

Toronto's Waterfront at War, 1914-1918

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Military history in Canada has traditionally been the stuff of regiments and battle honours, ships that could seemingly roll on grass (never mind the heavy seas of the North Atlantic), and the daring exploits of Canadian pilots in foreign-designed planes. This is the craft in its most obvious form, and its practitioners have had considerable success in tying warfare to a burgeoning sense of Canadian nationhood. Building from a base of general works that was developed after the Second World War, military history has since evolved to address such specific concerns as defence policy, the development of the militia, and the importance of imperial connections.¹ More recently, the boundaries of this approach have become blurred through a diffusion of methodologies with other sub-disciplines of Canadian history. Labour historians, for instance, have recognized the important role that the military played in controlling domestic union activities in the coal mines of Cape Breton during the 1920s. Writers of regimental histories, on the other hand, have broken ground by turning to a statistical examination of non-traditional sources, including personnel records, to help explain the changes in their units' composition and conduct.² As Martie Hooker pointed out in a recent review of Canadian military historiography, "the study of war exists not as a form unto itself, but rather as an associate of social, regional and political history and biography."³

In spite of this reciprocity of interests and approaches, there has been a reticence on the part of many Canadian historians to address the impact of war-related issues upon a nation that has devoted substantial resources to waging war during the last hundred years.⁴ Military history and related studies that trace the influence of armed conflict upon society are deserving of more attention, for war has been an important catalyst for change in the country's economic and social fabric. While the bulk of Canada's military engagements have taken place on other continents during this century, war has done much to influence the development of the nation's towns and cities in particular. This fact has not been lost on those who preserve and make accessible the records of this country's urban experience. As the world prepares to mark important anniversaries of its global conflicts, their impact upon at least one Canadian city will be commemorated in an exhibit entitled "Toronto Does Her Bit: the Home Front during Two World Wars," due to open at the City of Toronto Archives' Market Gallery in October 1989.

The urgency of wartime demands often outstripped a community's ability to cope with the pressures of mobilization, as cities such as Halifax faced a desperate housing crisis when naval operations brought overcrowding and the related ills of urban life.⁵ Mobilization had equally significant, but much less well known effects upon inland ports. In times of war the federal government turned to harbours such as Toronto, surrounded by a pool of skilled labour and raw materials and not in need of extensive coastal protection, to provide the industrial support for mobilization and a sheltered location to train personnel. The ensuing spurts of intense economic stimulation lasted no longer than the war years, but they had an enduring impact upon the shape and character of the urban waterfront. Mobilization complemented and expedited plans for large-scale public works that were already underway prior to the outbreak of the First World War. But long after the shipbuilding yards and munitions factories ceased to bring jobs and other financial benefits to the area, the hulking forms of foundries and machine shops presented persistent problems for the officials who were responsible for finding occupants for these buildings and their sites.

The commitment of waterfront property in the port of Toronto to war-related industry was significant during the First World War,⁶ but this theme has not loomed large in histories of the city or in general accounts of the country's preparations for war. The repercussions of precipitate industrial expansion associated with the supply side of the war effort were much less dramatic and much less immediate than the logistical problems that beset ocean ports. This situation also reflects the lack of studies that critically examine the administration of Canadian harbours and related issues such as shipbuilding and shipping, particularly for the war years when these functions achieved an economic and tactical prominence that was far greater than during peacetime.⁷ Most discussions of this subject have been limited to illustrated corporate histories that not only extolled the virtues of their authors' contributions during the Second World War, but also served to solicit the attention of governments and anyone else who might be inclined to award contracts to those firms that demonstrated ingenuity and excellence during periods of shortages and hurried demands.⁸

One of the more formidable obstacles to redressing this situation are the problems encountered during attempts to locate a comprehensive assortment of records dealing with waterfront activities during the war years. Navigation and shipping have been matters of federal jurisdiction since Confederation, but the framework for administering Canadian harbours has never been straightforward. Prior to the formation of the Department of Transport, most ports were managed by harbour commissions created by federal statute, each operating with varying degrees of autonomy. The creation of the National Harbours Board in 1936 placed the ports of Montreal, Quebec, Trois-Rivières, Chicoutimi, Halifax, Saint John, and Vancouver under much tighter federal control, but the 'municipal commissions' governing harbours such as Toronto, Trenton, and Winnipeg remained very much in existence, and responsible for their own records and affairs.⁹ In addition, military contracts let to private waterfront concerns often fell outside the territorial and operational jurisdiction of the local port authority, and hence were not reflected in its records. Just as there was never a single, centralized agency that established policies and guidelines for waterfront development throughout the nation, there is no single repository that provides the materials necessary for a detailed examination of harbour activities during the war years.

One remedy for this dilemma is to supplement the existing records of those bodies that spearheaded mobilization, particularly the Imperial Munitions Board and the federal Department of Munitions and Supply, with the extensive use of records from local repositories. The traditional approach to military history and related inquiries seems to have been to work from the records created by these agencies and the Department of National Defence in order to establish the development of policy and its subsequent implementation. This path can give a very unbalanced perspective, especially when there are serious gaps in the available documentation. These breaches were created not only by the toll that years of neglect took upon dormant records prior to their transfer to the National Archives, but also by the urgency of wartime requirements. Jack Kennedy came upon such a situation during his research for an institutional history of the Department of Munitions and Supply, which regulated military construction and purchasing during the Second World War.

