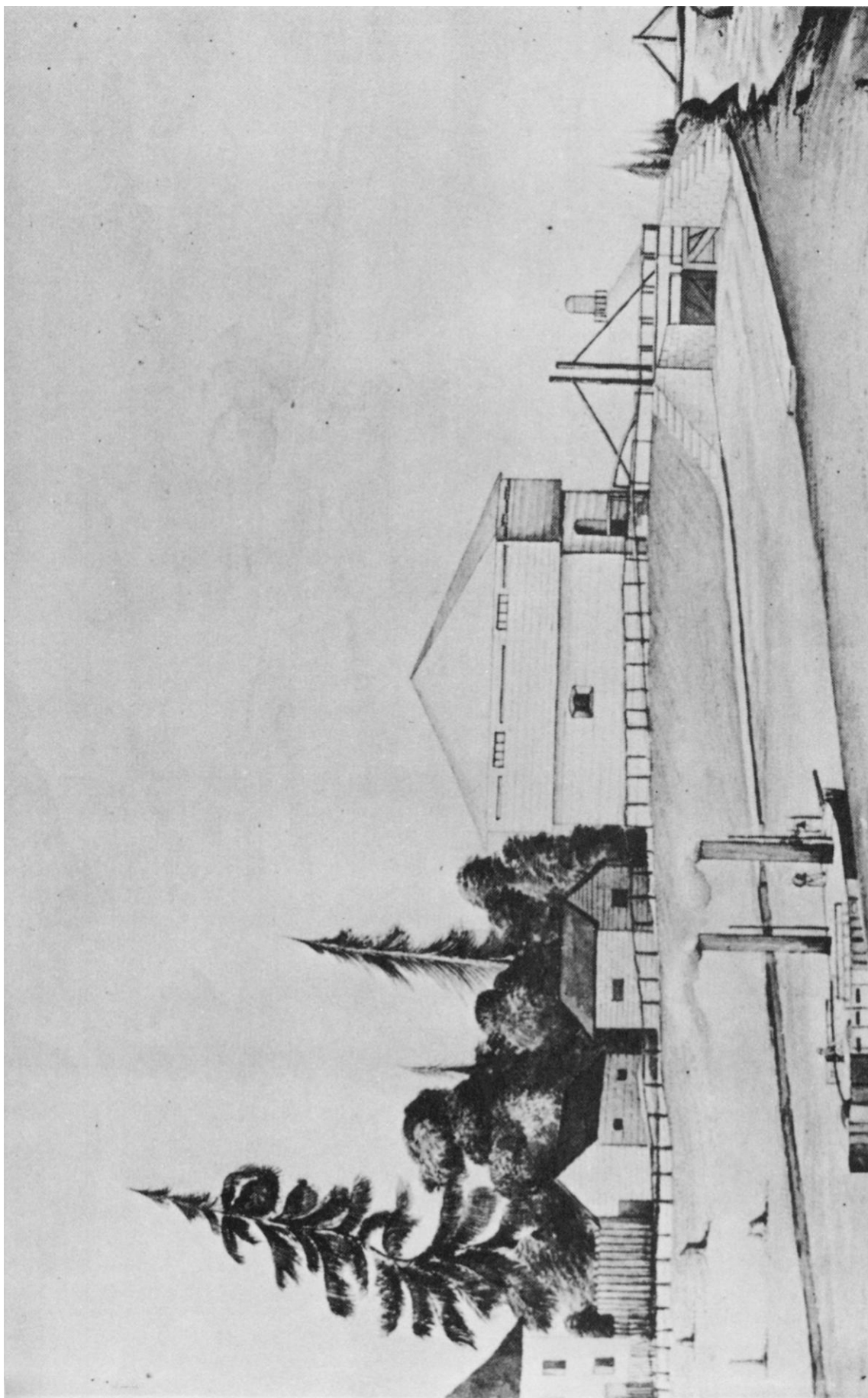
- 14 "Upper Rideau Lake; - Canoe en route to Bytown; - Westport in the distance," by Thomas Burrowes. (Public Archives of Ontario.)



