THE MCGILL ARCHITECTURE OF PERCY ERSKINE NOBBS

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ABSTRACT

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This thesis examines the seven major commissions executed for McGill University between 1904 and 1931 by the Canadian architect and teacher, Percy E. Nobbs (1875-1964), as a means of determining his design philosophy and creative growth. The works are the McGill University Union, the Macdonald Engineering Building, an extension to the University Library, the Osler Library, the Pathological Institute, the Pulp and Paper Research Institute of Canada, and an extension to Royal Victoria College.

The first section describes Nobbs's Arts and Crafts-influenced training in Edinburgh and London prior to his becoming head of the McGill School of Architecture in 1903. The McGill commissions are then analyzed chronologically and related to architectural trends in Britain, Canada, and the United States. In each case, Nobbs's Arts and Crafts background is seen to be the basis for his humane design concerns. His work is ascribed to the prevailing traditional eclectic stream of the early twentieth century; the merits of his approach are discussed in the conclusion. Both the architect's executed and unexecuted designs for McGill are listed in appendices, and there is a bibliography of his extensive writings.

PREFACE AND ACKNOWLEDGMENTS

On 13 July 1903 the Board of Governors of McGill University appointed Percy Nobbs, a young Scottish-trained architect then working in London, to head its School of Architecture. Only a month short of his twenty-eighth birthday, Nobbs was the second man to assume the chair, which had been endowed in 1896 by Sir William Macdonald, the university's great benefactor. McGill profited not only from Nobbs's teaching, but from his example; for, although he ultimately resigned as Macdonald Professor to take up private practice, he continued to teach in the department and for over twenty-five years designed new buildings and extensions on or near the campus. These McGill works, designed throughout the architect's working life, provide a unique opportunity to study in microcosm the ideas and development of a major Canadian architect and teacher of the first half of the twentieth century. It is apparent from his extensive writings that Nobbs, who was profoundly influenced by the British Arts and Crafts movement, intended from the first to create an architecture appropriate to his adopted country. The McGill buildings clearly reflect this aim--serving as object lessons for Nobbs's students, Canada's future architects.

This thesis examines Nobbs's major commissions at

McGill (both major and minor works are listed in Appendix I) as an initial step in determining the design philosophy and creative growth of an important architect whose oeuvre until now has not been subjected to any extensive or systematic critical analysis. It is hoped that in so doing, an exceptionally able individual will receive the consideration he deserves, and the history of Canadian architecture will benefit from added knowledge.

Percy Nobbs was a product of the late Victorian and Edwardian age, a period which has only just begun to draw the attention of architectural historians after years not only of neglect, but of marked disdain. This has made investigation and assessment both challenging and difficult. Many of Nobbs's most deeply held ideals were eclipsed by modernist dogma as the century progressed, but now, in the post-modern era, the pendulum has swung, and there is a renewed enthusiasm for the eclectic architecture of a generation that also found itself confronting the end of a tradition. It is surely especially relevant, then, to look closely at an architect who was typical of those times and attempt to evaluate his achievements and his shortcomings. An uncritical acceptance of twentieth-century traditionalism is as detrimental to the furtherance of knowledge as its wholehearted rejection. We can learn from both the successes and the failures of our predecessors as we face the uncertainties of our own future.

Much of the information on Nobbs and his buildings was obtained from sources at McGill University in Montreal. These include the architect's drawings and plans, photographs, and papers in the Nobbs Room, McGill University Library; the Board of Governors Minute Books, McGill Scrapbooks, and the papers of Principal Sir William Peterson (Peterson Papers) in the McGill University Archives; and the Osler Library Reception Committee file and related material in the Osler Library of the History of Medicine located in the McIntyre Medical Sciences Building.

My thanks are due in particular to John Bland, the current Macdonald Professor of Architecture at McGill, who kindly allowed me full access to the holdings in the Nobbs Room and graciously answered many questions concerning his former teacher. As a result of Professor Bland's foresight and the generosity of the Nobbs family, an important collection of original material has been preserved to benefit Canadian architectural history. Others at McGill were also generous with their time: Faith Wallace, Archivist, and Marilyn Fransiscyn and Dr. E.H. Bensley of the Osler Library. I am also grateful to the Montreal architects, Frank Nobbs and Harry Mayerovitch, for sharing their reminiscences with me on several occasions. Finally, I would like to express special thanks to Harold Kalman, Ph.D., Consultant in the History and Conservation of Architecture, for his excellent suggestions and criticism and to my husband, Timothy, for contributing his editorial and photographic talents.

CONTENTS

PART I: EARLY LIFE AND TRAINING

1. EARLY LIFE AND TRAINING

Percy Erskine Nobbs was born on 11 August 1875 at his mother's family home in Haddington, Scotland, near Edinburgh. He spent the greater part of his childhood, however, in St. Petersburg, Russia, where his father managed the Midland Bank.[1] As a result, romantic classicism and magnificent urban planning were among his earliest visual impressions, and it was at the Imperial School of Art in this capital city of the Romanov czars that he received his first artistic training.

In 1887, at the age of twelve, Nobbs returned to Edinburgh where a further unforgettable architectural experience awaited him--in addition to romantic classic, there were authentic medieval structures in one of the most picturesque settings in the world. By 1896, when he had received his M.A. in Arts from Edinburgh University and begun his articled pupilage under the Edinburgh architect Robert (later Sir Robert) Lorimer, classicism was less dominant in the Edinburgh region.[2] Nobbs described the atmosphere in an article he later wrote on his contemporary and colleague, Ramsay Traquair. Since Traquair underwent a similar training, Nobbs might easily have been characterizing his own background:

It is worth remembering that in the artistic life of the Edinburgh in which Professor Traquair grew up, the Gothic Revival was still actively in force. That Edinburgh no longer gloried in the appelation of "the modern Athens", and the making of Doric columns out of Craigleith sandstone had long since ceased. It is not too much to say that the word "academic" was a term of reproach in the artistic circle in which he received his training. This consisted largely in getting a thorough understanding of the principles of Medieval Architecture, . . . [and an] intimacy with the arts and crafts and all that the pre-Raphaelites and William Morris stood for.[3]

Robert Lorimer (1864-1929), with whom Nobbs articled, was a prominent and much-admired figure in his day. He belonged to the post-Pugin phase of the Gothic Revival after the work of antiquarian scholars such as his own teacher, Rowand Anderson (1834-1921), had led to a broader, deeper understanding of indigenous Scottish building and the related techniques.[4] As Alexandra Gordon Clark says in her discussion of Pugin: "Before him architects could, from learning and imitation, add Gothic details; after Pugin they could design as if the medieval building tradition had never been broken."[5] Like Anderson and Pugin before him, Lorimer contributed to this advance in knowledge and skill. Much of his work involved restorations to the medieval tower houses which were unique to Scotland (Fig. 2), and his own designs frequently drew on these old Scottish forms as well. In an age when nationalism was widespread, Lorimer, like many other architects, purposely worked in a vernacular idiom (Fig. 3). His contemporary, Charles Rennie Mackintosh (1868-1928), did this too in such houses as Windy Hill, Kilmalcolm (1899-1901), and Hill House, Helensburgh

(1902-4) (Fig. 4);[6] but the innovative Glaswegian broke ground in a way that was impossible for the more conservative Lorimer or, for that matter, Nobbs.

Lorimer influenced Percy Nobbs more than any other single architect. He was only eleven years older than his student, and although his name is less well known at the present time than many of his peers, he was a notable participant in that important offshoot of the Gothic Revival, the Arts and Crafts movement.[7] Lorimer trained a skilled body of craftsmen to assist him in his work, and he passed on much of his knowledge and enthusiasm in this field to Nobbs, who acted as his chief assistant in the final year of apprenticeship. During his school and college years Nobbs had taken a number of art and technical classes at Heriot Watt College, the School of Art, and Rowand Anderson's School of Applied Art. Consequently, by the time he had completed his training under Lorimer, he was extremely well versed in the various techniques relating to architecture--stonemasonry and carving, woodworking and cabinetry, plasterwork, metalwork, and stained glass. He also developed considerable facility with pen and brush, having studied under the landscape painter, W. D. McKay, secretary of the Royal Scottish Academy.

His association with Arts and Crafts enthusiasts in Edinburgh provided Nobbs with more than just technical expertise. The movement was, in essence, a secularization

of the religious idealism of A. W. N. Pugin (1812-52) and John Ruskin (1819-1900) who had looked to the medieval past, an age of spiritual ascendancy (so they believed), for antidotes to the inhumane squalor and ugliness of a rapidly industrializing England. Inspired by the older reformers' message, William Morris (1834-96) and Philip Webb (1831-1915) practiced and disseminated an Arts and Crafts ideology, permeated by social responsibility, which centred on man-made, rather than machine-made products. Linked to this veneration of handcraftsmanship were a love of the past; a profound respect for nature and natural, indigenous materials, for simple, rural buildings, and for the traditions of each region; and a sensitivity to the proper relationship of architecture to its surroundings. Lorimer shared these sensibilities, passing them on to Nobbs, who in turn transferred them to another continent and an urban setting, creating buildings which draw on local materials and traditions and are carefully adjusted to their environments.

Nobbs was accustomed to spending his holidays with his family in Russia. In 1896, he was awarded the Cross of St. Andrew for covering the coronation of Czar Nicholas II as a press artist. After completing his apprenticeship in 1900, he spent some time travelling and studying in other countries on the Continent, notably France, Italy and Germany. It was a particularly opportune time for an aspiring architect to visit Paris, for the immense Exposition of 1900 was taking place. Here, as the historian

H. S. Goodhart-Rendell tells us, visitors were just as much astonished by the grand Parisian classical manner as by Art Nouveau work.[8] This watershed year was personally auspicious as well. Not only did Nobbs pass his examination for associate membership in the Royal Institute of British Architects (he subsequently became a Fellow), but one of his designs (Fig. 5) was awarded the Tite Prize given by the RIBA for the purpose of promoting the study of Italian architecture.[9]

Nobbs chose to continue his architectural education in London, seeking opportunities for work and growth which poorer Edinburgh could not offer. By comparison with the Scottish city, London at the turn of the century was an exciting place for any architect.[10] In recent years there had been a great deal of building, much of it large and very expensive. The national government had commissioned a series of imposing edifices for various of its departments during the late 'eighties and 'nineties and continued to do so into the Edwardian era. More important for Nobbs, however, was the municipal construction which was such an important feature of this period. Sir John Summerson points out that in the decade from 1895 to 1905 county halls, city halls, and municipal buildings were rising at the rate of two or three a year, and that it was in this realm in particular that the most important types and styles were developing.[11] Local authorities,

strengthened by the Local Governments Acts of 1888 and 1889, set about constructing such modern urban necessities as public libraries, court houses, hospitals, fire stations, schools, swimming baths, and early urban housing estates. It was in this challenging field that Nobbs sought work, joining the Fire Brigade Branch of the London County Council's Architect's Department in 1901. Here, says his biography in the Canadian Architect and Builder, "he gained much practical experience in building operations."[12]

The London County Council had been created in 1889 to deal with the vast problems engendered by the rapidly expanding city. It shortly formed its own Architect's Department, taking over the duties of the old Metropolitan Board of Works. The situation must have been stimulating for Nobbs; the two major contemporary currents in English architecture were both operative here. On the one hand there were those who wished to see London transformed into an imperial capital rivaling Napoleon III's Paris. Grandeur was their aim, and after the turn of the century, a number of Beaux-Arts-inspired projects emerged under the Council's auspices. Notable among these was the grand scheme of Aston Webb (1849-1930), initiated in 1901, for the Mall approach to Buckingham Palace (Fig. 6).

Concurrently, there were the idealists and radicals who were inspired by the social theories of such groups as the Fabians.[13] Many members of this faction were asso-

ciated with the Arts and Crafts movement. Their concerns centred around very different forms of urban improvement: garden cities, eradicating slums, and providing adequate housing and other services for the poor. The London County Council

> . . . received applications for jobs from a stream of young architects attracted by the social idealism of the work. This was a generation born in the 1860's or later and strongly influenced by the political and social ideas of William Morris and Philip Webb. It is Webb's manner above all that one sees in the countless austere but striking, and humanely planned, buildings and housing estates which the department built before the First World War.[14]

Two outstanding examples of this architectural current were completed while Nobbs was in London: the famous Milbank Estate (1899-1902) (Fig. 7) behind the Tate Gallery and the Euston Fire Station (1901-2). In both, small-scale English vernacular forms were used to great advantage. Andrew Saint calls such projects "some of Britain's most radical and moving architecture."[15]

Partly as a result of his training under Lorimer, Nobbs responded strongly to this tendency. It would emerge later in Canada in the humanity, spareness, and lack of pretentiousness which characterize his designs and in his tireless efforts in the areas of slum clearance, low-cost housing, and city and regional planning.

Yet Nobbs's Arts and Crafts training and sympathies did not prevent him from being affected by the more magnificent architectural and urban improvement projects which symbolized the imperialism of late Victorian and

Edwardian times. Even before coming to London, he had been exposed to two of the world's most splendid examples of classical formal planning in St. Petersburg and Edinburgh. His response to this would be his proposal for the future development of the McGill campus and the formal plan he devised for the University of Alberta. Certain unexecuted projects, such as a War Memorial Hall that would be designed for McGill just after the First World War, reflect a grandeur not apparent in his executed work.[16] Most architects, however, cannot refrain from the occasional dream of glory.