Each branch, control and crown company was supposed to keep a complete record of its activities in narrative form for subsequent reference. But in those days the production of munitions was more important than historical records, and when I came to prepare the history in 1946, I found that, while some of the records had been well kept, others were very sketchy, some had not been prepared at all and most did not go beyond the end of 1943.¹⁰

Shortcomings of this nature, although understandable, can have a serious impact upon any attempts to probe into an agency's activities. A more balanced view might be achieved if greater consideration was given to local repositories possessing records not normally associated with military activities. As well as serving to place the events of a mobilization into the broader context of regional development, such archives can offer several types of information that were not retained by the authorities directly responsible for military affairs, or by the institutions that received their inactive files.

A good case in point are the records of the Toronto Harbour Commission.¹¹ This agency has had an important involvement in almost every waterfront development within the city's limits since the incorporation of the port authority in May 1911. An archival programme was established in 1975, and as the records were inventoried over subsequent years it was discovered that the corporate memory was virtually intact.¹² In addition to large quantities of written information, photographs, and engineering drawings, the Archives has also retained a comprehensive run of newspaper clippings that offer a wide variety of information and opinions on daily developments along the waterfront, and a number of related collections that describe the activities of other organizations that have had an influence upon the harbour. The breadth and scope of these holdings reflect the wide variety of undertakings that commanded the attention of the board of commissioners, and these historical records have a direct bearing upon attempts to study the mobilization of the port for two important reasons.

The first pertains to the Toronto Harbour Commission's role as landlord within the port area. Its act of incorporation gave the organization jurisdiction over twelve miles of shoreline along the mainland, and during the next few years the conveyance of waterfront lands from the City and a series of transactions with railway companies

and various individuals gave the commissioners ownership of over 90 per cent of this property. Very little acreage was alienated from their possession during the initial period of development, which lasted until the 1930s. In spite of the board's willingness to sell inshore sites, a policy that prohibited the purchase of property fronting onto the harbour's new dockwalls led to many manufacturers accepting the attractive benefits offered by nearby cities such as Hamilton.¹³ Those industrial or commercial concerns that agreed to locate along Toronto's shoreline enjoyed leasehold rather than freehold tenure, and the port authority maintained comprehensive records of its tenants' activities. Such information included significant changes in land use, requests for alterations to existing structures to accommodate new activities such as ship launchings, and changes in ownership when private corporations were nationalized to coordinate the production of munitions. As a landlord with large blocks of vacant property available for lease, the Toronto Harbour Commission was also the obvious choice when government agencies were looking for help when establishing war-related undertakings.

Secondly, these overtures for assistance were encouraged by the commission's historical role as a liaison between various levels of government, and as the driving force behind the industrial development of the waterfront. Federally-created harbour commissions managing inland ports have traditionally included municipal representation, ranging from one out of three members on the board for Hamilton, to the appointment of all five commissioners by the municipality in Winnipeg. This provided civic input into what was ultimately a federal responsibility, so that local concerns could receive an adequate hearing. In Toronto, members of City Council appointed three out of five harbour commissioners after 1911 while a fourth was nominated by the local board of trade, making for an exceptionally high level of municipal representation on a body that would manage the expenditure of millions of federal dollars. It is not surprising that the federal government would then turn to the port authority for assistance when wartime needs required prompt action from a local organization.

The Toronto Harbour Commission was well-suited for this role, for it owed its existence to a protracted struggle to develop the industrial capacity of the waterfront.¹⁴ By the beginning of the twentieth century it had become apparent that the existing port authority, the Harbour Trust, was an ineffective agent to deal effectively with the myriad problems that plagued Toronto's waterfront. The lack of coordinated development within the harbour, coupled with the extremely disruptive activities of the railways, left wharves ramshackle and neglected. In the view of the Toronto Board of Trade, the only answer to this mess was a reorganized harbour commission, one that would not only breathe new life into the commercial port, but would also undertake the reclamation of Ashbridge's Bay. Located at the east end of the harbour, the bay's 1,200 acres of marsh lands and shallow waters, long considered a prime site for industrial development, was the dominant issue in the campaign for a new port authority. These local designs were not lost on the federal government, which cooperated by creating a new commission with impressive landholding and financial powers that had been unknown to the Harbour Trust. While the maintenance of the port was an important concern for the organization, its activities were to be dominated by questions of urban planning and industrial development throughout its history. Edward L. Cousins, at various times the harbour

commission's general manager and chief engineer, and its most formative influence between 1912 and 1943, captured the essence of this dichotomy:

The harbor commission has always labored under the liability of its name. It should never have been created as a harbor commission. That was a misnomer. It should have been called an industrial and commercial development commission or some such name. No sane man would ever have spent \$25,000,000 which was the amount of the original bond issue, on Toronto's ambitions to be a lake port.

But the harbor was only secondary to the industrial area that was to be developed, with parks third. The basic idea was to reclaim 2,000 acres of waterfront land, of which 800 were to be parks and 1,200 for industrial purposes.¹⁵

This "basic idea" was the Toronto Harbour Commission's Waterfront Plan of 1912, which featured the reclamation of Ashbridge's Bay using 27 million cubic yards of dredged fill.¹⁶ It was an ambitious undertaking estimated to cost over \$19,000,000, but within months the harbour commission had won the support of both the federal and municipal governments.