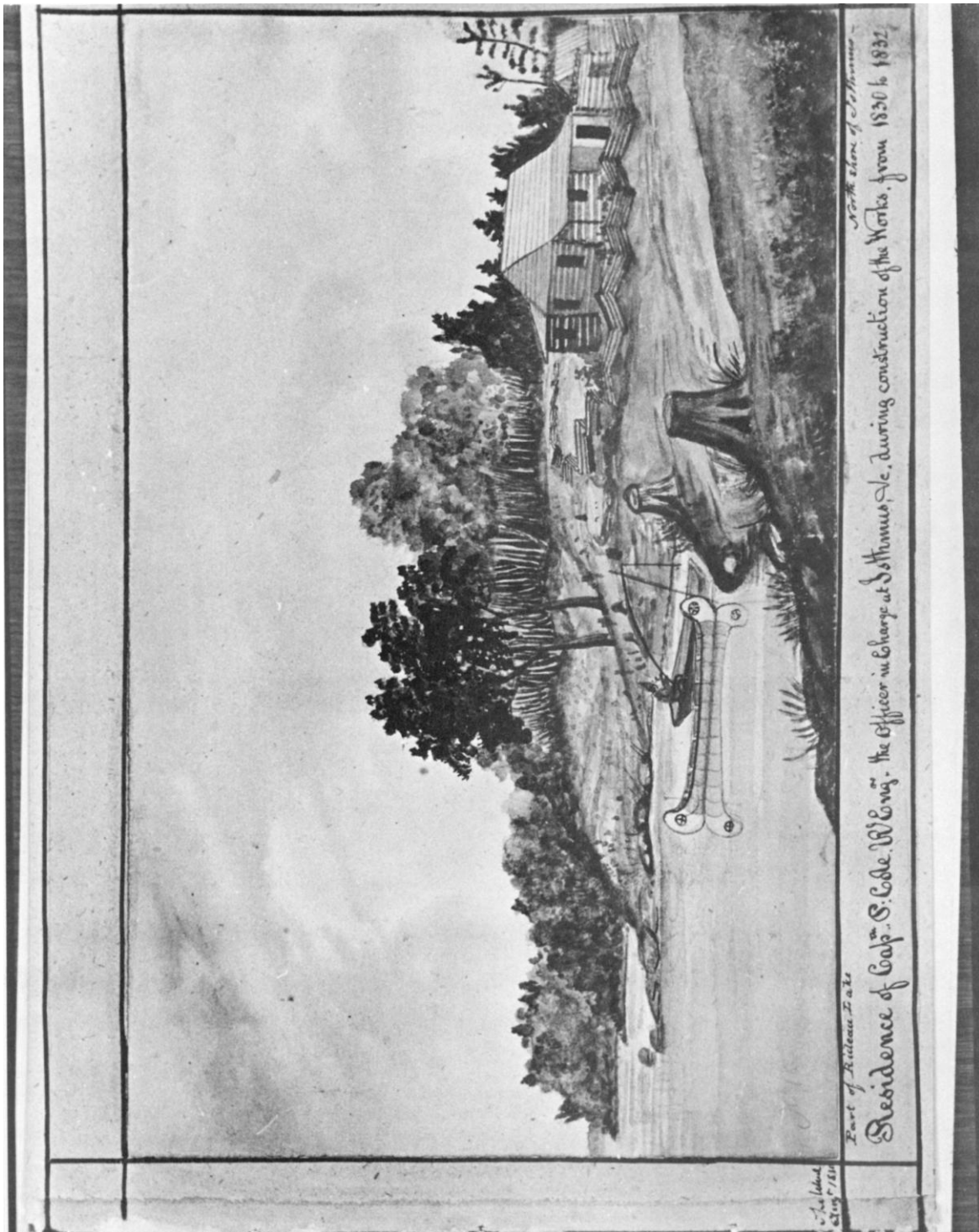
15 Survey field-note sketches. (Public Archives of Canada.)



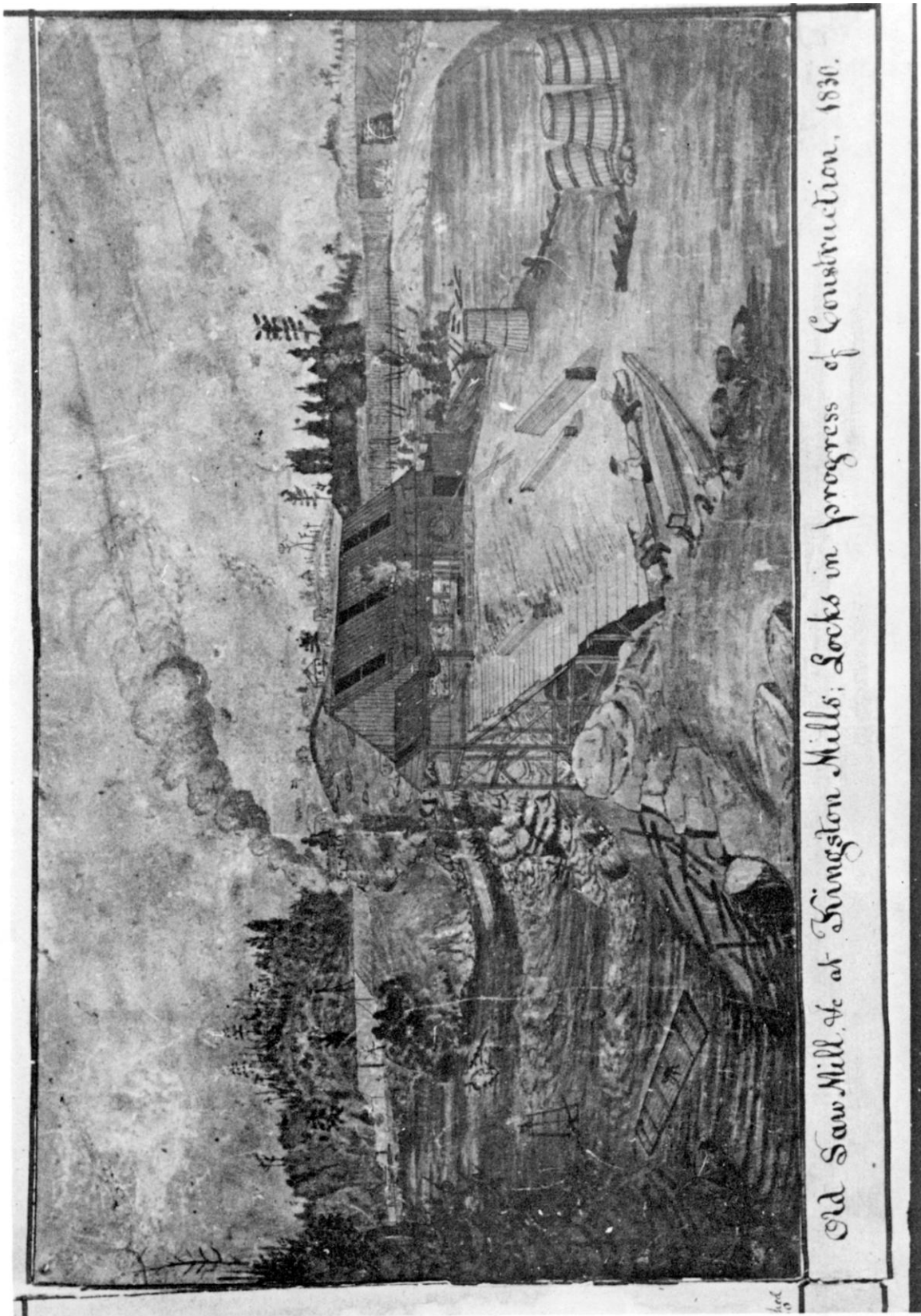
16. Blockhouse at Merrickville. Contemporary watercolour by Colonel H.F. Ainslie. (Public Archives of Canada)