Percy Nobbs was not the only Arts and Crafts-trained architect to be receptive to classical forms. Even before the turn of the century, various free classical modes (as distinct from French classicism) had steadily been gaining ground. These appealed to many Arts and Crafts followers who were concerned with urban problems, but were not prepared to rely on country building for all their solutions.[17] For many of these men, a classical approach seemed an elegant way of dealing with huge city structures, yet difficult to reconcile with the movement's ideals of rural simplicity, handcraftsmanship, and a vernacular style. One apparent solution to this dilemma appeared in 1888, when John Belcher (1841-1913) and his talented young partner Arthur Beresford Pite (1861-1934), both highly respected members of the Arts and Crafts movement, published their designs for the Institute of

Chartered Accountants to be built in the City of London (Figs. 8-9). This seminal work (1888-93) is in a style which its creators called free Late Renaissance (i.e. Baroque), and it established a fashion for Baroque Revival architecture which climaxed during the reign of Edward VII.[18] While simplicity is not one of the building's outstanding characteristics, it is not pompous as many of its successors were. It appealed to Arts and Crafts designers because it displayed inventiveness and individuality and was a showcase for the decorative arts. The Institute of Chartered Accountants is, in fact, a gem and was immediately recognized as such; its light-hearted exuberance perfectly suited the expansive self-confidence of the age. Almost immediately it influenced the widely-imitated Richard Norman Shaw (1831-1912). Upon seeing Belcher and Pite's designs, Shaw added Baroque blocked windows, aedicules, and doorways to his plans for New Scotland Yard (1887-90) (Fig. 10), which according to Summerson was "probably the most influential building in Britain" around 1900.[19] Shaw saw these details as stemming from the English classicism of Jones and Wren, and this "Englishness" satisfied the many Arts and Crafts architects and others who were seeking a national-rooted style. The freedom with which Belcher and Pite and then Shaw used their variously derived forms appealed, too, to British progressives who derided the academic manner of the French.[20]

Despite such hopeful beginnings, however, the English Baroque Revival was an imperfect solution. By the middle of Edward's reign, the development of modern steel frame construction was already making massive masonry walls both unnecessary and uneconomical for large urban structures.[21] Yet the enormous popularity of this revival style thwarted nascent British attempts to develop more suitable twentieth-century forms, much as the contemporary academic reaction in the United States slowed innovation there.

Both Shaw and Belcher were to be on Percy Nobbs's mind when he came to design the new Engineering Building at McGill in 1907.[22] Of particular interest in this regard is C. H. Reilly's statement that Nobbs was connected with Belcher's office.[23] Reilly, unfortunately, does not give specific dates, but an unusually revealing reminiscence of Nobbs's provides an indication. Subsequent to his employment with the London County Council, the young architect had joined the office of A. Hessel Tiltman (1854-1910), a successful London architect specializing in civic work.[24] Nobbs wrote:

> Later, just after the beginning of the century, I was chief assistant to Mr. A. Hessel Tiltman, who depended entirely on winning competitions to make a living. This was a busy office carrying out a large volume of work won and always throwing bread upon the waters. The pace was too fast for me, however, and for some time thereafter I prospered as a competition draughtsman in London, working for all and sundry, till one day Lorimer visited my quarters in Chelsea and extorted from me an oath that I would never draw for any one but myself. Shortly after, however, he arranged that I should

work for Walter Tapper on his Liverpool Cathedral competition design, but this was to be the last.[25]

The widely disputed Liverpool Anglican Cathedral competition was held in 1903, and although Tapper's was not the winning entry, the year was another crucial one for Nobbs. He won a second important prize given by the RIBA, the Owen Jones Studentship, for a design for the decoration of a church in mosaic (Fig. 11).[26] It should not be forgotten when looking at Nobbs's plain, greystone structures at McGill, that colour was an important part of his Victorian heritage. Mosaic and tile work were very popular at the turn of the century. Townsend's Horniman Museum (1896-1901) and Bentley's Westminster Cathedral (1895-1903) both contained notable mosaics.[27] The Builder complimented the young architect on his work about this time, remarking on the quality of the architectural designs he submitted to the annual competitions of RIBA, especially those in watercolour.[28]

It was in the summer of 1903 that President Peterson of McGill, on his annual trip to Europe, interviewed Nobbs as a candidate for the Macdonald Chair of Architecture. This came about through the recommendation of Gerald Baldwin Brown, Professor of Art and Architecture at Edinburgh University, a schoolmate of Peterson's, and his advisor on such matters.[29] Nobbs accepted the position and prepared to set sail for Montreal.

PART II: EARLY PERIOD AT MCGILL

1. MCGILL BACKGROUND

McGill's Department of Architecture was in its infancy when Percy Nobbs assumed the chair, but the university itself was one of the oldest independent institutions of higher learning in Canada.[1] In 1813 a public-spirited Scottish settler, James McGill, had died, leaving his Burnside farm of forty-six acres and £10,000 to the Royal Institution for the Advancement of Learning for the purpose of establishing a university in Montreal. McGill, who had made his fortune in the fur trade, realized that the future development of the country would depend on education. His university's progress, however, was long impeded by litigation over the endowment and by indecision on the part of the administrators; it was not until 1843 that instruction was offered in subjects other than medicine. In the following decade, with the appointment of William (later Sir William) Dawson (1820-99), McGill's real growth began.

On the advice of the future Governor-General, Sir Edmund Head, the governors took a daring and somewhat unnerving step in hiring not a well-known European educator to the position of principal, but a native Canadian born in Pictou, Nova Scotia. Dawson was, in fact, largely self-educated. When he took up his new post in 1855, he did not

even possess a university degree, although he had studied at Edinburgh University and would shortly obtain one. It was mainly through his own initiative that he had obtained world-wide recognition as a natural scientist, and this pioneering self-reliance served him well at McGill. He was undaunted by the magnitude of the challenge he faced and set about creating a university which would be useful in a colonial society. To this end, he concentrated on the sciences and professions which continue to be McGill's great strengths. Dawson deliberately turned his back on old world models, knowing that he could offer students neither the resources nor the amenities of an Oxford or a Cambridge. Other luxuries, however, were readily available: a challenging new world to be explored and conquered using inventiveness and self-reliance, without the constraints of tradition.[2]

McGill's rapid growth as a great scientific school was undoubtedly aided by an unusual (for the time) non-sectarian charter and the freedom of thought which this encourages. Such a charter had been a response to the bicultural character of Montreal rather than an early example of educational godlessness, but it ensured the university's steady growth at a time when Canada's denominational institutions were hampered by divisive and costly religious affiliation.[3]

William Dawson strongly approved of non-sectarian education, although at the same time, like many early

Canadian pioneers, he was a profoundly religious man. The momentous advances in scientific knowledge of the nineteenth century did not disturb his faith. He taught science "as the study of the handiwork of God, a subject as sacred as it was practical."[4] Religious belief was the mainspring of his abundant humanity, and it gave "inner meaning not only to Dawson's emphasis on science at McGill but to the whole range of Dawson's work as principal."[5] Although this vision of the religious quality of science faded at McGill after Dawson's death, it had infused needed strength into the struggling university, inspiring all who knew him.

Principal Dawson had to endure many frustrations before his hopes for the university began to materialize. He was extremely fortunate to find in the 1870s a benefactor for McGill who shared many of his own ideals and who was, like himself, a native Canadian. This was William Macdonald (1831-1917), grandson of a Scottish chieftain, Captain John McDonald, who had founded the first Scottish settlements on Prince Edward Island.[6] Having left Charlottetown for Montreal at an early age, William Macdonald had made his fortune by building up a Canadian tobacco industry while the Americans were preoccupied with their Civil War. He too believed in a practical education for a developing country, and it was he who created the modern scientific side of the university in a material sense. The great science buildings for

engineering, physics, and chemistry were his gift in the 'nineties. In addition he endowed chairs, including the one in architecture. He had the forethought to provide McGill with valuable land for future expansion in the centre of Montreal and was later to give an additional campus at Ste. Anne de Bellevue. Macdonald's gifts to the university ultimately totalled well over $10,000,000.[7]

Dawson's McGill had other important benefactors: William Molson, Peter Redpath, Lord Strathcona. In this pre-twentieth-century period their gifts were all concentrated like Macdonald's on the basic necessities--classrooms, laboratories, a science museum, a library. Such luxuries as a students' union would have to wait for a new era and a new principal, William Peterson (1856-1921).

Principal from 1895 to 1919, William (later Sir William) Peterson was almost the exact antithesis of Dawson.[8] He was Scottish-born, had studied classics at Edinburgh, Oxford, and Gettingen, and was serving as principal of University College, Dundee, when McGill's chancellor, Sir Donald Smith (later Lord Strathcona), persuaded him to come to Canada.[9] He never did totally adjust to this harsh new environment and returned annually to Europe. Yet it was during the Peterson years that the university achieved its full stature in scientific teaching and research. His devotion to the humanities brought a needed balance to the university, and he made some brilliant

scientific appointments. The most famous of these was Ernest Rutherford whom he lured from the Cavendish Laboratory to Macdonald's splendid new Physics Building. A man of Peterson's culture and sophistication was needed to lead McGill into the new century. Dawson had been a pioneer, but the pioneering days of McGill were now a part of the past. In the twentieth century the university could hold its own among the great educational institutions of the world. Its graduates no longer limited their activities to Canada, but put their skills to work throughout the world.

2. THE EARLY ARCHITECTURE OF MCGILL

The McGill buildings which Percy Nobbs first saw in September of 1903 were in his own words "a somewhat disjointed and oddly assorted crowd,"[10] but they were a vast improvement over the derelict campus which William Dawson had confronted on reaching Montreal a half century earlier.[11] Thanks to Dawson's foresight and the generosity of the early benefactors, the greystone structures which stood on the grounds as the new century opened were solid and commodious. Their diverse styles reflected the changing tastes of the Victorian era when, as Nobbs would later write, "taste in buildings was as fluid and as flimsy as taste in dress to-day, and an affair of moments only."[12] Be that as it may, these structures also expressed the non-sectarian character of the university. Throughout the nineteenth century classical and Romanesque modes had consistently been chosen for the various McGill buildings, but not the Ecclesiological neo-Gothic. Nearby religious institutions such as Presbyterian College and Diocesan College had, on the other hand, been appropriately Gothicized. As Stephen Vickers points out in his discussion of University College, Toronto, such deliberate architectural symbolism was not uncommon in Canada,[13] and McGill was no exception. Indeed, the architect of

Diocesan College (1896) and of most of the late nineteenth-century McGill structures was the same: Andrew Taylor (1851-1938), a British architect who carried on a successful practice in Montreal from 1883 to 1905.[14]

It was Taylor who designed the three science buildings for William Macdonald, who, like Dawson, was a firm believer in non-sectarian education. Macdonald had even gone so far as to renounce the religion of his Jacobite forebears; but not, as Percy Nobbs would astutely observe, because he was "negative against religion, but positive for freedom of thought."[15] It is probable that these convictions had influenced the choice of Renaissance and Romanesque stylistic treatments for the science buildings rather than Victorian Gothic. They certainly motivated his funding in 1904 of the McGill University Union, which would also be in a classical mode. Having discovered that Lord Strathcona had furnished money for the erection of a Young Men's Christian Association (Strathcona Hall) directly across from the campus, which would provide living accomodation, club, and game rooms, Macdonald said to Nobbs, the architect of the proposed Union, "Lord Strathcona and his friends are putting up a building for the Christian young men of McGill. I want a building for all the young men of McGill."[16]

In an age when extravagant generosity was frequently merely another form of self-glorification, Sir

William Macdonald was a somewhat unusual millionaire. His proud lineage freed him from the need to establish a position by means of his wealth, as Lord Strathcona did; and in any event, he was by nature a modest and unassuming man. He believed in simplicity in all things and spent little on himself, living "at less expense than his book-keeper"[17] in Prince of Wales Terrace next to the McGill campus. Macdonald travelled infrequently to Europe, "sedulously avoiding the 'light that beats about a throne.'"[18] His favourite occupations were his duties as governor and later chancellor of McGill and the disposition of his many benefactions. Yet whenever the board attempted to thank him for his generosity, he was usually nowhere to be found. This simplicity and lack of ostentation would be reflected in the austere, yet dignified Union that Percy Nobbs would design for him.

3. THE MCGILL UNIVERSITY UNION

1904-1906

The McGill University Union (Fig. 12) was an appropriate structure for the new century. One of the primary functions of a union was as a place where young men might cease being pioneers and acquire some polish. Accordingly, the building was modelled on a gentlemen's club. Dean Moyse remarked that

> . . . what has been needed at McGill has been something to emphasize the social side of the student's life and afford them a meeting place . . . after all, the greatest object of a university education is not to give men information, but to make them men of gentlemanly instincts and behaviour. One of the best means of bringing about that result is for men of inferior polish to be thrown into contact with those of superior polish.[19]

Sir William Macdonald's motives for eventually funding this expensive undertaking were, as might be expected, somewhat different. A childless bachelor, the students were his children. He was concerned not only with their education but with their general physical well-being. He thus gave not only academic buildings and endowed chairs but provided land for playing fields and a union where "all the young men of McGill" could dine and relax together.