The reclamation of the marsh lands began in May 1914, and the citizens of Toronto eagerly awaited the wholesale transformation of their waterfront over the next six years. The outbreak of war three months later did little to shake the studied confidence that had characterized much of the progress to date, but within a year, the stringent financial conditions induced by the conflict brought retrenchment. At a time when the city was forced to postpone all local improvements to answer calls upon its finances, the harbour commission restricted its activities to essential projects involving the development of industrial sites. The decision to press on was supported by Robert Rogers, the Minister of Public Works, whose department was spending millions of dollars to construct dock walls in Ashbridge's Bay. Recognizing the importance of harbour development to the industrial capacity of Toronto, he assured the city "that the work will be continued and carried on with all the force and energy at our command, as one of the great necessities of the people of Canada, war or no war."¹⁷

It soon proved to be an auspicious commitment. The accelerating demands of war-related industries had created an insatiable thirst for steel, and the hunt was on for means to increase the supply. One of the most vexing aspects of the shortage were the light steel turnings that were a by-product of shell production. Approximately 45 per cent of a shell's original steel composition was removed as the body was hollowed out during machining, and the annual accumulation of this waste metal was 350,000 tons in Canada alone. The turnings could still be melted down and recast into ingots, but the furnaces capable of doing such work were located primarily in the United States. A valuable source of steel was being sold to American manufacturers for little more than the cost of handling, and lost to future use by the Empire's starving munitions industries.¹⁸

In an attempt to remedy this situation, the Imperial Munitions Board, an Ottawa-based agency created in 1915 by the British Minister of Munitions to procure military equipment and supplies, decided to establish a massive steel plant to meet

the shortfalls in production. Negotiations for a site began in January 1917 between the Toronto Harbour Commission and senior executives of British Forgings Limited, the crown corporation responsible for building and operating the facility. The property under discussion lay in the former marsh lands of Ashbridge's Bay, which were slowly being replaced by unfinished retaining walls and approximately 75 acres of sandy fill. The commission offered to develop the site according to British Forgings' specifications, and to turn over the use of its plant, supplies and staff at cost. The most attractive features of the deal were the terms of lease, which offered property valued at over \$900,000 for a dollar a year for the duration of the war.¹⁹ In exchange for its largesse, the agency would gain its first major industrial tenant and the promise of future growth. As Cousins remarked to the Toronto newspapers in January 1917, "British Forgings will act as a magnet to other manufacturers, and we need not worry about the sale of our factory sites."²⁰

Once the Imperial Muniton's Board heard the commission's formal offer, it took only hours to agree to terms. The contract for construction of the plant was awarded to Perin & Marshall, a firm of consulting engineers from New York chosen presumably because of its experience with a technology that was primarily American in application. The harbour commission, meanwhile, was responsible for the preparation of the site and for laying the foundation. These were daunting tasks. The British Forgings lease would eventually encompass 127.6 acres, and by the end of 1916 only 59 per cent of this area had been reclaimed. Some 50,000 linear feet of pilings had to be driven down to bedrock before construction of the plant could

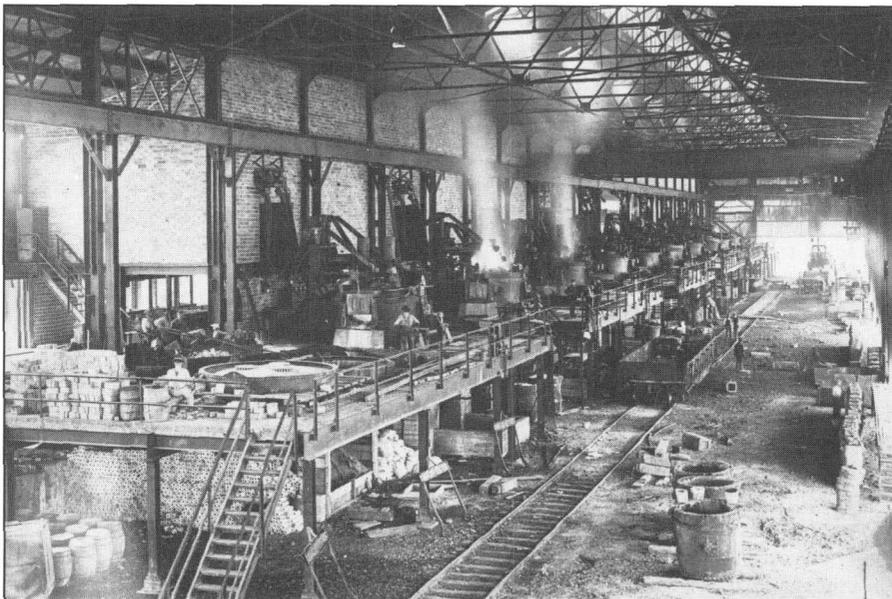


Figure 1: Interior of British Forging's melting house, showing two of the ten electric furnaces in operation on 28 June 1917 only days after the first steel was poured. Courtesy: Toronto Harbour Commission Archives, Arthur Beales Collection, PC 1/1/2859.

begin, but ground was broken by the first week of February 1917. Three months later work on the furnaces was almost complete, and on 19 June the Chairman of the Imperial Munitions Board, Joseph Flavelle, was able to cable Cousins and extend his "sincere thanks for your share in the successful work whereby steel was poured yesterday."²¹