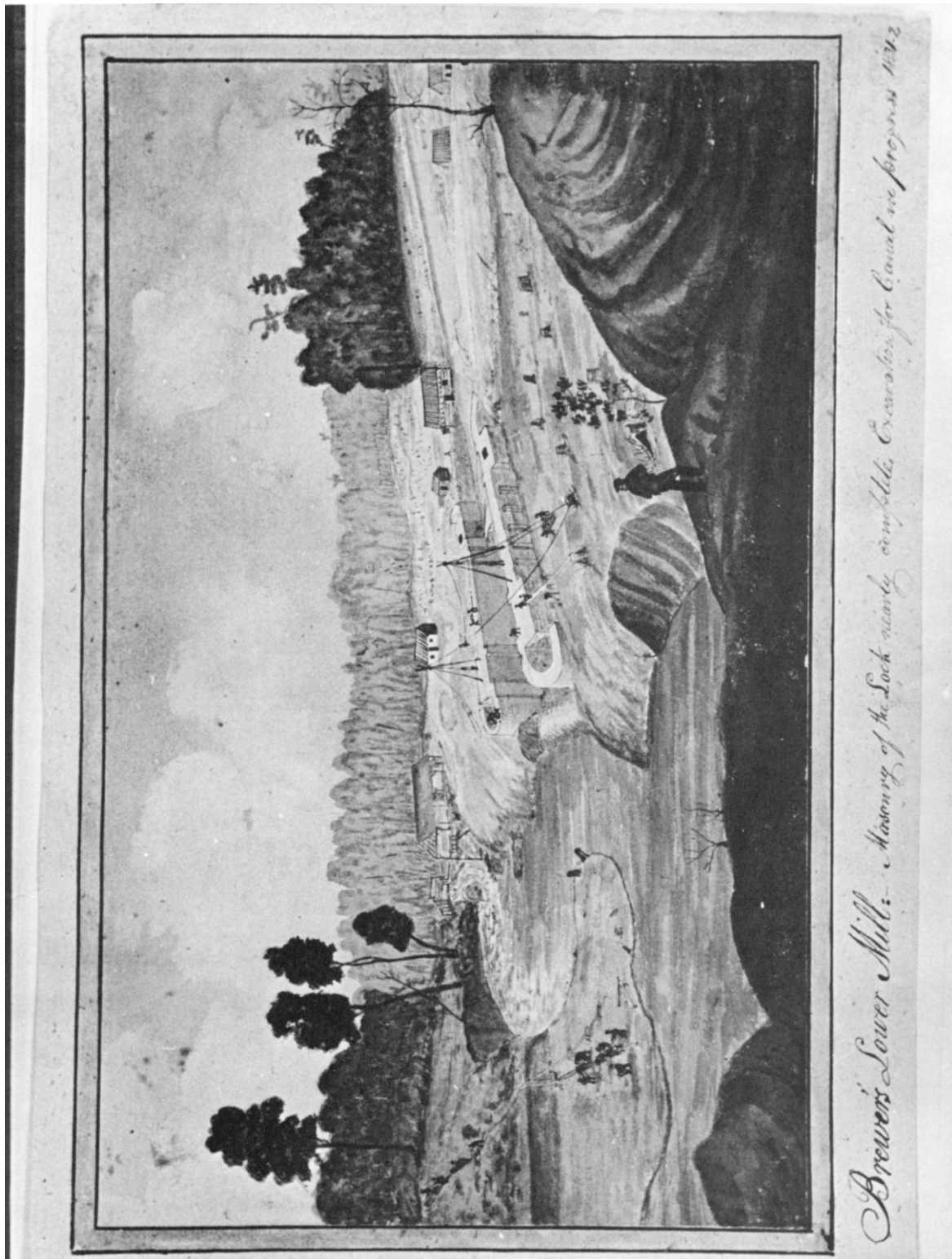
- 17 "Residence of Cap^{tn}, P. Cole, R¹ Eng^{rs}....in charge at Isthmus, &c during construction of the Works, from 1830 to 1832," 1830, by Thomas Burrowes. (Public Archives of Ontario.)