The original idea for such a building had not, in fact, been Sir William's. Rather, it had come from two

alumni, Arthur E. Childs and H. Holton Woods,[20] who were living in Boston and were undoubtedly envious of the recently completed Harvard Union (1901) designed by the leading American architectural firm of McKim, Mead and White. In February 1903 the two McGill graduates had offered to donate $5,000 each if another $65,000 could be raised. The gift would celebrate the university's seventy-fifth anniversary in June of the following year. By March 1904, however, the additional funds had not materialized, and a delegation of students, eager for their union, had gone to see Sir William Macdonald. He had agreed to help and eventually gave not only the $75,000 for the building and a further $25,000 for equipment, but also a suitable site opposite the campus at the south-east corner of Sherbrooke and Victoria streets.[21] In this way, Macdonald became the effective client for the Union.[22]

At a meeting of the McGill Board of Governors on 15 June 1904, a letter from Sir William was read finalizing his gift, and a committee was chosen "for the purpose of preparing and carrying into execution the necessary plans, it being understood that the Committee employ Messrs. Hutchison and Wood as architects, who will associate with themselves Professor Nobbs in the preparation and execution of designs."[23]

The agreement which was signed between the architects on 23 June put Nobbs in charge of preparing the drawings while Hutchison and Wood provided technical

expertise.[24] As an established Montreal partnership, Hutchison and Wood furnished Nobbs with office space, prepared the specifications, offered advice on heating and ventilation, and supervised construction. Although they are listed as co-joint architects, the agreement and the result show that the design of the Union was essentially Nobbs's. Hutchison and Wood's own work at this time shows none of the free Anglo-Classic detailing which distinguishes the Union. Their buildings, for example those for Canadian Express (1900) and Greenshields (1903)(Fig. 13), drew rather on American academic sources.[25] This is hardly surprising since McKim, Mead and White's popularity was at its zenith in Montreal at this time. The New York firm's work at the Bank of Montreal was being carried out between 1901 and 1905. These same Americans were given the commission to design the Mount Royal Club (Fig. 14) in the spring of 1904 after a fire destroyed the former premises.[26] Hutchison and Wood were responsible for preparing the working drawings and supervising the construction of this club concurrently with their work on the Union. Nobbs would later say of McKim at the Bank of Montreal that "he showed Canadians for the first time on their own soil, what modern classic and planning in the grand manner really meant; also he gave us a much needed lesson on the cost of a first-class job!"[27] Regarding the Mount Royal Club, he found "it just a little humiliating to the profession here that the work should go to New York."[28] With the McGill

Union, Nobbs set about proving that an indigenous product could also achieve excellence and on its own terms.

A large watercolour presentation drawing (Fig. 15) among the Nobbs material preserved at McGill shows the Union as the architect first envisioned it.[29] Deferring to the building committee's desire to keep costs down, he had specified a brick and limestone exterior. Although this first proposal was rejected by Macdonald, it is worth some study for the light it sheds on its creator's interests and capabilities at this time.

When Percy Nobbs had first arrived in Montreal, his Arts and Crafts training immediately asserted itself. Even as he drove from the docks to his lodging, he had noted the traditions and materials of his new environment. Writing a few months later in the Canadian Architect and Builder, he had discussed the local domestic building in greystone and brick--"the kind of tradition with which an architect must saturate himself if his work is to be indigenous at all."[30] Clearly, Nobbs intended to create an architecture which was rooted in its own history and surroundings. However, in the Union the manner in which the brick and limestone were combined in the first proposal reflected Nobbs's own tradition being applied to a Canadian problem.

Early on, Nobbs had expressed his displeasure at the many Montreal buildings having stone façades combined with economical brick sides and backs. "I suppose", he

remarked in August 1904, with characteristic wryness, "that people who like houses of this sort must be the class which wears one character on Sunday and another the rest of the week."[31] This was the manner in which Strathcona Hall (Fig. 16) was being constructed, with a façade of expensive Indiana limestone and utilitarian buff brick elsewhere. Such a handling must have seemed a manifest example of sham to Nobbs, who had read his Ruskin, albeit with a grain of salt. In The Seven Lamps of Architecture Ruskin had advised that if you could not afford marble, use the best brick, "preferring always what is good of a lower order of work and material, to what is bad of a higher."[32]

Two widely acclaimed buildings designed by Shaw and embodying Ruskin's philosophy had successfully overcome this difficulty. These were New Scotland Yard and the offices of the White Star Line (1896) (Fig. 17) in Liverpool, the latter one of the few non-Canadian contemporary designs illustrated in the Canadian Architect and Builder, indicating how admired it was.[33] Nobbs wrote:

> Both these grand buildings stand on bases of hewn stone or granite and the upper stories are constructed of brick with the occasional introduction of bands or members of stone in such a manner as to make of this interchange of material a decorative motif of distinct architectural value. The nobler material thus keeps helping out its humbler fellow all along, and together they form a unity and not a motley assemblage of elevations.[34]

The first design for the McGill Union thus employed this

same blending of materials. Horizontal bands of limestone ran through the brick upper stories with oriels, window surrounds, and cornice all of the lighter stone. Parapet and chimney combined the two. Such a treatment did indeed create unity and a pleasingly decorative effect through pattern and color contrast. It did not, however, suit Sir William Macdonald who, as Nobbs tells us, "loved a plain building."[35]

The taste of Macdonald had an important influence on the character of the McGill Union as it was finally built. Percy Nobbs would recall his client's role in an article written to ensure that "this grand old man" would not pass into history remembered more for his money than his spirit:

> I recollect particularly one Sunday afternoon at Prince of Wales Terrace when a change from brick to stone throughout, and an addition of five feet to the height of the building had been considered on its merits in about ten minutes of time, and it then came on to rain hard. Sir William insisted on hunting for some stout paper and string for the protection of the drawings. I opened my eyes in some astonishment at the quaint old man who added twenty per cent to the cost of a building and made up rolls of old string with scrupulous care. This he noted, no doubt, for on handing the wrappings to me he remarked in a casual way, looking past me out of the window: "Mr. Greenshields collects Dutch paintings, and Sir William Van Horne collects Japanese snuff boxes; but I collect string."[36]

More about the relationship between architect and client is revealed further on in the same article:

> Throughout the affair of the Union I had abundant opportunities of realizing where my client's heart lay. The young men, whom he loved, were to have a club, without ostentation or luxury, but with due dignity and substantiality. . . .

> We had Inigo Jones to help us, with the ideal he had set himself about the year 1640, when he announced his theory on architecture in the words: "solid, proportioned according to the rules, masculine and unaffected" . . . We owe him [Macdonald] much of the grey limestone, which is not the least of the glories of McGill.[37]

The final monochromatic Union, while it has the same general outline and disposition of elements as the first proposal, is a far more sober building. The detailing is considerably simplified in keeping with the cooler treatment, but the masterly handling of the greystone provides great pleasure to the attentive observer. Such austerity in the decorative treatment is particularly suited to the material, Montreal limestone, which, while it weathers beautifully, is difficult to work. "To treat materials with sympathy and techniques with understanding" was good Arts and Crafts practice.[38] The Union was meant to exemplify such practice, and the Canadian Architect and Builder was not long in offering its chauvinistic approval:

> It is true that the refractory nature of this stone does not lend itself readily to the sumptuous quality of carving that pretentious office building is supposed to require, and hence for such buildings Indiana and other sandstones from the United States are coming more into vogue, as in . . . the recently finished Strathcona Hall in Sherbrooke Street. . . . The buildings of Mount Royal Club and of the McGill Students Union, both in Sherbrooke Street, are faithful to the Montreal limestone and both have sufficient breadth of surface to exhibit well the unsurpassable delicacy of tone of this great stone.[39]

The Union as built is thus a free-standing monumental block of smooth grey ashlar measuring approximately

93 by 71 feet (28.4 by 21.7 metres). The lower storey, set upon a high basement, is separated from the upper two by a narrow stringcourse, the whole surmounted by a cornice and parapet scaled to the full height of the building. The main façade is symmetrically disposed, the spare detailing generally of English neo-Palladian inspiration, although oriel windows are a prominent feature of the second level. The main doorway, with its powerful blocked surround in the manner of Gibbs, is reached by a low double flight of stairs. The staircase is greatly simplified over the preliminary version.

Less elaborate, too, is the window treatment of the upper storey. In the first proposal a Palladian motif of alternating round and pointed pedimental window mouldings was proposed for the main front,[40] while the western Victoria Street façade had contrasting arched windows with radiating voussoirs. The final design maintains semi-circular broken-bed mouldings throughout, placed high above elongated, mullioned windows. The architect also eliminated elaborately carved chimney breasts on the western elevation in favour of a simpler handling. Finally, the parapet, which previously featured a heightened central section and contrasting layers of brick and limestone, now keeps to the same height throughout, rhythmically punctuated by narrow, forward projections.

The Union depends for its ultimate effect--an austere elegance--on the exquisite arrangement of the

proportions, the harmonious balance of solids and voids, and the contrast between the smooth, ashlar surfaces and the discrete architectural ornament. It is a chaste, static composition in the manner of English Palladian buildings (Figs. 18-19), and yet it has qualities which are very contemporary. The narrow mouldings, the flattened planes of the oriels which hug the wall surface, the unclassical elongation of the upper storey windows, all combine to create an attenuation reminiscent of Shaw and, to some degree, of Mackintosh.[41] The strong cornice line and powerful Baroque doorway add a necessary vigour which prevents the work from appearing overrefined or indeed unmasculine. The flatness and thinness of the major components, the sense of the limestone as a light skin, also suggest modern, structural techniques. The enormously solid masonry of former times is no longer necessary, and Nobbs has subtly alluded to this. His mouldings, for example, appear to be applied to the surfaces, indicating that they are not part of the structure. Honesty of structural expression was an essential Arts and Crafts principle with roots deep in the Gothic Revival.

Like the contemporaneous clubs, Strathcona Hall and the Mount Royal Club, the Union draws on the palatial club houses and mansions which the influential English architect, Sir Charles Barry (1795-1860), had popularized in the first half of the nineteenth century. As Winston Weisman points out, Barry's Travellers' Club (1829-31) and

Reform Club (1836-40) (Fig. 20) had sparked the widespread acceptance of the sixteenth-century Italian palazzo as the appropriate architectural symbol of the nineteenth-century merchant prince.[42] This variable form had been steadily enriched as the century progressed in deference to changing tastes. Such increased elaboration had characterized not only the Italian mode, but Romanesque and Gothic as well. Indeed, as Weisman remarks in discussing New York's "commercial palaces," it was not even the nationality of the ornament that made a building a "palace," but rather its richness. An elaborately decorated stone or marble front compensated for inelegant brick used elsewhere. By the early twentieth century, however, a new generation saw this as extravagance and sham.[43]

A comparison of the three contemporaneous Montreal clubs with one of the city's Italianate mansions of the early 1880s, the George Stephen House (Fig. 21) on nearby Drummond Street, demonstrates this change in taste.[44] Richness is the outstanding characteristic of the earlier building. Wall surfaces are heavily encrusted with carved ornament and architectural decoration. Quoining and rustication vary the texture of the masonry, while throughout the building, receding and projecting elements add enormously to the plastic multiplicity of the composition.

In contrast, the three early twentieth-century

buildings all have simple, block-like shapes, although the Union and the Mount Royal Club, unlike Strathcona Hall, are freestanding and cubic, more truly reflecting the original palazzo prototype. Strathcona Hall, by the Montreal firm of Finley and Spence, is a late example of the narrow-fronted, multi-storied arrangement by means of which mid-Victorians had adapted the palazzo form for urban, mainly commercial, use. As noted earlier, its five-storied main façade is Indiana limestone, embellished with ponderous Italianate detailing. The decoration is, however, far less than that found on the Stephen House.

In the Mount Royal Club, McKim, Mead and White, like Nobbs, rejected the rather ornate mask favoured by Finley and Spence, for a sparer, more modern handling. Carroll Meeks described the current taste which the Mount Royal Club and to a lesser degree the Union reflected: "The new standards were vague but stressed restraint, formality, 'good taste', 'correctness', the unexciting, the inconspicuous, and refinement. This meant that the vocabulary and even the grammar used was traditional."[45]

Although Percy Nobbs shared some of the above concerns with his North American contemporaries, he differed with them in important ways because of his Scottish and English background. Meeks points to the dependence on authority among American classicists. English progressives despised 'correctness'. The challenge, they believed, was not to refine upon the prototypes,

but to use them inventively and individualistically. Herein lay the possibility for architectural progress. Indeed, it was not necessary to keep strictly to a classical vocabulary. Nobbs, for example, looked to both medieval and classical sources for the windows of the Union.[46]

Different too, is the kind of architectural statement Nobbs's Union purposely makes.[47] History provided a vast storehouse of motifs and prototypes, but Arts and Crafts teaching stressed selectivity rather than "idle borrowing."[48] Structures should have national or regional appropriateness; consequently, Nobbs specifically avoided the anonymous, generalized classical detailing of the two other clubs. O. A. Hayes, first president of the Union, stated that "an attempt has been made to express the sentiment of English building traditions in matters of detail, avoiding the academic spirit so characteristic of American work."[49] A club serving English-speaking students in Montreal was thus, fittingly, Anglo-Classic, reflecting a major stream in Canada's own architectural past. In the Union Nobbs alluded not only to that early Victorian classicist Barry, but to other admired British masters: Jones, Gibbs, and finally Norman Shaw, incorporating all these diverse elements into his own individualistic design.

In spite of this, the McGill Union is not an English building. Like its two contemporaries, it is smaller and less ornate than comparable structures in

England or the United States--the clients served are fewer, less affluent, the climate harsher. Moreover, because of Nobbs's background, the Union has a specificity and an individuality which both the Mount Royal Club and Strathcona Hall lack. These qualities are especially refreshing in an age of overwhelming standardization, as the architect intended them to be. He was equally careful to ensure that his interiors conveyed this same sense of individuality and appropriateness.

The interior of Nobbs's Union, now greatly altered to accommodate the McCord Museum, may still be discerned thanks to surviving drawings, plans, and photographs in the Nobbs Room. The plan undoubtedly owed something to Barry whose clubs had been noted both for their impressive public rooms and for their functional planning. Nobbs continued this tradition in the Union. The high basement provided for utilitarian services: kitchens and offices, caretaker's apartment, exercise room, steam room, and baths. The ground floor (Fig. 22) commenced the formal spaces, and these were varied by the architect not only in deference to their function but to provide interest. Such variety had also been a favourite device of the eighteenth-century neo-Palladians. An octagonal vestibule thus opened onto a cross-vaulted corridor beyond which was a square arcaded central hall with a broad staircase rising at the centre rear. On the left was a luncheon room which could seat

eighty, and occupying the entire western face was "a long, airy apartment"[50] which served as the dining room with seating capacity for one hundred and twenty.