Toronto had become the site of the world's largest electrical steel plant, boasting ten 6-ton furnaces that required a combined horsepower equal to almost half of the city's total consumption. A staff of 1,600 employees considerably exceeded management's expectations by producing 400 tons of ingots a day in the huge melting house, which were used for the 6-inch and 9.2-inch-high explosive shells machined in the shell forging plant. In return for the \$3,000,000 that the Imperial Munitions Board spent on its Ashbridge's Bay facility, it received some 48,000 tons of steel and over 3,000,000 shells prior to the armistice in November 1918.²²

The conclusion of the war brought widespread feelings of relief throughout the nation, but for the employees with British Forgings the celebrations must have been tinged with pangs of trepidation for their immediate futures. The armistice brought a sudden end to the demand for munitions only eighteen months after the plant commenced production. Approximately 1,400 men were released from their jobs within a fortnight, and the remainder would soon follow. The armistice brought an urgent need to wind up the affairs of the Imperial Munitions Board, and this task required agents with extensive connections in the real estate market. The logical choice in Toronto was R. Home Smith. His quite varied experience, which included the management of Latin American railways and a Canadian trust company as well as the residential development of large areas along Toronto's Humber Valley, had put Smith into contact with most of the financial titans of Britain and North America.²³ He had also served as a harbour commissioner since 1911, so that the sale of the British Forgings plant was a matter of more than passing concern. It proved to be a greater challenge than initially anticipated, but perseverance eventually paid off when a Welsh firm, Baldwins Limited, agreed in May 1919 to take over the site in an attempt to recapture the Canadian sheet steel and tin plate market that had been lost by Britain to the United States during the war. The venture was unsuccessful, and the plant was levelled in the 1920s to make way for the tanks of the McColl-Frontenac Oil Co. Ltd., the predecessor of Texaco Canada Inc. The once-impressive plant would soon be remembered only by a local road named Munitions Street, but for two brief years it was the central fixture in the development of Toronto's eastern waterfront.²⁴

At the same time that the manufacture of steel and shells was dominating the use of lands reclaimed from Ashbridge's Bay, a second industry promised to have a similar impact elsewhere in the harbour: the construction of merchant cargo vessels. By 1900, at least three shipyards were producing steel-hulled vessels along the central waterfront, and prospects looked good for continued growth as orders were steadily arriving from Canadian and international sources. The initial impact of mobilization was to suppress development due to a shortage of capital, but wartime demands eventually acted as a brief but intense stimulant for local shipyards. Merchant shipbuilding in Britain had ground to a halt in late 1914, when yards were commandeered to construct naval vessels. The anticipated battles at sea never materialized, and Britain quickly found itself desperate for merchant ships in the face of the heavy toll exacted by German submarines and the ensuing steep rise in shipping

rates. By December 1915, British shipyards were being returned to the construction of freighters, but the country lacked the manpower and the materials needed to maintain its navy while restoring the merchant marine.²⁵

Such an admission must have come grudgingly, for it was not until early 1917 that the British Ministry of Shipping began to consider the resources of Australia, India, and Canada. A tour of Canadian shipyards produced favourable reviews, and British officials turned to the Imperial Munitions Board to implement a shipbuilding programme designed to shore up the merchant fleet.²⁶ Steel ships were the first priority, and among the 42 vessels built across Canada were contracts awarded to the Polson Iron Works, which had been a tenant of the Toronto Harbour Commission since 1911. The firm quickly expanded their Frederick Street yards and work force, and over the next two years launched a series of six 3,500-ton vessels that ended with the *War Halton* in August 1919.

In an attempt to circumvent the chronic shortages of steel that became worse after the United States entered the war in 1917, the Imperial Munitions Board commissioned a number of vessels constructed from wood. After experiencing great difficulty in locating coastal shipyards that would accept the work, the Board turned to builders along the St. Lawrence River and the Great Lakes. Among these firms was the newly-formed Toronto Shipbuilding Company, which had taken a lease of land along the south side of the Keating Channel on lands reclaimed from Ashbridge's Bay. Under the guidance of John E. Russell, the company's vice-president who would become a fixture among the port's industrialists, some 400 tradesmen began work on two 3,200-ton vessels in September 1917. In spite of the troubling shortages of trained men and sufficient quantities of British Columbia fir, the *War Ontario* finally slid down the ways on 29 June 1918 — not without a certain amount of excitement²⁷ — and her sister ship, the *War Toronto*, followed some four months later.

Similar activity was going on in the west end of the central waterfront, but on a much larger scale. In late 1917 American and Norwegian capital combined to form the Dominion Shipbuilding Company for the purpose of acquiring the Thor Iron Works, a firm with considerable expertise in the construction of steel-hulled freighters. The new venture immediately looked to the harbour commission's industrial reserve at the foot of Bathurst Street for the site of its future development. The signing of the lease for this property in November was reported with enthusiasm, and perhaps with a sense of wonder at the boldness of any private firm that would engage a site that was two-thirds underwater. Its landlords had worked wonders for British Forgings, and it was anticipated that the same would happen for Dominion Shipbuilding. Unlike the munitions plant, this work included not only the preparation of the site, but also the construction of buildings that were reputed to make up one of the largest shipyards on the continent. Work on the property began almost immediately, and by July some 800 men were at work on five 3,500-ton freighters.²⁸ On September 26 Dominion Shipbuilding's first vessel, the *St. Mihiel*, finally slid down the ways into the sheltered waters of Toronto Bay.