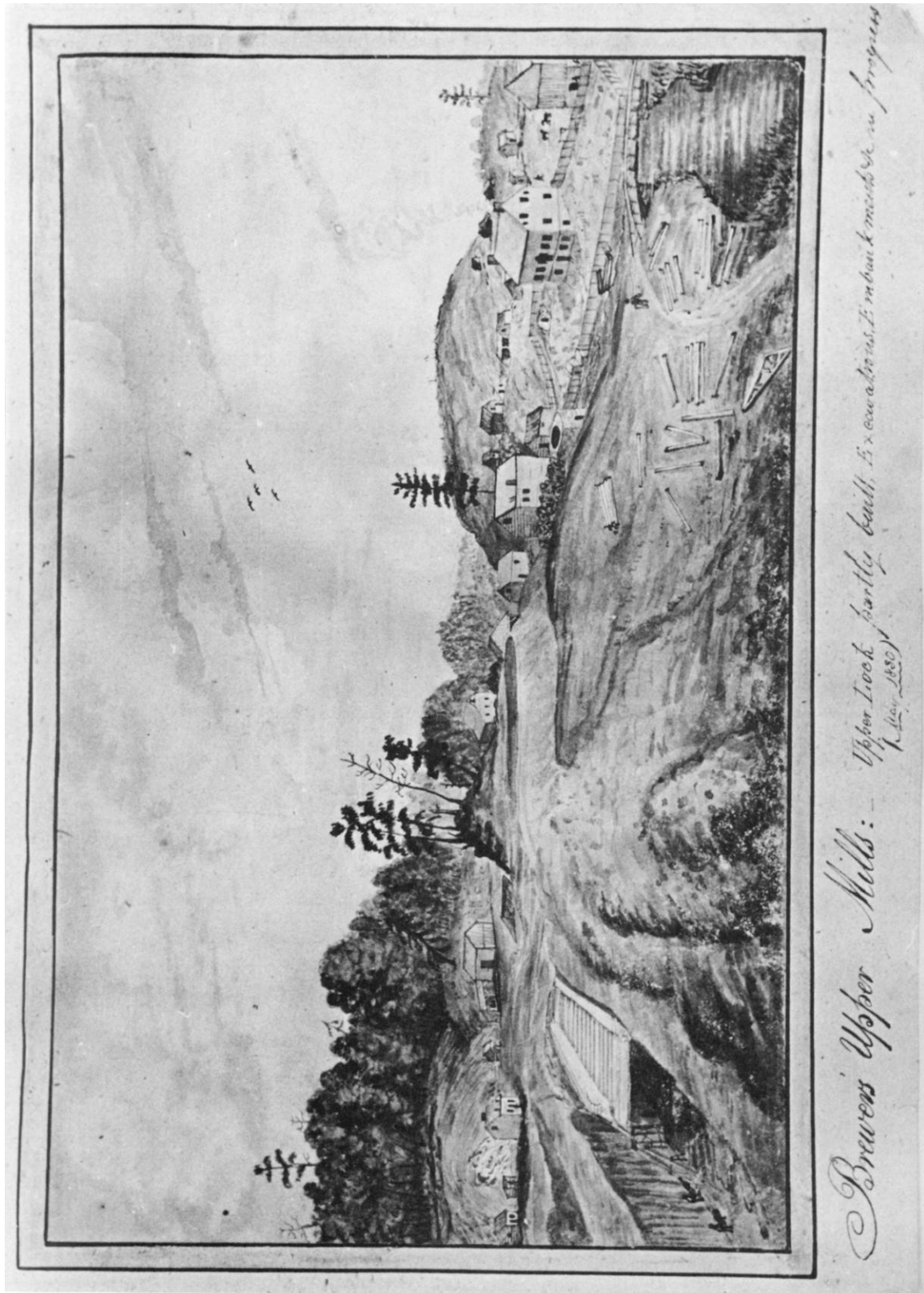
- 18 "Old Saw Mill, &c at Kingston Mills; Locks in progress of Construction, 1830," by Thomas Burrowes. (Public Archives of Ontario.)



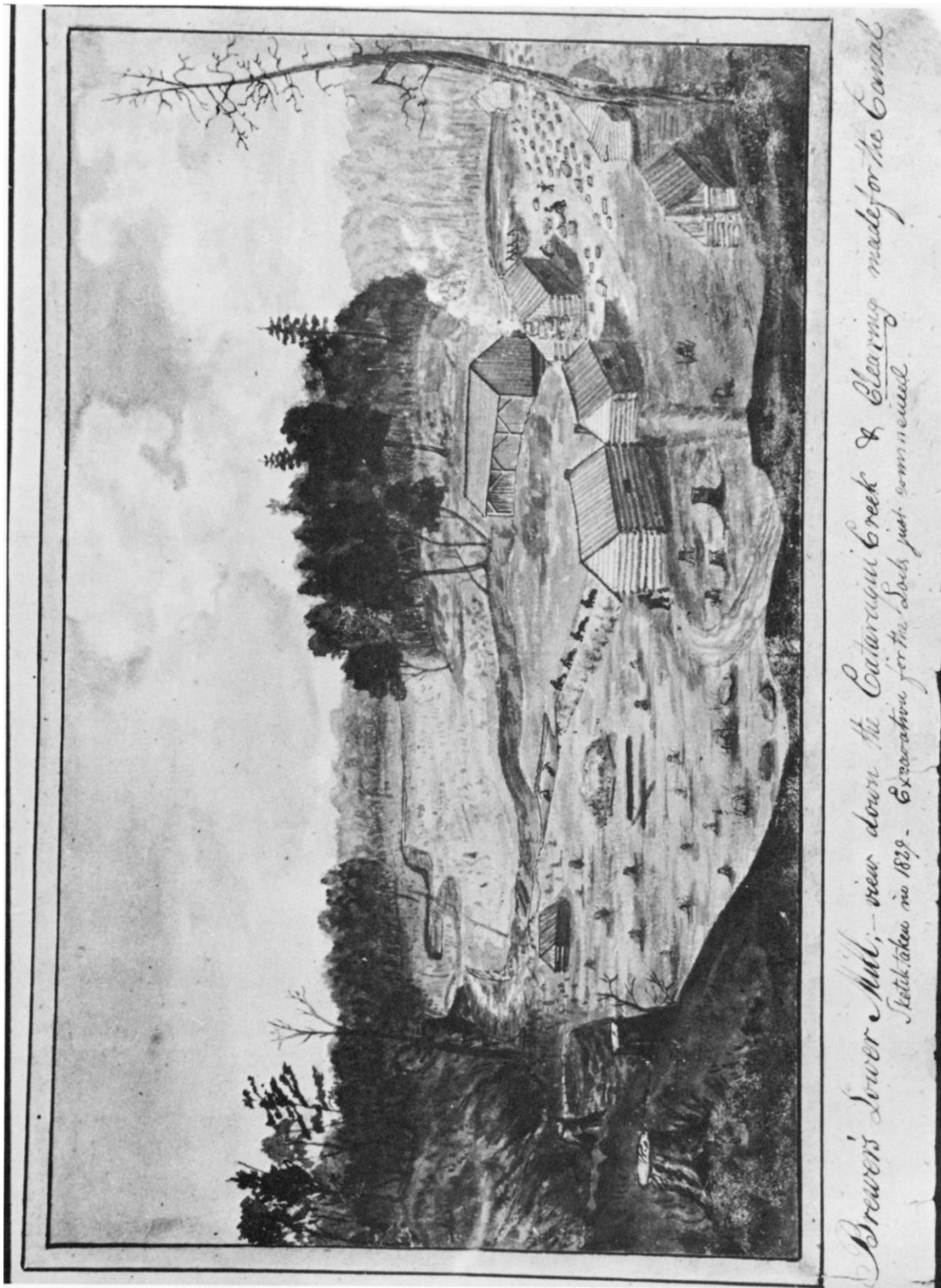
- 19 "Brewer's Lower Mill: - Masonry of the Lock nearly complete, Excavation for Canal in progress 1831-2," by Thomas Burrowes. (Public Archives of Ontario.)