The second floor, distinguished by the oriel windows, contained the recreation and quiet rooms. These included a lounging room across the front measuring 88 by 20 feet (26.8 by 6.1 metres), a billiard room, study and reading room. This floor was marked by extreme openness. "Standing in the centre of this floor one can see beyond the columns around the main landing, the windows opening on Sherbrooke and Victoria Streets, while to the south the trees at the back of the building will be visible, and to the left will be seen the side of Dean Moyse's house."[51] Above, on the third floor, lit by the tallest windows, was a great hall which could hold four hundred and would serve for debates, concerts, dances, and other social functions (Fig. 23). A music room and two guest bedrooms also occupied this level.

The interior of the McGill Union matched the high standard set by the exterior. A contemporaneous account of the new building stated that Professor Nobbs "spared no pains either in regard to this [the furniture] or to the interior decorations, to make the building an object lesson to the students whom he instructs in the principles of architecture."[52] No doubt with this in mind, he used a wide variety of techniques. Like so many architects with Arts and Crafts backgrounds, he was as concerned

with the interior aspect of design as any other, and had acquired the necessary expertise during his student days in Edinburgh. Fortunately, his patron shared this interest. Nobbs wrote that Sir William Macdonald "was rather like a mother arranging her daughter's trousseau, taking a most lively interest in the whole equipment of the building, teaspoons, table cloths and all."[53] A committee had been appointed in November 1904 to approve the interior furnishings, but it was Nobbs and Sir William who were chiefly responsible. A large proportion of the furnishings were made in England to Nobbs's designs (Fig. 24), although Canadian woods were used whenever possible.

Whereas Nobbs followed Barry's example in giving his interiors a Renaissance flavour, the ornate and scholarly creations of this predecessor or the similar fabrications of McKim, Mead and White did not appeal to him. The outstanding quality of the Union's interior seems to have been comfort without ostentation, a "rich simplicity." Canadian motifs were a prominent part of the decoration. The hall, for example, was finished in terra cotta with a design based on the heraldic devices of the provinces and the figures of the McGill shield were used for the lounge.

The building was an immediate success, so much so that its various facilities were soon stretched to their full capacity. In August 1906 a Montreal newspaper approvingly observed: "Alike inside and outside, simplicity and good taste are the marked characteristics of the

building."[54] Another paper carrying an account of the formal opening in February 1907, remarked:

> The building is a most fascinating one. The exterior is so severe, so rough and rude in appearance that one would never dream of the many comforts and cozy corners hidden within. . . . All the guests moved from one portion of the big building to another, exclaims of surprise and admiration were ever heard.[55]

The reporter was obviously unused to twentieth-century severity, but he recognized that the McGill Union set a high standard. Herein to a large degree lay its value for Canadian architecture. Nobbs had been fortunate indeed to find a client whose notion of excellence and whose hopes for the future matched his own.

4. THE MACDONALD ENGINEERING BUILDING

1907-1909

Shortly after completing the Union, Percy Nobbs had another major job on his hands. In April 1907, within a period of eleven days, two disastrous fires occurred at McGill destroying the Macdonald Engineering Building (Fig. 25) and the greater part of the Medical Building.[56] The Macdonald Professor of Architecture, appropriately, was assigned the task of rebuilding the structure which housed his own department. Once again, Sir William Macdonald supplied the necessary funds--approximately half a million dollars.

Nobbs was formally given charge of reconstruction by the Board of Governors on April 20, fifteen days after the Engineering Building had burned, and by May 10, he had a front elevation (Fig. 26) and floor plans ready for the board's approval.[57] It was decided at this time to add another storey to the Workman Shop and Foundry, a wing of the old Engineering Building that remained intact. At a subsequent meeting, approval was given for the addition of a south-east extension; a change which added another $40,000 to the cost, but greatly increased the space. Byers and Anglin completed demolition of the old structure on June 21, and Sir William laid the cornerstone for his new building on

July 17. The Gazette noted at the time that this was a testimony to McGill's recuperative powers.[58] Nobbs's completed plans were submitted to the board by Principal Peterson on September 20, and the new Macdonald Engineering Building opened a year and a half later on 27 April 1909 (Figs. 27-28).[59]

The speed with which the project got underway was partly due to the fact that the old foundations had survived the fire and were re-used. While the first Macdonald Engineering Building had been spacious and modern at the time of its completion in 1893, much had changed in the intervening years. The rebuilt structure would have to serve more students--600 altogether--and it would be required to provide temporary, though adequate quarters for the electrical and mechanical engineers, in addition to housing the departments of architecture, civil, and mechanical engineering.[60] Nobbs was therefore concerned with increasing the available space and up-dating the internal arrangements as much as possible.

He saw to it that the laboratories that served the engineers were better adapted for teaching than previously. The new ground floor (Fig. 29) was made extremely high for the most part, as it contained the huge laboratories for civil, geodetic, electrical, and mechanical engineering. The vast size of the rooms which contain the hydraulic equipment, pulleys, and hoisting apparatus used by the

mechanical engineers is expressed on the exterior by the great semi-circular headed windows which extend the entire height of the base in the end bays. The new building also has a mezzanine floor in the central section of this first level, lit by four Diocletian windows placed above rectangular openings below. The old structure had not been arranged in this way, although, fortunately, much of the heavy equipment had escaped serious damage in the fire and was put to use in the improved quarters.

At the time of completion, the first floor contained lecture rooms, a faculty library, and two museums: one for transportation, the other for architecture. On the second floor were located the professors' offices, the dean's office and faculty room (one room), further lecture rooms, and a very large architectural draughting room. The upper two floors were devoted to more draughting rooms, with far more space now available for that purpose on the top floor than previously. The original building (Fig. 30) had had a low, hipped roof with a smaller attic storey lit by continuous windows set just below the ridge.[61] Nobbs increased the roof pitch in his new structure, lit the interior by dormers, and provided the end bays with tall gables pierced by large Diocletian windows. This change freed the full floor area of the uppermost storey.

Adding to draughting room space was especially important to Nobbs as a teacher. The Gazette had noted when

he assumed his chair:

> The architecture course of the Faculty of Applied Science . . . may undergo some changes at the suggestion of Professor Nobbs, who favors the methods adopted in the American universities, which give more opportunity for practical work. If the changes are made, draughting will be a subject of more importance than at present, which it is believed, will give the students more valuable knowledge than confining their attention too much to theoretical work which can be gained from text books on the subject.[62]

These ideas are contained in a report Nobbs made on his department's curriculum submitted in October 1903 and underline his committment to a thorough, practical architectural training.[63] He felt, too, that since most of his students would begin earning their livings as draughtsmen, they should be well-versed in this area.

The new building was made as fireproof as possible--almost to the point of paranoia. On a personal level, the School of Architecture had lost in addition to its quarters, a very valuable collection of lantern slides, photographs, casts, and models, painstakingly built up by Nobbs and his predecessor Professor Capper.[64] Undoubtedly Nobbs wanted to make sure that such a catastrophe would never happen again. An extreme example of his concern are the big wooden chests of drawers for storing the students' work. Each drawer is lined with metal, since it was felt that perhaps the fire had started as a result of student carelessness. The exterior of the building is limestone, with an internal supporting structure of steel beams and concrete. The floors are quarry tile, the walls of brick

and terra cotta, and the stairs all of marble (Fig. 31). The various floors are divided into sections by sliding fire doors which are of wooden construction with asbestos between the layers of wood, the whole covered by a sheathing of copper. Even the ordinary doors are lined with asbestos.[65]

The rush to get the new structure built and ready for use did not prevent Nobbs from exercising his usual care with regard to the interior finishing. The decoration is limited in keeping with the utilitarian nature of the structure, but the brick and terra cotta walls are pleasantly coloured and patterned and executed with considerable skill. Unfortunately, some of this has been painted over. The plasterwork ceiling in the dean's office and faculty room is especially beautiful, and here one can see the extent of the architect's attention to detail.[66] He provided a special recess in front of the windows for the curtain rods so that these would not obtrude.

As the past determined to some extent how Nobbs managed the interior of the new Engineering Building, it also affected his handling of the exterior. He was greatly concerned to create a structure which would harmonize with the existing buildings on the campus. The only thing that in any way tied together this "disjointed and oddly assorted crowd", however, was the fact that they had all been constructed of limestone. Nobbs kept to this

material but still had to find a style which would somehow blend with the diversity already there and not add to the chaos. The taste of the early twentieth century leaned heavily toward order and harmony in reaction against what was viewed as the unrestrained individualism of the preceding Victorian period; Nobbs was very much of his own time in this respect as in others. He was determined almost from his arrival at McGill to bring order to the campus and in the winter of 1904, when considering a location for a power house, had submitted a plan to the administration for the future disposition of the buildings. He had written here that "accidental groups of trees, winding paths and grassy slopes are all very well in their place;--the back of the Mountain. The precincts of a great University are wanting of a more formal and dignified treatment."[67]

He had set himself quite a challenge. The earliest academic structure, the Arts Building (Fig. 32), dating from 1843, had started things off in the right direction.[68] It was in the severely classical late Georgian style and had been situated, after the orderly manner of the day, far back in a commanding central position overlooking the southern expanse of the campus. When Principal Dawson had arrived, however, he had begun setting out the accidental groups of trees and winding paths, reflecting the growing taste for the Picturesque.[69] The buildings dating from the last years of Dawson's tenure demonstrate very well the

"picturesque eclecticism" which Carroll Meeks saw as the prevailing spirit of the late nineteenth century.[70] They include a heavily decorated science museum of more or less Greek inspiration (Hutchison and Steele, 1880)(Fig. 33) and the varied works of Andrew Taylor. Taylor had designed the robust Richardsonian Romanesque library (1893) as well as the three Macdonald science buildings. Two of these, the first Engineering Building and the Chemistry and Mining Building (begun in 1896), were in a free Italian Renaissance style, while the Physics Building (opened in 1893) like the library, drew on Romanesque decorative sources (Fig. 34).

Andrew Taylor's choice of a classical idiom for two of these structures had probably been influenced by two main factors beyond its non-Ecclesiological symbolism: the proximity of the classical Arts Building of 1843 and the ease with which the classical tradition lent itself to the use of modern materials and methods. Hitchcock lays great stress on Barry's important contribution in this regard at the onset of the Victorian period;[71] and Richard Phené Spiers, a graduate of the Ecole des Beaux-Arts and Master at the Royal Academy Schools from 1879 to 1906, was a crucial figure in awakening a later generation of architects to the value of discipline and logic in planning as taught by the French. Taylor had studied under Phené Spiers in the 'seventies; yet he was also a product of the Gothic Revival.[72] Working under the diocesan architect

and surveyor for Canterbury, Taylor had gained extensive experience in the restoration of old parish churches and in church work generally. In Montreal he lectured on ecclesiastical architecture at Presbyterian College, in addition to teaching drawing in the Faculty of Applied Science at McGill. Like so many successful architects of the age, Andrew Taylor was extremely adaptable. A contemporary description of the first Macdonald Engineering Building noted that "Mr. Taylor, the architect, came to the work with an open mind. He was not hampered by tradition. He had combined utility with beauty."[73]

This first Engineering Building, while it was the least ornate of Taylor's three adjacent science structures, nevertheless well demonstrated the prevailing late Victorian taste for variety, texture, and plasticity in architecture. Contemporary engravings of it emphasized these qualities, the heavy rustication of the two lower floors, the space-encompassing end bays, and jutting entrance porch. Nobbs could hardly be expected to simply rebuild the old building. His job was, after all, to teach modern architecture, and he therefore up-dated the interior arrangements and clothed the exterior in a contemporary style. Once again, Richard Norman Shaw was a major source of inspiration, in this case providing Nobbs with prototypes for the gabled form he chose.[74]

Albert Hall Mansions (1879)(Fig. 35), an early

apartment building, was Shaw's first attempt to apply the Dutch-looking gables he had used in house design to a large-scale city structure. It had immediately given contemporary architects a model for handling large compositions, the distinctive gables being a useful and picturesque means of providing the upper two stories with additional space and light. As late as 1940, Shaw's great admirer, Sir Reginald Blomfield (1856-1942), still preferred it to modern design: "The modern designer of flat blocks is content to pile storey on storey, without any attempt at mass composition, or light and shade, in fact at architecture."[75] Later, in New Scotland Yard, Shaw had given his gables a Baroque dress after seeing Belcher and Pite's drawings for the Institute of Chartered Accountants.[76] The impact of New Scotland Yard, a wildly eclectic mixture drawing on a wide variety of sources, was enormous. Summerson writes that the building had

> . . . failed to provide all the rooms the policemen wanted, so what did Shaw do but plant two hugely quaint Dutch gables on its ends to provide commodious roof-space. This rash conjunction, with Wren-like windows in walls built partly of granite, partly of brick, fused into a transformation of enormous magnetism. In no time at all the gables and tourelles of New Scotland Yard were seen all over England.[77]

This grand edifice, plus an offshoot, the offices of the White Star Line in Liverpool, furnished ideas for the Macdonald Engineering Building as they had for the McGill Union. The Liverpool building's bracketed balcony was borrowed for the Engineering Building (where its purpose

was for developing blueprints) and also the eccentric, open pediment pierced by an obelisk which crowned its end gable (and the gables of police headquarters)(Figs. 36-37).[78]

Finally, Nobbs was undoubtedly influenced by Shaw's recently executed designs for the Piccadilly Hotel (Fig. 38), which formed part of a vast scheme for rebuilding Regent Street. "When the plan, together with beautiful drawings by C. W. English of the Quadrant and the Piccadilly façade of the Hotel, was exhibited in 1906 [at the Royal Academy in April and May], they received the rare and unanimous acclamation of the whole architectural press."[79] Here again Shaw had drawn on the gabled and dormered pattern of New Scotland Yard for his hotel, but had forsaken the extreme mixing of motifs found in the former for a flamboyant neo-Baroque.

In the new Engineering Building, Nobbs, too, maintains a Baroque feeling throughout, and there are other similarities. The disposition of the symmetrical, main façade is close to the hotel's Piccadilly Street front, including the high, heavily rusticated base pierced by arched openings, the two tall gables, and the variegated window treatments.[80] Understandably, the Canadian building is much less elaborate.