The harbour commission's extensive involvement in this company's affairs, as well as the growing public and political interest in the shipbuilding industry as a whole, was predicated on one basic assumption: not only would the various yards counteract the menace of German submarines, but they would also "continue building



Figure 2: War Ontario being launched from the yards of the Toronto Shipbuilding Company. The indistinct cross near the bow's waterline is the form of the ship's caulker falling headlong into the Keating Channel (see note 29). He would soon be rescued unhurt by his co-workers. Courtesy: Toronto Harbour Commission Archives, Arthur Beales Collection, PC 1/1/3061.

for the quieter ocean commerce of peace."²⁹ Local hopes would soon be dashed by the federal government's refusal to award to Toronto yards any of the shipbuilding contracts for the new merchant marine announced in November 1918. In spite of very vocal attempts by Mayor (and harbour commissioner) Tommy Church to obtain a share of the money being spent on national reconstruction, the federal government's course could not be altered. In the face of such intransigence, an industry employing over 2,500 people and providing annual wages of \$2,350,000 quickly died. Only the Toronto Shipbuilding Company survived after a major restructuring, but its affairs were restricted to ship repairs and the construction of small scows and tugs.

Coupled with the loss of British Forgings, the closures of the other shipbuilding firms was a serious blow to the harbour commission and the industrial development of the waterfront. By the time of the armistice, a large percentage of the commission's reclaimed lands had been devoted to war-related industries, many of which were expected eventually to help finance the large-scale works that had been continued with some difficulty during the hostilities. The disappearance of these manufacturing concerns not only hindered the city's post-war redevelopment, but also dashed many of the Toronto Harbour Commission's hopes for the prompt achievement of one of the major goals of the Waterfront Plan of 1912 — the growth of a strong industrial base within the port area.

Given the nature of the harbour commission's involvement in these undertakings as both landlord and contractor, the agency's records for this period shed considerable light on important, if somewhat limited aspects of wartime industries along Toronto's waterfront. This information takes three basic forms: written records, engineering drawings, and photographs. The first group is primarily composed of the commission's central registry files, which have served since 1914 as the repository for the agency's original correspondence, memoranda, and reports. Hidden away in basement vaults prior to the implementation of an archival programme in 1975, these records have survived virtually intact to form the mainstay of responses to corporate and general research inquiries.

Files relating to property transactions begin with the opening round of negotiations, as well as details regarding the preparation of unfinished sites. This correspondence often contains interesting information about matters of policy, as well as the anticipated long-term implications of the proposed development.³⁰ Once principles of occupation had been resolved, discussions turned to more mundane matters, such as the legal niceties that complicated the signing of the lease, and questions of servicing, such as the installation of sewers and railway sidings and the dredging of waterfront slips. The qualitative value of the information does not substantially improve until the various plants subsequently closed their doors. The bankruptcy proceedings at the Polson Iron Works and the Dominion Shipbuilding Company are particularly useful, as the information sent to major creditors such as the harbour commission not only outlined the progress of the receivership, but also described in considerable detail the physical composition of the buildings and equipment.

In the case of British Forgings, the file contains a great deal of additional information about the disposition of the property. Home Smith and Cousins regularly corresponded about the frustrating lack of progress in negotiations for the sale of the plant to American steel companies, and copies of these letters were faithfully filed. Smith was also responsible for selling the munition factories owned by British Chemicals in Trenton, and British Cordite in Nobel, Ontario. Cousins offered frequent advice and assistance in connection with these two properties, and retained a number of very informative documents that pertain to the decommissioning of these plants.

Some of the more important developments affecting the war-related industries, such as ship launchings, fluctuations in employment numbers, and overviews of the sites' construction progress were not reflected in the official records of the commission, as they did not correspond with the housekeeping nature of the central registry files. Instead, staff relied on a comprehensive clipping service to corral published accounts of such matters. These newspaper articles were bound into scrapbooks, and have been preserved in an almost unbroken run. When combined with the central registry files, the result is a fairly comprehensive picture of the career of waterfront munitions and shipbuilding industries from a local point of view. This perspective represents a valuable supplement to the holdings of the National Archives of Canada for individuals involved in the Imperial Munitions Board, especially Joseph Flavelle, Lord Brand, Prime Minister Robert Borden, and Colonel William Gear, who served as the Board's Director of Steel Shipbuilding. Their papers deal for the most part with the particulars of individual contracts, as well as the broader context of the industry's wartime development in Canada.

The Toronto Harbour Commission's graphic records are quite useful for interpreting the physical features of these operations, and for preserving the architectural heritage of the waterfront's industries. Site plans prepared by the commission's Engineering Department establish the layout of buildings, dockwalls, railway sidings, and other structures, and these drawings are often vital to an understanding of the tailoring of sites and services to meet the demands of individual tenants. There are, of course, much more extensive holdings for British Forgings and Dominion Shipbuilding, for direct involvement in the construction of their facilities kept the commission's draftsmen quite busy. In addition to obtaining blueprints of the elevations, sections and floor plans drawn by Perin & Marshall, the commission prepared designs for the foundations of buildings and site servicing. Its expanded operations in connection with the shipbuilding yards led to the preparation of hundreds of linen drawings showing technical details of gantry cranes and other specialized features. Many of these drawings have survived, and they provide an interesting account of the industrial architecture that was associated with war-related industries.