- 20 "Brewer's Upper Mills: - Upper Lock partly built,
Excavations, Embankments &c in progress (May 1830)" by
Thomas Burrowes. (Public Archives of Ontario.)



- 21 "Brewer's Lower Mill: - view down the Cataragui Creek & Clearing made for the Canal... 1829..., " by Thomas Burrowes. (Public Archives of Ontario.)



22. Thomas McKay (Public Archives of Canada)



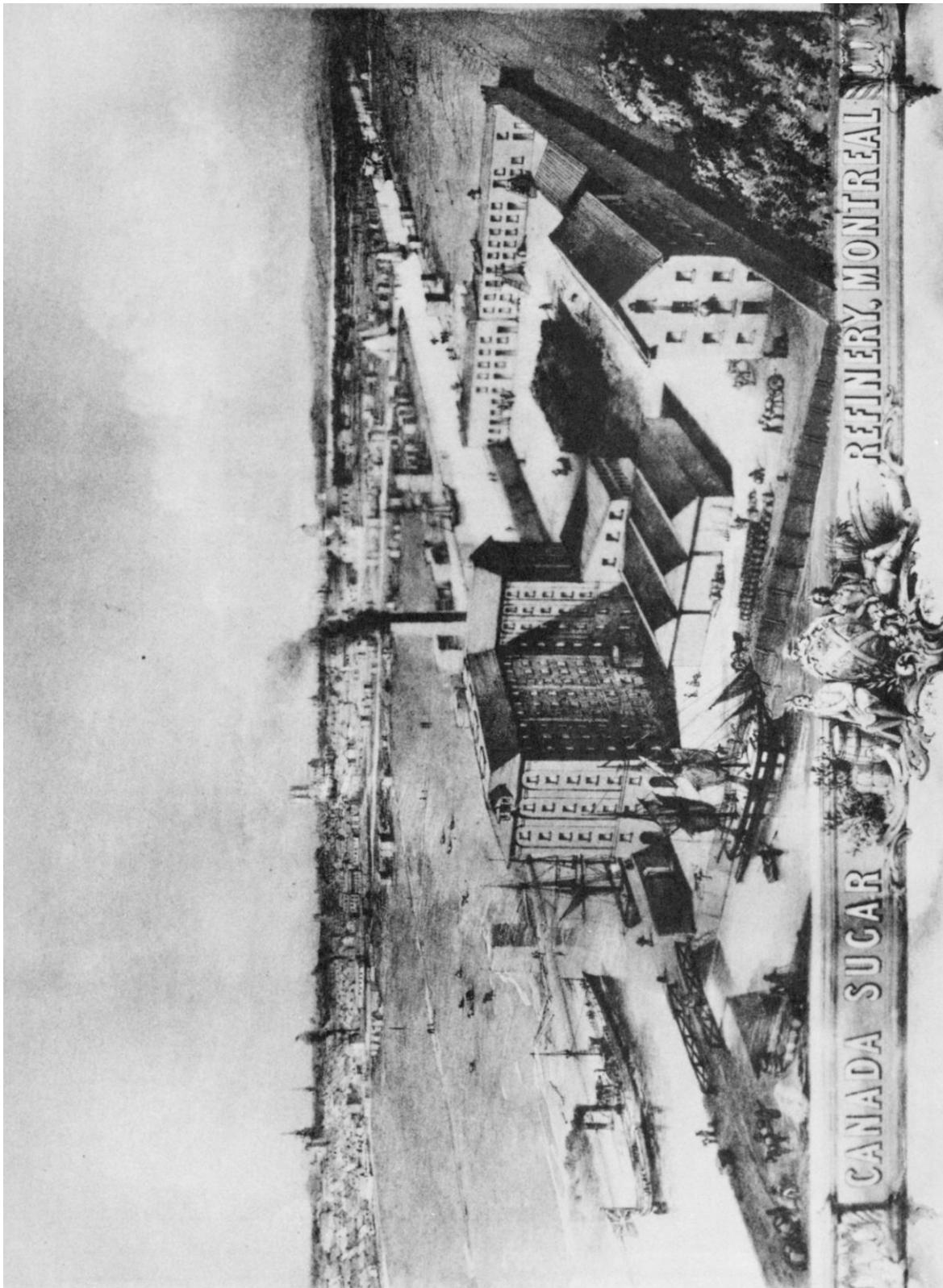
23. John Redpath in 1836, by A. Plamondon