Such a Baroque stylistic dress was now very much in fashion, thanks to Shaw, Belcher, Blomfield, Sir Aston Webb, and others. It satisfied important cultural needs of the Edwardian period as Robert Macleod indicates:

"In Wren, Hawksmoor, and Vanbrugh could be found a combination of regularity, order, a well-assimilated native tradition, the pomp and circumstance which the Edwardian era found so necessary, with the individuality and pictorial effects which the Victorian age had made imperative."[81] In his discussion of Canadian society in the 1904-11 period under the Governor-Generalship of Lord Grey, R. H. Hubbard points out that the two streams of imperialism and nationalism were at flood point.[82] A Canadianized version of this style was thus highly appropriate, although perhaps what led Nobbs to choose it over other current stylistic treatments were its visual qualities. Summerson aptly calls it "classical picturesque."[83] Neo-Baroque is massive, robust, various, all attributes shared by McGill's late Victorian structures, yet formal enough to satisfy Nobbs's plans for the future disposition of the campus. The restrained Jonesian Palladianism that Nobbs had used for the Union was, while formal, not nearly vigorous enough for this new situation.

Nobbs did not choose one of the more heavily ornamented, grandiose versions of the Edwardian Baroque, but followed a more restrained approach favoured by many Arts and Crafts architects, an approach far simpler, in fact, than Belcher's.[84] This suited Canadian conditions and no doubt the austere tastes of Sir William Macdonald, the donor. The architect nevertheless conveyed a distinctly Baroque feeling through a number of means. The Baroque-

inspired ornamental features (Fig. 39) are, of course, extremely important: the powerful main portal with its heavy blocked surround, the curving double staircase, the emphatic pedimented gables, and the diverse window treatments which include banded surrounds, emphatic key-stones, and radiating voussoirs. His structure is also scaled to achieve a sense of massiveness and the more plastic handling of the various elements differs sharply with the smooth, refined surfaces of the Union. Nobbs kept the high, heavily rusticated basement that Taylor had used, heightening it even more. This furnishes a textural variation with the ashlar above. He also enlivened his façades and roofline with diverse shapes and elements, again in contrast to the Union. Projections and recessions create a play of light and shade that further contributes to the Baroque flavour. The effect, however, has been somewhat lessened by low additions which were later inset between the main portal and the end bays.

Even though Nobbs pointedly drew on British classical tradition for his own decorative motifs as he had in the Union, he still managed to refer to Andrew Taylor's neighbouring science buildings in subtle though important ways. He echoed the broken silhouettes of their rooflines, their tall chimneys and dormers, their semi-circular and rectangular window openings. His assertive, rusticated base pierced by tall round-arched openings relates to the Chemistry Building, while the bracketed balcony nicely

reflects a prominent feature of the Physics Building. Nevertheless, there are essential differences which distinguish Nobbs's design as a contemporary structure. Despite the greater diversity of forms he used in the Engineering Building, there is still an overall regularity and cohesiveness which is lacking in Taylor's work. The gables enclose rather than interrupt, for example, and there is a general simplification in spite of the variety of component parts. Elements are grouped together in an orderly manner--like with like. Finally, the plasticity which Nobbs created is built up of superimposed planes or parts rather than by a hollowing-out of the central core so characteristic of Taylor's work. All of these features relate the new Engineering Building to the Union and to the twentieth century.

An Arts and Crafts interpretation of Edwardian neo-Baroque was extremely well suited to the purpose which this building served: a structure for teaching. A lack of pomposity, individualistic ornament, craftsmanship, liveliness--all characterized the Arts and Crafts approach--and the new Macdonald Engineering Building. The variety of the ornamentation, the differing window treatments, and the carvings are a reflection of Nobbs's craftman's attitude; but more than that, he surely meant this building to be a kind of visual encyclopedia for his architecture students.[85] He seems, too, to be

saying that both learning and architecture can be fun. Despite its massiveness, the Engineering Building has a light-heartedness about it, largely due to the very personal quality of its ornament. This relates mainly to the people connected with the building rather than to abstract concepts: the tools of the engineers and architects carved above the main doorway, the amusing owl perched in the dormer niche higher up and signifying wisdom, the initials of Sir William Macdonald, Principal Peterson, and King Edward VII as well as references to England, Scotland, and McGill, and, of course, the gables which pay tribute to Shaw. Perhaps the most personal of the decorations, however, is located on the street-side wall of the south-east extension. It is a carved plaque showing a phoenix rising from the flames.

Summerson has noted that Shaw delighted in architecture as play,[86] and there is no doubt that Nobbs admired this engaging quality in Shaw. He wrote:

> Consistency with tradition is the last thing to look for in Shaw's work. Consistency of mood and humour, and a serene, vitally strong spirit, as of energy controlled by gentleness, is written large all over the building he refers to New Scotland Yard to break out exuberantly at last against the sky at the tops of the great gables.[87]

The new Engineering Building was meant to be a demonstration not only of sound construction and fine craftsmanship, but also of that other aspect of architecture which distinguishes it from engineering: conscious aesthetic expression.

Its mood is friendly, good natured, human, all qualities which its creator valued highly and hoped to pass on to his students.

PART III: MATURE PERIOD AT MCGILL

1. INTRODUCTION TO MATURE PERIOD

The second decade of the twentieth century was a time of massive upheaval in the western world. For Nobbs, too, these years involved significant change. In June 1909 the thirty-three year old architect married Mary Cecilia Shepherd, daughter of McGill's Dean of Medicine. By December he had tendered his resignation to the Board of Governors,[1] relinquishing the Macdonald Chair of Architecture two years later in order that he might carry on a professional practice. The problem had plagued him from the very beginning of his assocation with McGill, for Principal Peterson had originally led him to believe that he might work as a practising architect as long as this did not interfere with his teaching duties. Consequently, Nobbs had expressed both surprise and dismay in the spring of 1904 when Peterson had objected to his proposed summer association with the Montreal architect, David R. Brown.[2] This disapproval took the form of a threatened salary cut, making it abundantly clear that the university demanded his undivided attention.[3] When he finally did offer his resignation, the governors decided "that an effort should be made to retain the services of Professor Nobbs under some arrangement."[4] Accordingly, he was offered the position of Professor of Design at a reduced salary. This

he accepted, retaining the post until his retirement from McGill in 1940.

In 1910 Nobbs formed a partnership with George Taylor Hyde which would endure until 1945. Hyde, born in Montreal in 1879, had graduated from McGill in 1899 with a B.Sc. and then studied architectural engineering at M.I.T. From 1897 to 1902 he worked as an architectural draughtsman in various offices and from 1902 to 1907 with contracting firms in Pittsburgh, Pennsylvania. He finally returned to Montreal in 1907, where he practiced alone until 1910.[5]

The partnership was an extremely successful one. The two men complemented one another, each admiring the special qualities of the other. Percy Nobbs, for all his genius in design, was temperamentally unsuited to deal with the practical side of architecture. This is amusingly illustrated by a story told by Hyde's son of Nobbs's continually asking to borrow his partner's telephone book because he could never find his own. Hyde finally chained one to Nobbs's desk. It was George Hyde who saw to it that designs became buildings. He prepared the specifications, supervised the work, and carried on the business side of the firm. The office was small and personal, unlike the architectural-factories which were becoming more and more prevalent as the century wore on. Hyde, too, was a perfectionist, and the care lavished on detail is apparent in all that the firm built, whether academic structures, private houses, or office buildings. George Hyde's early death in

1944 would be brought on by overwork in connection with his dedicated service to the Canadian government's war-time housing project.

Shortly after forming their partnership, the two architects were involved in a very large commission. In 1912 the new president of the as-yet-to-be-constructed University of Alberta, Dr. H. M. Tory, who had been Professor of Mathematics at McGill, invited Nobbs and Frank Darling (1850-1923) of Toronto to visit the site on the North Saskatchewan River to make a report as to future development.[6] The subsequent block plan and designs for three of the buildings were carried out by Nobbs and Hyde.

While the first of these structures, the Arts Building, was under construction the First World War broke out; and Nobbs, who was in England at the time, volunteered for service. His special talents would ultimately be put to work in camouflage work for the Royal Engineers in France, for his "delicate build" prevented him from serving out the war as a fighting soldier.[7] It had not, however, stood in the way of this many-faceted individual's winning of a silver medal for fencing in the 1908 Olympic Games.[8] In January 1919 Major Nobbs returned from the war to resume his architectural practice and teaching duties.

McGill had not been untouched by the changing world. The university had grown and prospered despite the disruptions caused by the conflict in Europe, reflecting

the unprecedented expansion of the Canadian economy now that the transcontinental railroad, completed in 1885, had opened up the country's vast riches. Under Sir William Peterson's skilled guidance, land, buildings, and many new departments had been added. The principal's retirement in 1919, the result of a disabling stroke, did not halt this expansion. In the 'twenties, under the new principal, Sir Arthur Currie (1875-1933), formerly Commander of the Canadian Corps in France, new directions were set. Among the most important was the establishment in 1923 of the Faculty of Graduate Studies and Research, an indication of an increasing emphasis at McGill on post-graduate training and investigation.[9] This marked a major milestone in the university's history, for one of Principal William Dawson's first tasks had been to set up a normal school so that there would be adequately prepared undergraduates coming to McGill.

These new developments, in addition to the university's continued growth, would have a bearing on the kinds of structures which Nobbs and Hyde would be called upon to design in the post-war period. These included two extensions to existing buildings and two research institutes. Percy Nobbs was now in his mid-forties, at the height of his powers. The works which he created for McGill in the early 'twenties mark the climax of his development.

2. THE MCGILL UNIVERSITY LIBRARY EXTENSION

1921

One of the buildings most affected by McGill's expansion was Andrew Taylor's Redpath Library, the university's main library (Fig. 40). When it had opened in 1893, it had seemed most commodious, with apparently ample stack space that could be nearly doubled when need arose. Within only seven years, however, this expansion had been required, and Taylor had extended his original stack wing in 1900-1901. This served for only two more decades; in February 1921 the Board of Governors requested Nobbs and Hyde to prepare plans for a second addition to the stack wing.[10]

The library was situated at the western edge of the McGill campus on McTavish Street. Its short main front faced Presbyterian College a few yards to the north, while the windows of its long, eastern façade looked across the campus toward the Macdonald science buildings. Sherbrooke Street lay about 200 yards to the south.

Taylor's library, like his science buildings, was a typical product of the taste and interests of the age. It had been the gift of Peter Redpath, whose father had founded a prosperous sugar refinery. The son had a high regard for learning, as did so many members of the

Victorian middle class, and had already given McGill its costly science museum in 1880 and endowed the chair of mathematics.[11]

Redpath and his architect, Andrew Taylor, had undertaken an extensive study of American and European college libraries in order that the new structure might be as up-to-date as possible.[12] The prototype chosen was not, however, the latest pace-setter in library design, McKim, Mead and White's Boston Public Library (1882-92).[13] Taylor looked instead to H. H. Richardson's neo-Romanesque designs of the 'seventies and 'eighties, which reached their height of popularity in Canada in the 1890s.[14] Romanesque had been the style chosen for D. B. Dick's Central Library at the University of Toronto, completed a year before McGill's Redpath Library.

The Redpath Library is really more akin to Richardson's larger ecclesiastical projects than to his relatively small and highly compact community libraries.[15] Considering Taylor's background and the fact that he taught ecclesiastical architecture, this is hardly surprising. As models, Victorian churches provided him with great functional variety, and he could plan on a grander scale. Thus the main block of the Redpath Library, distinguished by a ninety-foot tower, contains a vast reading room with an impressive hammer beam roof, closely resembling the nave of a church, while the stacks are housed in a wing extending south along McTavish Street.

A medieval, ecclesiastical mode was also particularly appropriate to the location, as Taylor, trained in the Gothic Revival, was certainly aware. The site was somewhat hilly, with Mount Royal clearly visible to the north. Already a medieval theme had been set for this side of the campus with the building, in 1872, of Presbyterian College, the high-towered, Ruskinian Gothic structure in which Taylor gave his lectures (Fig. 41).[16] In designing his library, Taylor courteously acknowledged this product of an earlier phase of Victorian revivalism even as he catered to the more robust tastes of his own generation. At the time of completion, the Redpath Library seemed an eminently satisfying addition to the McGill campus, and it was much admired. The Canadian Architect and Builder observed in 1895: "The style adopted is a free treatment of Romanesque, which lends itself to the requirements of such a building, as being at once dignified and yet picturesque."[17]

Unfortunately, there were also drawbacks to Richardsonian Romanesque which became apparent before much time had elapsed. Neither its creator nor his many imitators adequately foresaw the dynamic growth which would soon be experienced by both urban and academic libraries.[18] Philip Turner, discussing the libraries at Toronto and McGill in the 'thirties, stated that "the worst feature . . . about these buildings is that they were not planned in the first place to allow for the

periodical expansion that is now required, and both Universities are in consequence faced with the problem of costly building operations."[19] The massive masonry that is one of the glories of Richardson, and which was emulated in these Canadian libraries, became not only prohibitively expensive in the twentieth century, but technically redundant.

Nobbs's objective was to design an extension to Taylor's stack wing along McTavish Street that would more than double the existing stack space as well as provide a number of specialized rooms. He accomplished this feat within a smaller area than Taylor had required in his own addition of 1900, while maintaining both the scale and roofline of the existing structure. Nobbs's design harmonized with the old building while reflecting the current tendency toward a more economic simplification and spareness.