The interpretation of these line drawings is reinforced and extended by the large number of photographic images that illustrate the development of the various industries. When the Engineering Department was formed under Cousins in February 1912, he gradually adopted many of the practices that had been popular with his former employer, the City Engineer. One of the most significant of these procedures was the use of a staff photographer to capture the progress of local public works.³¹ With the commencement of the harbour commission's own large-scale improvements in the summer of 1914, Cousins hired a professional photographer, Arthur Beales, to provide an account of his department's efforts. Beales' appreciation for landscapes, which led to a solid reputation as an award-winning photographer,³² was very evident during his career with the commission. Over the next three decades he took several hundred photographs a year, capturing comparative views of various engineering projects. These images depict the evolution of the harbour during the implementation of the Waterfront Plan, and almost all of his photographs have survived as either original negatives or prints.³³

The extent to which each industry was photographed was a reflection of its operational relationship with the harbour commission. The Polson Iron Works, for instance, had little involvement with the commission beyond leasehold negotiations, and as a result their yard appears only in a few elevated views of the general area east of Yonge Street. More detailed views of Polson's operations can be found in the photographs taken on site by the Department of National Defence, which document the construction of trawlers for the Royal Canadian Navy in April and May 1917.³⁴ The Toronto Shipbuilding Company, on the other hand, was a new firm located on land reclaimed by the commission, and several photographs were taken to record its operations, including side launchings into the Keating Channel. The bulk of the work, however, was dedicated to British Forgings and Dominion Shipbuilding, for the development of their properties was a matter of considerable importance to Beales' employers.

Beginning in January 1917, Beales took photographs almost daily on the site that would eventually support British Forgings. By June, he had accumulated over 220 views showing almost every aspect of the plant's quick ascent from the lakefill that was once Ashbridge's Bay. These images show construction methods and the

gradual reclamation of the marsh lands that surrounded the concrete foundations, and form a record of development that could never be matched by written reports. Most of these shots were included among his own series of registered photographs, but at least half of the better views became the property of Perin & Marshall. While the glass plate negatives were eventually taken back to the head office in New York, Beales had the good sense to retain original prints that would be held with his work for the commission, as well as a number of negatives taken by an unidentified photographer for Roger Miller & Sons, whose President, Fred Miller, also ran British Forgings. Beales' work emphasized the detached, technical and rather impersonal side of the massive structures. The more forceful images of sweat and toil in the plant were photographed by the Toronto studio of Pringle & Booth. Their work conveyed a sense of the drama that was involved in the war effort, while Beales captured the enormity of the task. Both approaches would find an important role in the historical record of the Imperial Munitions Board.³⁵

A similar impression is drawn from Beales' work at the foot of Bathurst Street. His photographs show the gradual construction of the harbourhead wall and the much more rapid reclamation of the site for Dominion Shipbuilding. His willingness to climb pile drivers, gantry cranes, buildings, and other structures with a cumbersome camera and glass plate negatives resulted in a detailed and powerful portrayal of the commission's work on the property, and the shipbuilding techniques of the company. His photographs have become a striking and significant record of the impact of Canada's mobilization for the First World War upon the development of Toronto's waterfront.

As in the days of Edward L. Cousins, the Toronto Harbour Commission continues to labour under the liability of its name. Most people naturally associate the agency with matters of shipping and navigation, but the port authority has maintained its traditional involvement with industrial and commercial development and the creation of dry land out of water. These problems of identity have affected the use of its historical records. Many researchers would not think of approaching the harbour commission for information about urban planning and the promotion of industrial development, just as those involved in the writing of military history and kindred studies have not yet probed its past for details concerning mobilization and war-related industries. A greater use of the holdings of local, often untried repositories would be beneficial to both approaches. In the case of the Toronto Harbour Commission Archives, its historical records can offer valuable perspectives on the impact of war upon the home front, not just in terms of its economic implications, but also in matters of long-term planning and the physical development of the port area. As military history and other sub-disciplines of the profession continue to expand their horizons, these are themes that deserve serious consideration.