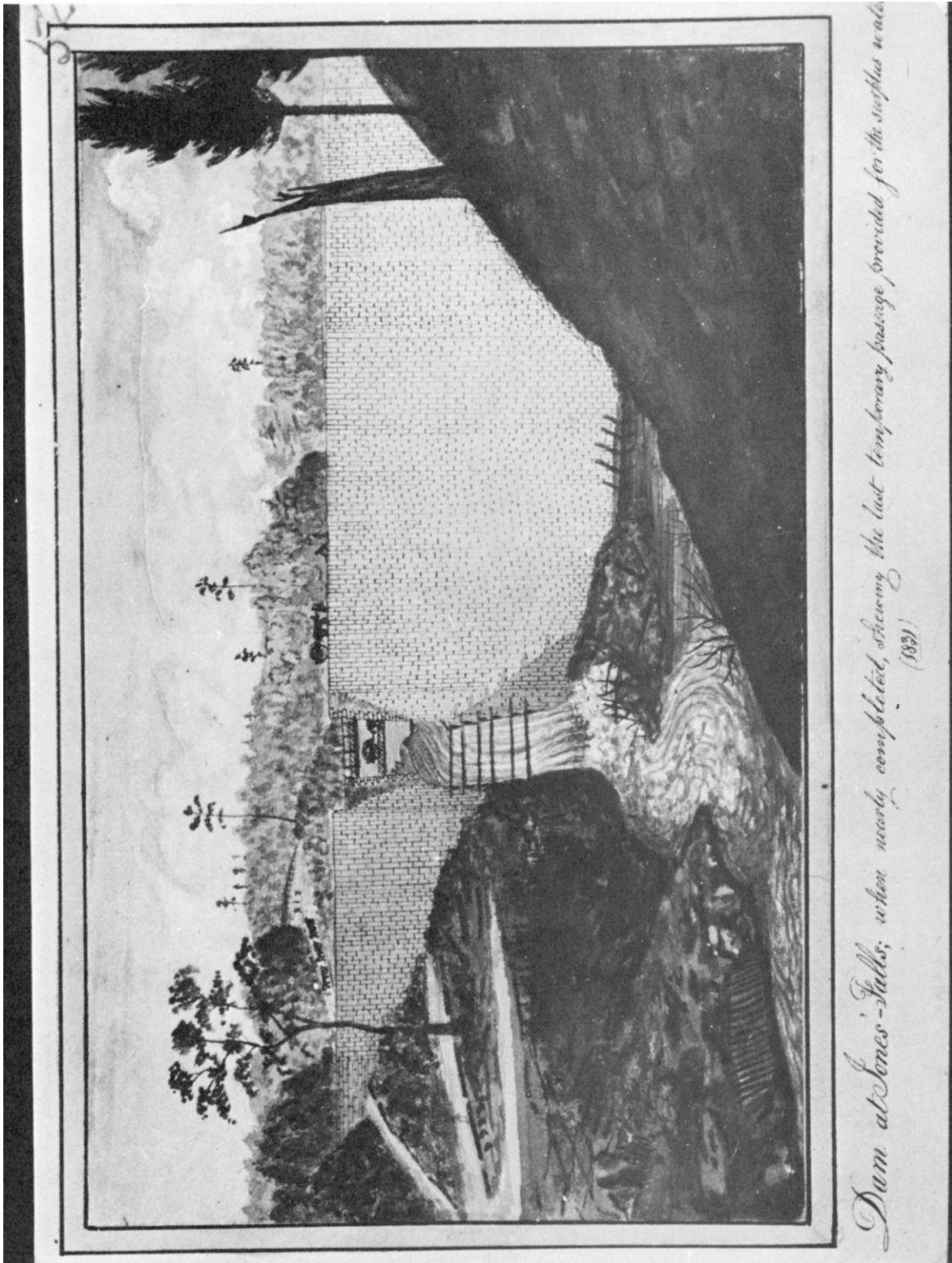
24. Rideau Falls and McKay's Mills, Ottawa. (Public Archives of Canada)