The original 1893 library had housed 35,000 books in a five-storied stack;[20] Taylor's extension of 1900 had nearly doubled the capacity. Nobbs, however, was able to provide storage space for 90,000 additional books in a six-deck stack, which occupied less than half of the area at his disposal. He did this by dividing his block, which measured approximately 36 by 45 feet (11.0 by 13.7 metres), longitudinally by means of a brick wall rising from the foundations to the top floor (Fig. 42). This gave him two independent sections with which to work but left the entire

top floor free for an exhibition room. The portion facing on McTavish Street, measuring 32 by 22 feet (9.8 by 6.7 metres), housed the stacks, which connected with the 1901 extension. By reducing the intervals between the decks and taking advantage of the sloping site, Nobbs was able to add one more level than Taylor had had. As was usual at this time, the fireproof stacks were of steel with steel and glass floors and steel stairs.[21]

The campus side of the brick dividing wall contained a different allotment of space. Here, there were four storeys and a basement. The latter was given over to storage, while the three floors above each housed a specialized collection. An exhibition room (now appropriately the Nobbs Room) occupied the top floor. Nobbs designed all these rooms so they could be converted for stacks with space for another 90,000 volumes.[22]

The sloping site and the differing management of the interiors created discrepancies in the floor levels of the old and new parts of the building. To overcome this problem, ramps or steps were used between the stack areas, and on the campus side, a spiral staircase in the south-eastern tower provided access to all floors of the new wing.[23] Public access to these stairs was through a corridor leading off the main reading room past the old stacks, which were kept separate by means of a new glass wall. The staircase tower could also be entered from the campus through a stately doorway which Nobbs set diagonally

into the corner where the tower met the new wing, thereby creating a graceful transition between the two.

In designing his exterior, Nobbs was as sensitive as Taylor had been to the medieval, ecclesiastical character of the campus's western extremity. On McTavish Street, where this is most apparent, he placed a vast window wall that calls to mind the great halls of the Middle Ages, yet functionally lights the stacks. The wall was divided vertically so that the long, narrow strips of glazing would coincide with the alleys between the sections of shelving in the new stacks (Fig. 43). The horizontal masonry dividers are simply a screen and do not relate to the interior levels as do the windows of Taylor's sections. Nobbs's window wall was an adroit adaptation of constructions that generally existed as parts of additive buildings. Both Shaw and Richardson had seen how useful window walls were for modern use--and how picturesque.[24]

Nobbs, the traditionalist, unlike the twentieth-century purist, obviously welcomed and indeed was inspired by design situations that involved the residue of the past. He wrote in his book Design, published in 1931:

> Some of the irregular groups of associated structures which have not been designed by one master at one time, but, as in the cases of Edinburgh Castle and Mont St. Michel, have developed into what they are by an agglutinative process extended over several centuries, may nevertheless be regarded as an example of intentional composition. The difficulty of their sites and the variety of their elements have not been a hindrance, but a source of inspiration to the successive designers who have played their parts in masterpieces of joint effort.

> Such things cannot be explained away as mere accidental agglomerations of harmonious form and fortuitous contrasts.[25]

The attitude expressed is both a reflection of the architectural humanity advocated by Morris and Webb and a continuation of the picturesque romanticism which characterized the Victorian era as a whole. The latter quality is confirmed by Nobbs's evocative presentation drawing showing his proposed addition silhouetted against a golden, winter sunset (Fig. 44).[26] Robert Lorimer, Nobbs's teacher, was a leading exponent of visual romanticism in architecture, and this tendency extended well into the twentieth century.

While Nobbs inherited and perpetuated certain of the picturesque attitudes of his Victorian forerunners, his own manner shows a more modern regularity in outline and composition and an overall simplification of form. His library addition is a rather plain, regularly fenestrated, gabled block, which contrasts with the multiplicity and variety of Andrew Taylor's work. Taylor had maintained the towered manner of his original building in his own 1900 addition, using identical dressed grey ashlar for the major portions with rock-faced masonry for the high basement. The two polygonal towers that terminate his composition had been adorned with a frieze of Celtic-style interlace, and string-courses demarcated each floor level.[27] Gables and towers, varying window treatments, convex and concave elements, all added to the multifarious effect.

Nobbs not only chose a restrained and regular form

for his construction but lessened the textural contrast of the masonry. Taylor's high basement provided a greater surface area for displaying the tactile, rock-faced masonry which late Victorians enjoyed. Nobbs, however, used this differing finish only sparingly; his much lower basement is almost invisible from McTavish Street. The smoother ashlar thus predominates in his extension, suiting simpler tastes. The stone work does have more texture than that of the McGill Union in keeping with the medieval theme. It has been cut and laid with equal craftsmanship (Fig. 45).

John Stirling Maxwell, writing of Robert Lorimer, observed that he

> recognized that the character of a building is not determined by form alone, that it lies even more, though less obviously, in texture, scale and silhouette, in the relation of part to part, the pitch of the roof, the subtle battering of walls, the pleasant irregularities which enliven work done by hand and eye without mechanical guides. Though it added enormously to his labours, his attention to these vital factors never flagged.[28]

Nobbs worked in this same vein. Like Lorimer, he conveyed the quality of medievalism in his extension by different, more subtle means than had the earlier Victorians, using neither towers, nor irregular massing, nor sumptuous carved decoration. He did not seek to replicate ancient or earlier nineteenth-century structures, for this would have been mere copyism. Nobbs rejected, too, the "mullions and buttresses and parapets all turned out by the yard"[29] that, in his opinion, characterized most of the 'Collegiate

Gothic' favoured by so many Canadian and American universities around this time.[30] He went so far as to criticize Sproatt and Rolph's widely acclaimed Hart House at the University of Toronto (1918-19), saying that Sproatt "almost uses plates of measured work as working drawings, albeit with a fine selective taste."[31] The English architect, T. G. Jackson (1835-1924), had set down the criteria for modern Gothic in the 1870s, and similar principles continued to guide conscientious traditionalists like Lorimer and Nobbs in the early twentieth century. Jackson had written:

> The moment we begin to use the forms of Gothic architecture simply because they are called Gothic . . . that moment does the work in our hands cease to be Gothic at all in the modern sense of the word, and become pseudo-Gothic, . . .
>
> . . . Gothic is to be developed into a living art . . . by the gradual removal of archaicisms which clash with modern habits . . . and by the incorporation into it of modern ideas, and the utilisation of modern discoveries and improvements.

Jackson, whose views were greatly admired by Shaw, advised architects to take full advantage of the five or six hundred years of experience which lay between the nineteenth century and the Middle Ages and advised "the necessity of a judicious eclecticism."[32]

As noted, Nobbs's window wall is his primary means of evoking a medieval feeling, although at the same time, it is both restrained and functional. The architect purposely related his own new work to the existing structure in the same way medieval builders had done: by keeping his

mullions the same width as Taylor's. Verticality, that essential quality of so much Gothic building, is achieved not by tall towers, but by repetitive, unadorned strips that make up this window wall. Yet, equally important, the unity created by such simple repetition prevents the onlooker from reading the eight rows of glazing as separate windows and noticing that they are not on the same level as those of Taylor's adjacent tower. The quick, vertical rhythm causes the eye to sweep along and upward without time to compare (Fig. 46).

The façade facing Sherbrooke Street, now unhappily partly obscured by a later addition, was given this same vertical emphasis, in this instance by aligning the main architectural features one above the other, axially. Thus, the eye was led quickly from the low basement door up a tall and narrow leaded window lighting the main aisle of the stacks to a dominating oriel window in the gable, which, along with a skylight in the roof, illuminates the exhibition room. In the apex of the shaped gable, a final note is sounded by a rondel containing the McGill motto: "In Domino Confido" ("In God I Trust"). Seen from dead on, this façade appears to be embraced by Taylor's two end towers, its upward movement in perfect harmony with theirs, providing a fitting conclusion to the medieval sequence that unfolds down McTavish Street (Fig. 47).

On the campus side of his new wing, now entirely lost to view, Nobbs sought a somewhat different effect

His windows here were regularized rectangles and together with the pedimented entrance portal, helped to create a more formal quality in keeping with the classical buildings to the north and east. Yet once again, the regular repetition of window shapes established a uniform pattern to occupy the eye so that the different window levels nearby would have been barely noticeable. Nobbs placed relieving arches above the upper storey lights which quietly reiterated the distinctive arched openings at the top of Taylor's tower.

Reflecting the modern trend toward the elimination of applied decoration, the exterior is sparingly ornamented; the patterns created by the windows provide much of the decorative effect. Nevertheless, Nobbs did not renounce a certain amount of additional ornament which serves to suggest the sacred nature of knowledge. Taylor had already managed this in a somewhat different manner.[33] The bands of interlace have, of course, subtle ecclesiastical overtones, but the earlier architect had also decorated his church-like library with carved representations of the four gospel writers. Nobbs, in contrast, relied exclusively on words and symbols, an especially fitting choice, since a library is the repository for the written word. On the two long façades, in place of the interlace frieze, are two carved inscriptions. Facing McTavish Street is the adage: "Ipsa Scientia Potestas Est" ("There is power in knowledge itself"). On the campus side, now hidden, was

the message: "Sapiens Dominabitur Astris" ("The wise shall have dominion over the stars"). The main doorway here also featured the profoundly meaningful words taken from Genesis: "Fiat Lux" ("Let there be light").[34] The decorations of the Sherbrooke Street elevation, which can still be seen, are also simple and chosen with equal care. In addition to the McGill motto, referred to earlier, there are two medallions which flank the oriel windows. These contain replicas in stone of the devices of an ancient and a modern printer. The old insignium is that of the Aldine Press, famous Venetian printers of the fifteenth century. The modern one belongs to Longmans, Green and Company.[35] The placement of these was highly appropriate, for behind them originally lay the exhibition room which housed the library's collection of bindings, illuminated manuscripts, and other historical material, arranged to show the development of the book arts.[36] A sense of the enormous debt owed to the past was never far from Nobbs's thoughts; his doorway inscription, in particular, expresses his belief that everything man has, including knowledge, derives from a single source.

Such sparing ornament characterized not only Nobbs's work but that of Lorimer; and Hitchcock notes that even Richardson, with more familiarity of old buildings, finally came to realize "how rare extreme elaboration was in medieval work. Ruskin's influential criticism, which emphasized in architecture the applied

arts of carving and polychromy, was obviously based on an erroneous premise."[37] Both Nobbs and Lorimer, with their thorough knowledge of old Scottish work, recognized the frugality of its ornamentation, and this fitted in with their own modern taste for simplicity. Nobbs observed:

> For us there is still much to learn from the substantial simplicities of the Middle Ages--those residual lessons of the Gothic Revival. Mullions, and cusps, and pinacles, and leaded glass are, after all, merely the letter of the medieval laws of good taste, and have nothing to do with its main doctrine, recaptured with so much effort and pain, to say nothing of a good deal of glorious claptrap in Victorian times. The spirit of that doctrine . . . is simply this, that the way things are made and the material that enters into their construction, must be taken into consideration in their design. This had been well elaborated in the teachings of Professor Lethaby, and is to be regarded as part of the heritage of our culture. After all, this is that 'truth' that Ruskin raved about and the 'blessed angels know'; it is not, however, a matter of ethic, but of aesthetic, in conjunction with the common sense of the economic.[38]

3. THE OSLER LIBRARY

1921-1929

In the year following the completion of his extension to the university library, a commission for another sort of library to be housed within the Strathcona Medical Building (1910) fell to Percy Nobbs, and once again, the architect had an opportunity to demonstrate his skill in the structuring of interior space. In this case, however, the composition of space was the yehicle for expressing profound meaning, beyond the more obvious purpose of housing an important collection of books.

In March 1920 the dean of the McGill Medical Faculty, Dr. H. S. Birkett, received the following cable: "Sir William Osler bequeathes to Medical Faculty his medical and scientific library as catalogued. Please cable if accepted and write in confirmation. Grace Osler. Oxford."[39] The medical faculty accepted this gift gratefully and with considerable pride, for Osler, who had graduated from McGill's medical school in 1872 and had taught there for ten years, was one of the most famous physicians and medical pioneers who ever lived. His peers included men like Pasteur, Lister, Koch, and Virchow. Yet it was not so much the doctor's science that was revered by those who knew him, but his kindness, symbolized

by the name bestowed on his Oxford home, "The Open Arms." Like William Dawson, whom he greatly admired, Osler imbued his science with something beyond the secular. "The practice of medicine," he said, "is an art, not a trade; a calling, not a business; a calling in which your heart will be exercized equally with your head."[40] When Osler's beloved books, which were rare editions of the principal texts in the history of science and medicine, made their way to McGill, his heart went with them. His ashes were concealed in the room which was designed to house the rare and priceless library.

Dr. Osler's life work had also taken him to the United States and to England, but his gift to McGill was his way of expressing gratitude for what the university had given him. This included not only knowledge and skills, but friendships, "the goods which neither rust nor moth have been able to corrupt." "My heart," he once said, "or a good bit of it at least, has stayed with those who bestowed on me these treasures."[41] Here indeed was a graduate who fulfilled the fondest hopes of Principal Dawson.

Like Dawson, William Osler came from a religious pioneering background. He was born in Bond Head, Canada West, in 1849, the son of a clergyman. A scholarship enabled him to enter Trinity College, Toronto, where he intended to study for the ministry. He soon switched to medicine, however, in part because of a seventeenth-

century book he had read, Religio Medici (The Religion of a Doctor), by Sir Thomas Browne.[42] Next to the Bible this was the most important book in his life. He began his library with a copy of it in 1862 and it rested on his coffin during his funeral service fifty-seven years later.[43]

Osler's lifelong passion for collecting historical books stemmed in large part from his sense of debt to the trailblazers in his chosen field, a type of gratitude which Percy Nobbs would understand.

McGill was caught unprepared for such a magnificent gift, so in October 1920 an Osler Library Reception Committee was appointed by the medical faculty to take charge of arrangements.[44] The then principal of McGill, Sir Arthur Currie, acted as chairman; the secretary was Samuel E. Whitnall, Professor of Anatomy and a former colleague of Osler's at Oxford. At the first meeting of the committee in December 1920, Whitnall was asked to refer the question of accommodation to the Medical Library Committee. A memo by Whitnall among the committee's papers, dated 4 December 1920, noted that he and Dr. Blackader (who was a member of the Medical Library Committee) had inspected Whitnall's own research rooms on the second floor of the Strathcona Medical Building and concluded that they would suit the purpose. These rooms, which formed part of the Department of Anatomy, were just across the corridor from the medical library reading room and had originally been designed as a single laboratory. They had subsequently been subdivided.