Notes

- * The author wishes to acknowledge the kind assistance of Roy Merrens and Gene Desfor for their constructive comments upon an early draft of this paper.
- 1 Martie Hooker, "Clio's Enlistment: Military History in Canada," *Register* 5, no. 2 (Autumn 1984), p. 280.
 - 2 See, for example, Don McGillivray, "Military Aid to the Civil Power: The Cape Breton Experience in the 1920s," *Acadiensis* 3, no. 2 (Spring 1974), pp. 45-64, and Jean-Pierre Gagnon, *Le 22^e Bataillon* (Quebec, 1986)
 - 3 Hooker, "Clio's Enlistment," p. 283.
 - 4 Carl Berger, *The Writing of Canadian History. Aspects of English-Canadian Historical Writing: 1900-1970* (Toronto, 1976), pp. 169-171.
 - 5 Graham Metson, comp., *An East Coast Port...Halifax at War 1939-1945* (Toronto, 1981). Although Metson's work contains little analysis of the short- and long-term effects of the war, his use of contemporary photographs, reproductions of original documents, and personal reminiscences helps to capture some of the character of the problems facing Halifax. For a more detailed examination of these challenges and the various proposed solutions, see John Bacher, "From Paper Plan to Reality: The Movement for Public Housing in Halifax, 1930-1954," *Acadiensis* (forthcoming 1989).
 - 6 The Second World War also had considerable impact upon land use in the port of Toronto, but the role of the harbour commission was much more passive. The agency's involvement in the war effort was primarily restricted to leasing land to the Royal Canadian Air Force for use as an equipment depot, and to arranging for the operation of the Toronto Island Airport (constructed by the commission between 1937 and 1939) as a training base for the Royal Norwegian, and later the Royal Canadian, Air Forces. The commission was also nominally involved in turning over Malton airport to the federal government for the British Commonwealth Air Training Plan, the growth of aircraft manufacturing operations around the Malton site, the lease of property to Wartime Housing Limited, and in the activities of the Dufferin Shipbuilding Company, later known as the Toronto Shipbuilding Company. Due to the undeveloped state of the harbour in 1914, the commission had a much more active and significant role in the commitment of waterfront lands to industries associated with the First World War, and as a result, the scope of this article has been restricted to the years of this conflict.
 - 7 The scarcity of literature dealing with Canadian ports, particularly those in Ontario, is discussed in Malcolm Davidson, "Changing Patterns of Great Lakes Vessel Ownership as a Factor in the Economic Development of Toronto, 1850-1860," *Urban History Review/Revue d'histoire urbaine* 16, no. 3 (February 1988), pp. 242 and 252, note 3. Similar remarks concerning the lack of studies examining the history of the harbour administration in Canada can be found in Roy Merrens, "Port Authorities as Urban Land Developers: The Case of the Toronto Harbour Commissioners and Their Outer Harbour Project, 1912-68," *Urban History Review/Revue d'histoire urbaine* 17, no. 2 (October 1988), pp. 92 and 102, note 3.
 - 8 See, for example, The Burrard Dry Dock Company, *Progress: an Illustrated Presentation of the War and Peacetime Shipbuilding Facilities in Canada's Largest Pacific Port, Vancouver, British Columbia, 1894-1946* (Vancouver, [1946]), and the Dominion Bridge Company Limited, *Of Tasks Accomplished: the Story of the Accomplishments of the Dominion Bridge Company Limited and its Wholly Owned Subsidiaries in World War II* (Montreal, 1945). Detailed information about merchant shipbuilding can also be found in the scrapbook of photographic prints that was published by the Wartime Shipbuilding Limited, *A Ship is Built* (Montreal, n.d., [ca. 1946]). Naval vessels, on the other hand, have recently received some attention in Ken Macpherson, "Naval Shipbuilding on the Great Lakes, 1940-45," *Freshwater* 3, no. 1 (Summer 1988), pp. 10-14, a brief article that is especially useful for its list of warships constructed in Canadian yards.
 - 9 A brief but useful account of the historical development of port authorities in Canada can be found in an unpublished report prepared by the federal Department of Transport's W.J. Manning, J.H.W. Cavey and F.K. Devos, *Study of Harbour Administration in Canada*, (Ottawa, 16 September 1968). The current arrangements for the administration of Canadian ports are described in F. Shane Foreman, "A Matter of Semantics: the Canadian Port System Defined," *Portus* 3 (Winter 1988), pp. 16-18.
 - 10 J. de N. Kennedy, *History of the Department of Munitions and Supply: Canada in the Second World War. Volume 1* (Ottawa, 1950), p. xvii.

- 11 Under the terms of the incorporating legislation, 1-2 Geo. 5, ch. 26, the organization was given the name of The Toronto Harbour Commissioners. For purposes of convenience, this paper uses the less formal style that has been employed by newspapers and government agencies throughout the Harbour Commission's history.
- 12 A more detailed discussion of these holdings can be founded in Michael Moir, "The Toronto Harbour Commission Archives," *Urban History Review/Revue d'histoire urbaine* 17, no. 2 (October 1988), pp. 112-115.
- 13 *Toronto Star*, 30 October 1917; Toronto Harbour Commission Archives [hereafter cited as THCA], Records of the Board of Commissioners, RG 1/2, box 1, folder 5, "Report 1912-1919," p. 37.
- 14 For a discussion of the various problems plaguing the port of Toronto prior to 1911 and the movement to create the Toronto Harbour Commission, see Frances N. Mellen, "The Development of the Toronto Waterfront during the Railway Expansion Era, 1850-1912," (Ph.D. thesis, University of Toronto, 1974); James O'Mara, *Shaping Urban Waterfronts: the Role of Toronto's Harbour Commissioners, 1911-1960*, York University, Department of Geography, Discussion Paper No. 13 (Toronto, 1976), pp. 12-32; Roy Schaeffer, *The Board of Trade and the Origins of the Toronto Harbour Commissioners, 1899-1911*, York University, Department of Geography, Discussion Paper No. 27 (Toronto, 1981); the author's untitled article in *Port of Toronto News* 33, no. 2 (1986), pp. 2-5, 12; and Gene Desfor, "Planning Urban Waterfront Industrial Districts: Toronto's Ashbridge's Bay, 1889-1910," *Urban History Review/Revue d'histoire urbaine* 17, no. 2 (October 1988), pp. 77-91.
- 15 *Toronto Star*, 14 April 1931. A more extensive treatment of the organization's efforts to facilitate industrial growth along the eastern waterfront can be found in Merrens, "Port Authorities as Urban Land Developers," pp. 92-105. The author is grateful to Professor Merrens for sharing his work on this subject during the formative stages of this article.
- 16 Details of the Plan can be found in the booklet prepared by the Harbour Commission, *Toronto Waterfront Development, 1912-1920* (Toronto, 1912). It was a very polished publication containing numerous drawings and photographs, but more substantial details about the scope and implementation of the Plan can be found in the formal presentation made by the Harbour Commission to City Council on 13 November 1912; see THCA, RG 1/2, box 1, folder 1, Annual Report, 1912, Appendix, pp. 55-68; and *Minutes of Proceedings of the Council of the Corporation of the City of Toronto for the Year 1912* (Toronto, 1913), Appendix "A," pp. 1802-1812. Although the published proposal has received considerable attention from urban historians discussing the planning movement during the early twentieth century, the more useful (but much less attractive) overture to City Council has been virtually overlooked.
- 17 *Toronto News*, 4 March 1916.
- 18 David Carnegie, *The History of Munitions Supply in Canada, 1914-1918* (London, 1925), p. 164.
- 19 THCA, Central Registry Files, RG 3/3, box 167, folder 10, E.L. Cousins to Col. D. Carnegie, 8 and 13 January 1917.
- 20 *Toronto Star*, 17 January 1917. These remarks were echoed four months later in a letter to the Ordnance Advisor to the Imperial Munitions Board, and Cousins also observed that "I am frequently confronted with the question in American industrial inquiries as to whether there is a steel plant in Toronto;" THCA, RG 3/3, box 167, folder 12, E.L. Cousins to Col. D. Carnegie, 25 April 1917.
- 21 *Ibid.*, Flavelle to Cousins, 19 June 1917.
- 22 Carnegie, *History of Munitions Supply*, pp. 171-73. There is some confusion over the actual cost of the facility. While Carnegie quoted a figure of \$2,500,000, Flavelle used the more substantial amount of \$3,000,000; THCA, RG 3/3, box 167, folder 14, Flavelle to E.L. Cousins, 23 September 1918.
- 23 For a discussion of Smith's significance as a developer of real estate, see Ross Paterson, "The Development of an Interwar Suburb: Kingsway Park, Etobicoke," *Urban History Review/Revue d'histoire urbaine* 13, no. 3 (February 1985), pp. 225-235. In spite of his involvement in many issues that were important at provincial and municipal levels, Smith remains an enigmatic and relatively unknown individual.
- 24 Although gone from view, British Forgings has not entirely disappeared from the site. An engineering firm obtaining soil samples for an environmental assessment of the property recently bored into a number of massive concrete caissons. Their origin was unknown, until the examination of engineering drawings and photographs at the Toronto Harbour Commission Archives revealed that these caissons were part of the original foundations for the plant.
- 25 J. Russell Smith, *Influence of the Great War on Shipping* (Ottawa, 1919), pp. 244-246.
- 26 For an overview of this programme, see Carnegie, *History of Munitions Supply*, pp. 204-214.