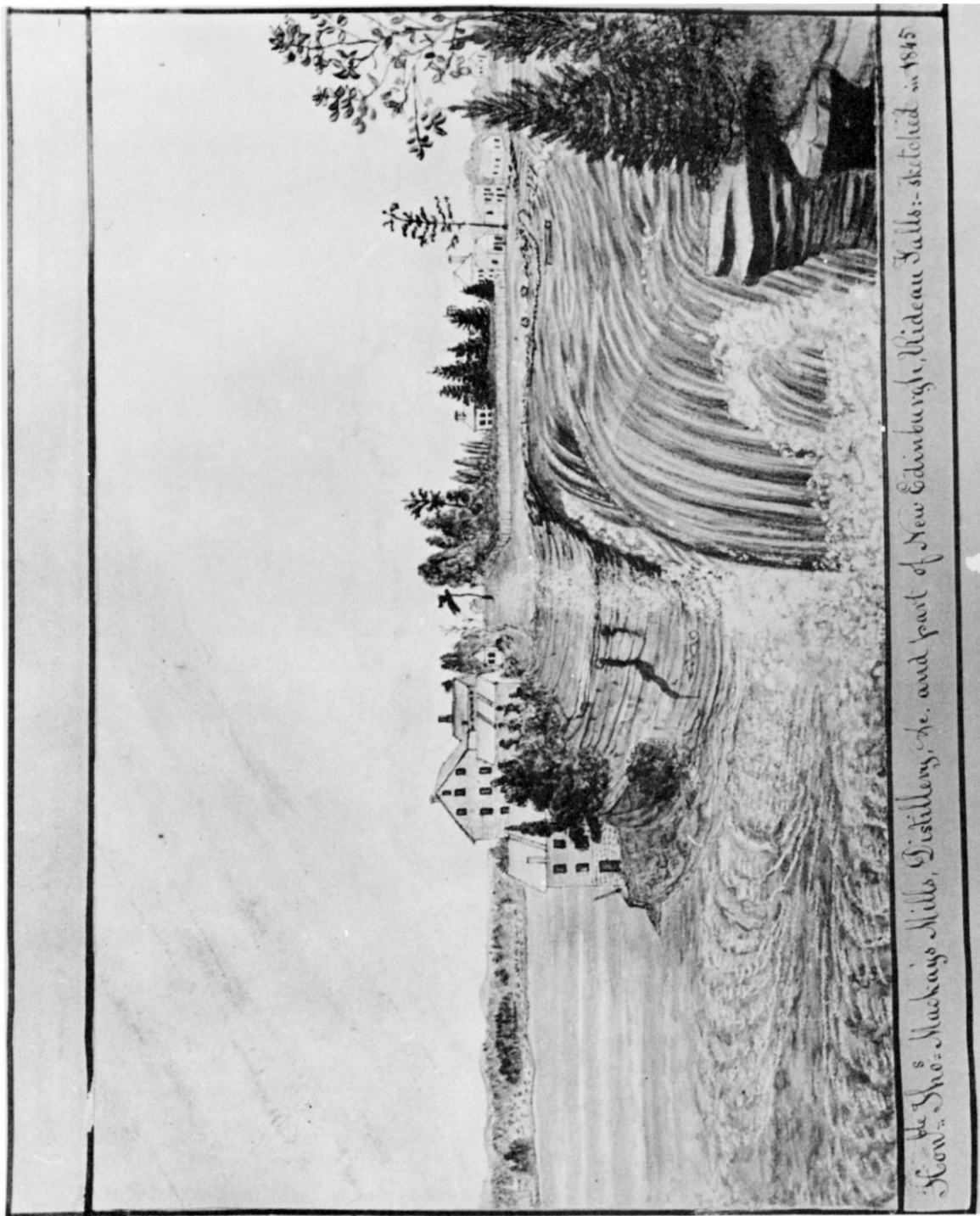
25. Redpath's Canada Sugar Refinery in Montreal. (Queen's University Archives)



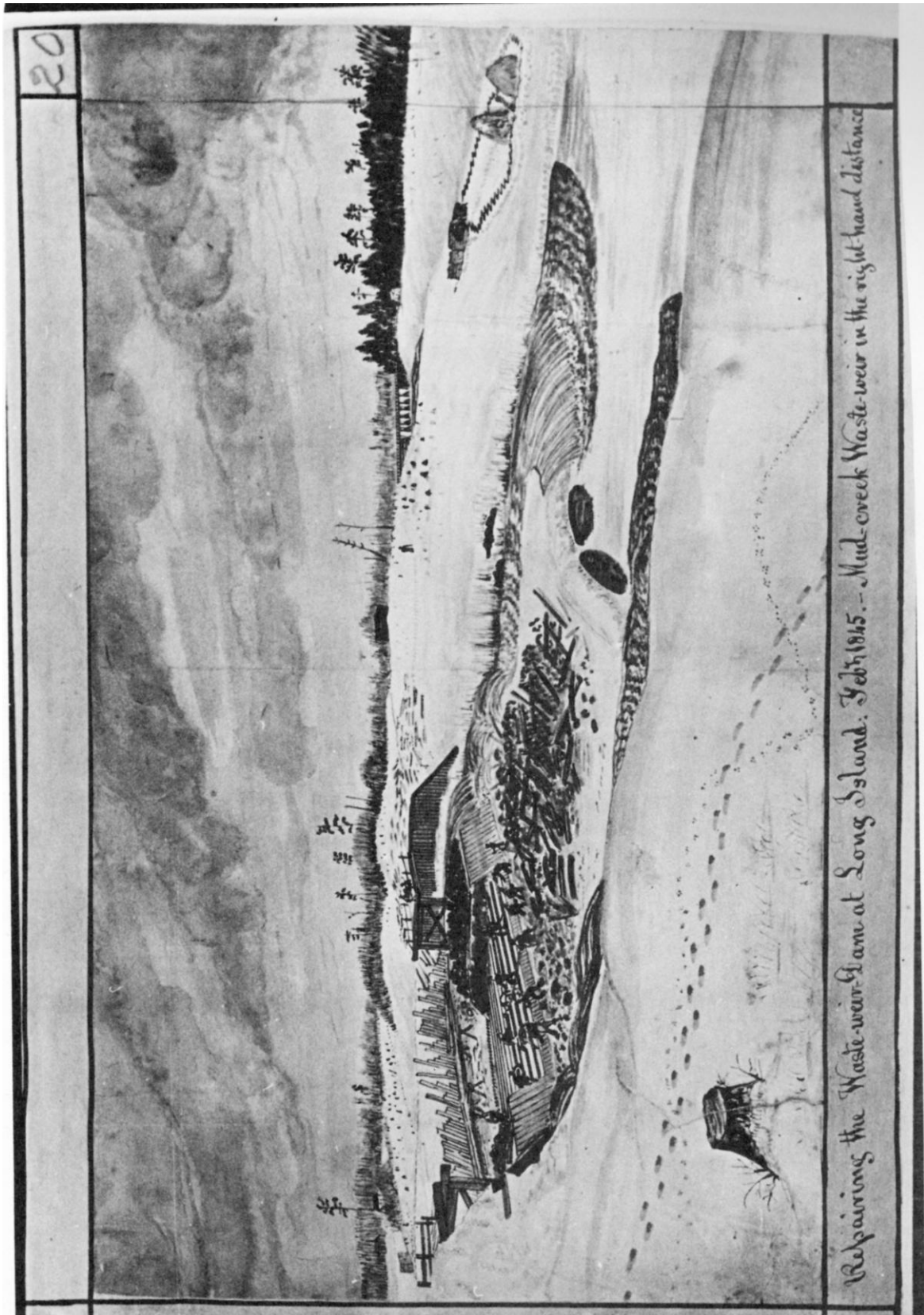
26. "Dam at Jones' Falls; when nearly completed ... (1831)" by Thomas Burrowes (Public Archives of Ontario)