The space which the future Osler Library would occupy thus had considerable height and was well lit. There were three large windows on the north wall and a skylight. In the corner furthest from the windows was the entrance which was very narrow and approached by four steps from the corridor. This factor had an important influence on Nobbs's final scheme.

Before the firm of Nobbs and Hyde received the commission to design the fittings and furnishings of the Osler Library, however, Dr. Blackader had proposed that the Bromsgrove Guild (Bromsgrove, Worcestershire, England) design the room. At the time the Guild had a Canadian branch in Montreal (465 Clarke Street); accordingly, the local manager; Mr. Wray, measured the space and on 11 January supplied two blueprint copies on which he had marked out a rough idea for placing the shelves.[45] This plan, which did not interfere with the basic structure of the room, was to be sent to England for the Guild to prepare designs from. The work would be carried out by the Canadian branch. An undated blueprint preserved among Nobbs's designs is possibly one of these two blueprints.[46] It is signed "Percy E. Nobbs" on the back in pencil, but may have been given to Nobbs when he was named architect of the library in May 1921. It bears no resemblance to the brilliant approach which he subsequently evolved.

The selection of Nobbs came about as a result of various problems which the Osler Library Reception

Committee presented to McGill's Board of Governors. On 26 February 1921, the committee furnished the governors with a report and a petition seeking authorization to

> . . . consider the questions of whether the designs should be prepared in England, whereby the firm could inspect the character of the books and possibly copy the fittings of some medieval libraries there, and also confer with Lady Osler as to the appropriate accommodation for the ashes, showing her plans and sketches for the whole design and then be executed by a firm here, or whether both plan and execution should be entrusted to local firms. The Professor of Architecture would be asked for advice.[47]

On 11 May, Principal Currie informed Professor Whitnall that the governors had appointed Nobbs as architect.[48] Nobbs and Hyde were responsible for designing the Osler Library; the Bromsgrove Guild of Canada executed the work.

The Professor of Design lost no time in preparing plans and a set of copies of the preliminary proposals, dated 10 June 1921, were taken by the principal to England for Lady Osler to see (Figs. 48-49).[49] The books, themselves, had not been shipped to McGill, having not yet been catalogued.[50] This valuable bibliographic work was undertaken by Dr. W. W. Francis, a nephew of Dr. Osler, who was named first Osler Librarian. Lady Osler bore the cost of this immense and unexpectedly time-consuming task, a task which ultimately took nearly eight years. On the day the first packing boxes arrived for shipment of the books to Canada, Lady Osler died, her work completed.

What are presumably Nobbs's earliest sketches for the library have fortunately been preserved and show his

plans for a total transformation of Professor Whitnall's former suite.[51] The unprepossessing corner door was moved to the centre of the end wall and its new importance magnified by three rounded steps and a fourth rectangular one which marked the approach. In the interior of the room, the partitions which broke up the original space were removed and a system of columns and alcoves substituted. Further sketches show how the architect worked out the profiles of columns and mouldings and other detailing which enhanced his new creation. Although there were changes before the design was finally approved by Lady Osler, the basic idea was set.

The elimination of the corner doorway in favour of a central one was a major feature of the architect's overall plan and one for which he had to fight.[52] Such a structural change, of course, meant added cost. A letter from Nobbs to Professor Whitnall preserved in the Osler Library files tells the story.

> I hope you have forgiven me for the brutal methods I employed to head off discussion on the question of the door to the Library. My feeling is strong that the place is a show-place, or nothing, anyway for many years to come, and until the research habit becomes more general in these latitudes. Consequently I lay great stress on the impression to be obtained on entering. Even if the Osler Library is, from the nature of things, an afterthought, it should, I think, be grafted on to the rather over-spacious system of corridors in the building. There is a nursery rhyme about "Up three steps, and in at a wee dorrie," which doorie, recurs to me incongruously at sight of that funny little corner way in.[53]

Fortunately, Nobbs was allowed to proceed in the

manner he wished and the entrance to the Osler Library was made very special indeed. Five shallow marble steps and a small vestibule mark the approach facilitated by the setting back of the main body of the room.[54] Two piers of black marble with grey and white veining flank the entrance and an inner surround of the same material create a sense of sanctuary and mortal resting place. Nobbs countered any feeling of morbidity or sadness, however, by using a golden-toned marble in the walls of the vestibule and providing it with a gold coved ceiling. The warm colour of the woodwork of the glazed door also imparts an essential quality of life, enhanced by the view of the inviting panelled room beyond. In all of this, the architect has managed to suggest that this is not a memorial to the dead past, but a very personal room full of treasures the owner wished to share. This had been Osler's custom in life. Special friends, the "latch-keyers," were given free access to his house and library; and, in the same vein, he saw to the improvement of many institutional libraries in America and England.[55] At the opening of a new building of the Boston Medical Library he said:

> It is hard for me to speak of the value of libraries in terms which would not seem exaggerated. Books have been my delight these thirty years, and from them I have received incalculable benefits. To study the phenomena of disease without books is to sail an uncharted sea; while to study books without patients is not to go to sea at all. . . . There should be in connection with every library a corps of instructors in the art of reading who would, as a labour of love, teach the young idea how to read.[56]

Nobbs's library captures this friendly spirit to perfection, so that William Osler's generosity is not interrupted by death but perpetuated for all who go there.

To achieve the sense of warmth and intimacy which the interior conveys, the architect first carried out an important modification. He introduced four structural columns which serve to break up the large, cold, utilitarian chamber into smaller, personal areas (Fig. 50). These columns, encased in hollow piers of panelled wood, create a central area flanked by three bays on each side. The entrance door is at one end of this aisle and at the other, the focus of the ensemble, a shallow recess containing a bronze portrait plaque of Osler beneath which is a concealed enclosure for the casket containing his ashes. While this main element in the composition was given emphasis, it is not obtrusive in keeping with the doctor's own lack of self-importance.

The six side bays were made into quiet alcoves by extending bookcases out from the walls to meet the piers. In these, tables and chairs were set and the books arranged according to type (Fig. 51). While this radical re-structuring of the space was the primary means by which the architect created intimacy, it was not a new concept. Nobbs borrowed his idea from the alcoved gentlemen's libraries of the past. Richardson had drawn on this same prototype for his own small-town libraries. In Richardson's case, the choice was perhaps unfortunate with regard to

future expansion, but it afforded much pleasure to his contemporaries.

Nobbs took care that his new subdivisions did not impede the flow of light and air which give the room a sense of spaciousness along with its intimacy. This was accomplished by keeping the height of the bookcases which separate the alcoves several feet lower than the height of the piers, so that the space of the upper portion of the room is continuous. This space was, however, architecturally enriched. The original chamber had had a barrel vault running across the mid-section, pierced by a skylight. Nobbs kept this vault, but coved it and confined the skylight to the centre. The two end divisions which extend on either side of the columns have lowered ceilings; so that as one proceeds into the room, darkness opens up into light, descending once again in the area surrounding the niche. Such a manipulation of the light greatly enhances the underlying meaning.

In this same vein, the architect paid particular attention to the colour of the light in addition to its gradation. The tallest windows lit the central section, adding to the illumination already provided by the skylight. Nobbs refitted the leaded windows of the north wall with decorative glazing in order, as John Bland has pointed out, "to reduce, warm and soften the harsh north light."[57] The glazing also serves to mask the "somewhat lopsided"[58] view

which the architect found singularly uninspiring.

The fitting up of the interior was the other major factor in creating the sense of warmth and welcome. Characteristically, Nobbs rejected the idea of copying some medieval library. The panelling and leaded windows provide a medieval flavour, but the handling of the piers and ceilings recall classical prototypes. In effect, the room was meant to be timeless, to serve as an unobtrusive background for Dr. Osler's treasures. Nobbs wrote:

> These ancient volumes are of course of extraordinary human, scientific and literary interest, but a large percentage of them are also works of art, being exquisitely printed and sumptuously bound. The shelves thus present a charming colour scheme of vellum, calf and dyed leathers, and in the design of the Osler Library at McGill everything has been subordinated to the books themselves which are arranged in full view, behind glazed doors.

The colour of the wood was important, and the architect recorded that

> . . . very great pains were taken [by the Bromsgrove Guild] to secure a finish which, without any suspicion of artificial patination, succeeds in bringing out the full damask effect of the chamf of the quartered oak in velvet tones.
>
> The floor is covered with haircloth, over felt, and on this are strewn a notably harmonious collection of Kazak rugs of sun-burst pattern in mulberry reds and ivory white.
>
> The furniture is in oak to match the wainscot work and while frankly inspired by old English models, is of no particular period. Here, as elsewhere, the intention has been to do things simply and solidly, in the hope that all may go on growing old together gracefully, as the saying is, with the books on the shelves.[59]

The subdued quality of the whole creates an atmosphere of peaceful quiet which is entirely appropriate.

The library contains other ornamentation which

carried a more specific meaning, also typical of Nobbs. His lifelong interest in heraldry--he designed the McGill Shield--is reflected in the coloured papier-mâché coats of arms which flank the centre window and decorate the lunette opposite. These represent the arms of the six institutions of learning with which Osler was associated--Toronto, McGill, Pennsylvania, Johns Hopkins, Oxford, and Christ Church--and also his own device.[60] The walls above the wainscotting are of smooth plaster painted white, which sets off the colours of these varied shields. The plaster decoration on the cornices includes, in the central area, bead and reel, acanthus, and bay leaf (laurel) motifs; while the two end sections feature a repeating design formed from the letters "W. O." The grisèille work devices of the windows consist of the serpent insignia of the physician and a book.

As John Bland notes in an article written for the Osler Library Newsletter:

> When the room was finished it was clear that the architect had done a supremely good job. No aspect of its floor, walls, windows, ceiling, fixtures or furniture had escaped his attention, and the work of each tradesman who had been involved could be seen to have contributed to the splendid result.[61]

Once again, the training Nobbs received under Robert Lorimer is in evidence and once more served him well.

Although the Osler Library was primarily the responsibility of the architect and the Bromsgrove Guild of Canada, all the details had to be approved by the Osler

Library Reception Committee. Furthermore, Lady Osler was consulted at every stage, and the final result bears the imprint of her taste. Just as William Macdonald favoured simplicity in the McGill Union, so Grace Osler requested that the panelling and decoration here should be simple in character. She asked that the woodwork be plainly finished without high polish and free from carving. She wanted the window-panes plain with no pattern but leaded if possible. All the furniture was to be very simple.[62] The first proposals which were taken to England were slightly more ornate than the final design which simplified some of the panelling and omitted the small amount of carving Nobbs proposed.[63] The windows were also changed. The colourful heraldic motifs in stained glass instead became the papier-mache decorations. Lady Osler did eventually approve of the grisaille work which was important to the architect for reasons already noted. Nobbs informed his client that woodwork in Canada could not

> . . . be left raw and dull, as is frequently done in the case of very high-class work in England; for climatic reasons it has to be filled and finished. That need not involve a high polish. My preference is for a dull, velvety finish, done with wax, hardly an egg-shell gloss.[64]

The major problem encountered involved the niche with its portrait of Osler and repository for his ashes. The original design called for a semi-circular apse crowned by a coffered half-dome which could contain a pedestal supporting a bust. Nobbs suggested the sculptor, Tait

McKenzie, as "the obvious man to be commissioned to handle this."[65] He envisioned the whole fenced off by a low wrought-iron screen, a more imposing handling than that finally chosen. In April 1924 the architect visited Lady Osler in England, showing her sketch models of a proposed bust, but these did not please her. She asked instead to be permitted to donate a profile relief of her husband. The one she chose had been made in Paris in 1903 by the French medallist, Frédéric Vernon, and medals had been struck from it for memorials at the Johns Hopkins Hospital, Oxford, and McGill.[66] With the permission of the owner of the original medal, Osler's former colleague, Dr. Henry Barton Jacobs, an enlarged copy was made by a foundry in Baltimore. In the end, the domed niche became a shallow polygonal recess lined with bookcases to match the rest of the room. In the centre is the Vernon relief with a very simple slab beneath, behind which are concealed the ashes.[69] Dr. Osler's own writings were placed in the two bookcases to the left and his favourite authors on the right.

This restrained treatment ensures that while the memorial to the giver of the library remains the focus of the room, it does not dominate the scene. No doubt the generous and selfless Dr. Osler would have wished it thus. Even the inscriptions are minimal. Under the plaque are the words "William Osler Professor of the Institutes of Medicine in this University 1874-1884." Above the entrance on the interior, a panel reads "Sir William Osler Bart Born Bond

Head Ontario 1849 Died Oxford England 1919." "Bibliotheca Osleriana" is carved over the outer door.

Lady Osler's desire to create an unostentatious setting for her husband's most cherished material possessions no doubt reflected her understanding of his character, but it also reflected her own personality. Grace Revere Osler was a great-granddaughter of Paul Revere, and this Yankee heritage surely influenced her love of simplicity. It is fitting, too, that her spirit and her ashes inhabit this room along with her husband's.[68] A privately printed biography written by a friend, Arnold Muirhead, states a fact which is often overlooked in accounts of famous personalities: that behind every public saint stand many private ones.[69] Lady Osler's death upon completing her final self appointed tasks of overseeing the preparation of the library and the cataloguing of the books is symbolic of her married life. She was as devoted to the advance of medicine as her husband and just as selfless, but in typical nineteenth-century fashion she perceived her role as that of helpmate. She ensured the smooth functioning of Osler's homelife so that he could concentrate his attention on his own profession. The hospitality which made the Oslers so beloved by so many was largely Grace Osler's doing. During the First World War she organized hospital units, looked after the wounded, and supervised the finding of homes and clothing for Belgian war refugees. "I have only two duties in life," she wrote at this time, "to keep on cheering the

wounded and to keep W. O. fit for his tremendous amount of work, and strong enough to bear the parting with Revere."[70] Revere, their only child, like so many others, would be killed in Flanders in August 1917. Two years later, on 29 December 1919, William Osler died of pneumonia, largely brought on by overwork, which was his way of dealing with grief. Lady Osler died in 1928, and on 29 May 1929 the Osler Library was dedicated.