- 27 The Imperial Munitions Board normally avoided frills and ceremony during the launching of its vessels. In this case, the suggestion to replace the champagne used for christening with water led to a vigorous letter campaign from sailors and others who protested that such a switch would bring the vessel a string of bad luck. Lady Hearst, who performed the ceremony, acquiesced, but the traditional formalities did not prevent a ship's caulker, Fred Bradley, from sliding off the rain-soaked decks and tumbling head-first down the side of the ship and into the Channel. He was retrieved intact, only to be jokingly accused of being paid \$10 by John Russell "to jump overboard ahead of the boat for the benefit of the movies;" *Toronto Globe*, 1 July 1918.
- 28 *Toronto World*, 17 July 1918. This article also contains a brief but interesting account of construction methods at the shipyard.
- 29 *Toronto News*, 26 September 1918.
- 30 This pattern applies to each prospective tenant, for information concerning the nature and advantages of individual applications had to be presented before the publicly appointed board of commissioners. As a result, the central registry files contain a wealth of information about the evolving pattern of land use along Toronto's waterfront.
- 31 Toronto, Department of the City Clerk, Records and Archives Division, *The City of Toronto Archives* (Toronto, 1986), pp. 11-13. In recognition of the important role that these photographs play in the interpretation of changes to the urban landscape, the City of Toronto Archives recently mounted an exhibit entitled "The Camera at Work: Photographs from the City Engineer's Collection, 1890-1910."
- 32 Examples of Beales' work and details about his life and career can be found in Lilly Koltun, ed., *Private Realms of Light: Amateur Photography in Canada, 1839-1940*, (Markham, 1984). According to information compiled by Peter Robertson during the preparation of this book, landscape photographs taken by Beales finished first in competitions held by the Toronto Industrial Exhibition as early as 1895. Selections of his work for the Toronto Harbour Commission also form the basis for a regular column in its magazine, *Port of Toronto News*, as well as for its recent publication, *Toronto Harbour: The Passing Years* (Toronto, 1985)
- 33 While the Toronto Harbour Commission Archives is the principal repository for the photographs taken by Beales between 1914 and 1949, a number of images have found their way to the National Archives of Canada as part of the Andrew Merrilees Collection.
- 34 National Archives of Canada, Documentary Art and Photography Division, PA-125813-125814, 125818-125825, 125827-125828.
- 35 Samples of the work of Pringle & Booth at the British Forgings plant are held by the National Archives of Canada, which also obtained copies of 33 Beales photographs that show the progress of construction between 31 January and 26 March 1917 (PA-97547-97584). Several of these images, as well as the work of other photographers, were included in the scrapbook compiled and edited by Frederick Nelson, and published in Canada by the Imperial Munitions Board, *Souvenir Photographs Illustrating the Work Undertaken by the National Factories of British Forgings Limited, Toronto, Canada, during the Great War of 1914-1918* (n.p., n.d.). The Toronto Harbour Commission Archives has a copy of this work that was presented to Cousins.