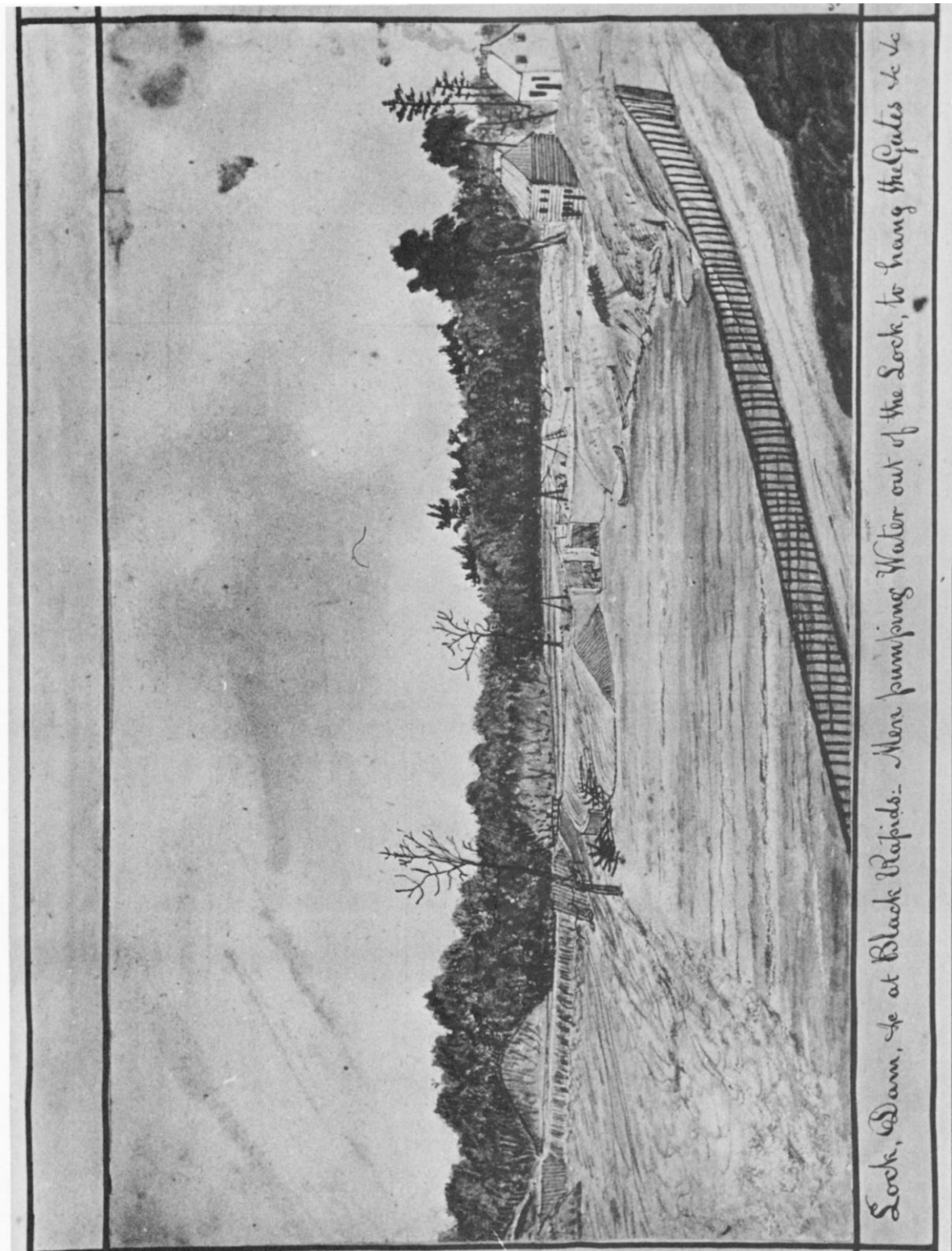
27. "Hon^{ble} Thos. Mackay's [sic] Mills, Distillery, &c ... 1845"
by Thomas Burrowes. (Public Archives of Ontario)



28. "Repairing the Waste-weir Dam at Long Island, Feb^y 1845 ..."
by Thomas Burrowes (Public Archives of Ontario)



29. "Lock, Dam &c at Black Rapids ..." 1834 by Thomas Burrowes
(Public Archives of Ontario)



30. "Lock, Blockhouse &c at the Narrows, Rideau Lake - the first descent from Summit towards Bytown" 1841 by Thomas Burrowes (Public Archives of Ontario)