The library is in actuality the joint creation of three individuals: the Oslers, husband and wife, and Percy Nobbs. All three shared a common generosity of spirit which caused them to direct their actions toward the good of the whole rather than toward personal glory. This shared quality is part of the texture of the Osler Library, the deeper meaning which Nobbs has conveyed with such success. The measure of his own selflessness is evidenced in a design in which, as he tells us, everything was subordinated to the books. This same lack of personal vanity is apparent in Nobbs's other works as well and is basic to his expression. Robert Macleod makes an interesting point regarding architectural modesty in his discussion of Lethaby, whose teachings Nobbs admired. "Lastly, there was evident in his own personality an instinctive self-effacement which may have been bound up in personality traits, but which certainly owed something to his commitment to the idea of a social impulse rather than to a cult of personality."[71] Percy Nobbs was by no means as extreme in thought or deed

as Lethaby, nor did he share William Morris's belief that there was no qualitative difference between building and architecture. He was, however, as deeply committed to the social role of his art. It seems to the author that his self-effacement, like that of the doctor and his wife, came from a realization of man's infinitesimal place in the universe, of his dependence on the rest of humankind, both past and present, and of his responsibility to the future. This made Nobbs an ideal architect for the Osler Library, one of the most perfectly realized of all his works.[72]

4. THE PATHOLOGICAL INSTITUTE

1922-1924

In 1897 F. T. Gates, one of John D. Rockefeller's closest advisors, bought a copy of Dr. William Osler's famous textbook The Principles and Practice of Medicine, later observing:

> It charmed me, for it is one of the very few scientific books that are possessed of a high literary quality. There was a fascination about the style itself that led me on, and having pulled me from page to page, and chapter to chapter, until the whole of about a thousand large and closely printed pages brought me to the end.

Gates was intrigued, but he was also deeply disturbed, for "he discovered that this outstanding medical practitioner knew no cures for a large number of diseases, and that the germs of most of them had never been discovered."[73] Gates managed to convince his employer that here was an opportunity for pioneer work of inestimable value in the relief of suffering. Consequently, in 1901 the Rockefeller Institute of Medical Research was established, and benefactions were commenced on a vast scale to eradicate disease and promote health throughout the world. This accorded with Osler's own belief that the progress of medical science should not be impeded by national boundaries.

In 1920 Canadian universities began receiving assistance from the Rockefeller Foundation. McGill and

the Universities of Toronto, Dalhousie, Montreal, Manitoba, and Alberta all received aid in one form or another.[74] McGill's Faculty of Medicine was given an endowment of $1,000,000 for purposes of research contingent on the university securing new capital funds for buildings. The result was the Biological Building and the Pathological Institute.[75] There was a certain poetic justice about the grant to McGill, for Osler's first appointment at the university at the outset of his career had been as lecturer in pathology and physiology; the position of pathologist had been created for him.

Nobbs and Hyde received the commission for the Pathological Institute in 1922. In the spring of that year the project had become a joint undertaking of the university and the Royal Victoria Hospital, one of the McGill Medical School's teaching facilities. The hospital's own pathology department was no longer adequate, and its board offered to contribute $100,000 towards building costs.[76] This accounts for the location on the north-east corner of University Street and Pine Avenue, directly opposite the hospital.[77] A tunnel beneath University Street links the two institutions, signifying their interdependence. The Institute would provide the hospital with improved facilities for investigating and determining the causes of disease and death; for the medical school, there would be extended opportunities for practical teaching and research.

The preliminary proposals were presented to the

McGill Board of Governors on 1 May 1922.[78] Because of the technical aspects involved in laboratory design, Stevens and Lee of Boston and Toronto, well-known hospital architects, acted as consultants.[79] R. Traquair and W. Carless are cited as associates. This was a courtesy to McGill's architecture department which was then headed by Ramsay Traquair. The new building was completed at a cost of just over $450,000, twice the original estimate, and was officially taken over by McGill on 12 May 1924.[80]

The task facing Nobbs and Hyde was an extraordinarily complex one. The narrow and sloping site was difficult. The plan had not only to allow for a variety of functions related to pathological teaching and research on undergraduate and postgraduate levels, but also to include space for the related disciplines of bacteriology and medical jurisprudence. Beyond this, Nobbs sought to harmonize his design with the neighbouring buildings, a task that was not easily accomplished.

In his book Design, Nobbs wrote of

> . . . the absolute need of a logical consecutive process in elaborating the plot or plan. This may have many and great artistic possibilities, or they may be a few and of little consequence, but, in either case, it is equally imperative that they arise out of the plot or plan and not fortuitously. Inspiration comes from the theme, not from the sky.[81]

In tackling this particular problem, Nobbs's Gothic Revival training stood him in good stead. The functional asymmetry stressed by this tradition provided him with exactly the flexibility he needed to deal with the cramped, uneven site

and diversified program.

Along University Street, the architect placed a narrow main block, which is symmetrically disposed except for differing fenestration on its gabled end bays (Fig. 52). This long, rectangular section of the building, with its gables and dormers, is really a reduced version of the Engineering Building without the central doorway. It is here that the office and laboratory units are found, on either side of a central, longitudinal corridor. At the north Nobbs joined a lower (three stories to the main section's four), square wing containing the museum, autopsy theatre, and lecture hall. The autopsy theatre is visible at the rear, jutting out in the form of an apse (Fig. 53). The main entrance and hallway are located in the principal block's northwest gable end to provide easy access to both these portions of the building. There is an entrance for students through a basement doorway in the opposite bay nearer to McGill.

On the short, Pine Avenue front, Nobbs attached another unlike wing in the form of a small house which provided lodgings for caretakers on the two lower floors and quarters for experimental animals above. This was linked to the main block by a covered archway (Fig. 54). The top floor of the house can only be entered from the main building through a passageway over the arch. Thus the caretakers' flats were effectively isolated from any possibility of contamination, their only entrance being directly to the

outside.

The interior planning, now considerably altered, was characterized throughout by a multiplicity of purpose (Fig. 55). At basement level, for example, the physical needs of both the living and the dead were looked after. Beneath the autopsy theatre wing is the entry to the tunnel under University Street so that remains from the hospital could be transported easily and unobtrusively. A corridor led to the morgue, the preparation and storage facilities, and the incinerator. A great deal of space was also necessarily given over to the electrical and mechanical equipment which ensured adequate ventilation and cold storage. The sloping site enabled the architect to provide an entrance at the rear on this level giving on to the courtyard formed by the angle of the main structure and the attached house. This was the undertakers' entry. Their vehicles passed through the archway on Pine Avenue, a thoughtful and discrete arrangement for the conveyence of earthly remains. A small chapel was placed near this entrance, taking advantage of the apsidal shape required by the autopsy theatre above. The remainder of the basement under the main section was for the students, providing them with shower facilities, lockers, and a common room.

The museum and the autopsy and lecture theatres commenced at the first or main floor level of the northern wing and extended through two floors to roof level to exploit skylighting. Galleries led off a corridor on the

second floor into these rooms. The autopsy theatre, being on the rear, benefitted from a northeastern exposure. Two little rooms on either side served for private autopsies; all were faced with marble and had special forced ventilation. The theatre itself could hold approximately 150, and its seating rose acutely so as to afford a good view of demonstrations in the pit. A special reflector attached to the ceiling focused light onto this area. The lecture room on the front could seat the same number in rising tiers, and it, like the autopsy theatre, was lit by a skylight. This room also had twelve high-powered arc lamps and highly sophisticated projection equipment. Connecting doors led directly to the museum, which also had roof-lighting and was painted white to create a dull, uniform light preventing glare on the glass cases. Behind the lecture theatre was a smaller exhibition room used for illustrating topics currently under discussion.

On the first floor of the main part of the building, off the long corridor, were various specialized rooms. At the northeast, for example, was a conference room for the pathological and clinical staffs of the hospital which had a large exhibition refrigerator where organs could be kept for several days for study. Records, the medical jurisprudence lab, space for microphotography and an artist, and the departmental library were all on this level.

The second and third floors were devoted to the departments of pathology and bacteriology respectively with

primary space being given to the big student laboratories. These were located on the courtyard side of the building so to take advantage of the northern exposure; the façade is distinguished by the almost continuous glazing of the two upper stories. The pathological laboratory was arranged in a series of tiers so that 120 students could work with microscopes without obscuring one another's light. A system of indirect lighting was also used to ensure maximum illumination without direct sunlight, which interfered with microscopic work. A contemporaneous source stated that this second-floor lab was a replica of a famous one in Leipzig.[82] The animal operating room was also on this level as well as the entrance to the passageway leading to the animal quarters. The top or third floor had, in addition to the large bacteriological laboratory, a research room for graduate students, and refrigerating and incubating rooms. Both floors contained an office and a private laboratory for the professor. Stairs gave access to all levels at either end of the main block, and there was also an elevator. Electric light, hot and cold water, and compressed air were carried throughout the building, and a number of rooms were provided with refrigerating pipes, live steam, and exhaust. One of Nobbs's early sketches shows him worrying over the ventilators. The design must have been a great challenge.

If the interior of the Pathological Institute seems admirably organized to facilitate the pursuit of scientific

knowledge, the exterior is equally as successful in meeting aesthetic, even spiritual, needs. Preceding chapters have shown how carefully Nobbs related his architecture to the existing surroundings, and the Pathological Institute is outstanding in this respect. Here, he had to contend not only with the hilly terrain of Mount Royal, but also with two highly disparate neighbours. Extending downhill in an easterly direction along Pine Avenue were some very modest row houses, family homes, while to the west, on the avenue's upward slope, was the massive, even intimidating Royal Victoria Hospital, built in the late nineteenth century (Fig. 56). This structure had been the result of a $1,000,000 gift given in 1887 by Sir Donald Smith and Sir George Stephen (later Lords Strathcona and Mount Stephen respectively) to celebrate the Queen's Golden Jubilee. Its Scottish Baronial mode, characterized by towers, bartizans, and crow-step gables, had complimented a known preference of Her Majesty, just as it acknowledged the Scottish ancestry of so many of the people connected with the institution. An earlier Baronial structure had served as a model, David Bryce's Royal Infirmary in Edinburgh (1874-79).[83] This was hardly a surprising choice, since most of the faculty of the McGill Medical School were Edinburgh-trained. Finally, a mountainous site demanded some form of medieval, castellated response as far as Victorians were concerned, and this grand structure no doubt had served to compensate for the ancestral

Scottish castle which the two self-made millionaires, Smith and Stephen, lacked.[84]

The architect of the Royal Victoria Hospital, A. Saxon Snell, a leading English expert in hospital design,[85] had taken great care to design an efficient, modern, medical complex for his clients; but his handling of the Baronial mode must have been especially jarring to Nobbs's sensibilities. Symmetry, seldom seen in real Scottish medieval building, allowed Snell to plan in a functional way, but it results in a structure which appears to be imposed on its hilly, irregular site with only a minimal regard for the natural contours of the land. As a memorial to two of the men who had successfully conquered the nearly insurmountable Canadian topography by means of a railroad, it is a highly expressive symbol. Regularity, in fact, characterizes this building throughout: for example, the window arrangements and the various decorative components, including the dressings. Even the harsh, rock-faced limestone of which the hospital is constructed, while meant to recall medieval rubble walls, is laid in straight courses with the relentless monotony of railroad tracks. Mechanical precision, the key to Victorian technological success, was so greatly admired during the nineteenth century, that it was frequently linked to styles which were innately alien.

For Percy Nobbs, with his profound knowledge and love of old Scottish work, this earlier interpretation was a false one. Indeed, he once referred to the Curfew Tower

at Windsor Castle, refaced in 1863 in a manner as rigid as that of the later hospital, as "a monstrous form, born out of due season."[86] Irregularity, as Nobbs well knew, was what distinguished medieval building; and, as a consequence, the walls of the Pathological Institute display the soft beauty of random masonry. Respecting this stonework, John Bland recalls that Nobbs encouraged his masons to take pride and pleasure in their labours.[87] This was an important aspect of the Arts and Crafts movement, meant to counteract the dehumanizing effects of modern technology. Consequently, even as the architect made sure that his own structure acknowledged its imposing neighbour in a number of ways, he also made subtle comments on it by emphasizing some very different architectural qualities.

Nobbs tells us that when faced with a situation involving other buildings, he always began by assuming there were organic relationships to be discovered somewhere among them.[88] This was a lesson he had first learned with Lorimer applied to rural surroundings, but it could be effective in urban situations as Lethaby had demonstrated. Godfrey Rubens points out that "Lethaby was as sensitive to a city site as to a rural one," and like Philip Webb, whom Lethaby admired profoundly, "most carefully related his building to its neighbours both in adjusting it to its site and taking up local manners in building."[89] Here, Nobbs's solution was to create a relationship which had not previously existed. The Pathological Institute

provides a gentle, graceful transition between the towering hospital and the little family homes, enabling the eye to move along in a pleasing, rhythmical sweep down Pine Avenue. The entire area is thus visually and architecturally enhanced (Fig. 57). The architect's varied training enabled him to recognize that a planned urban experience need not always be a formal one involving classical modes. We can see him envisioning these relationships in a watercolour rendering dated 28 June 1922 (Fig. 58), before the working drawings were issued.[90] It makes quite clear how deeply felt were his concern and respect for the environment. The new building nestles into its site as though it had always been there.

To accomplish his feat of architectural dexterity, Nobbs made use of tools which any designer has at hand: such things as scale, optical adjustments, the size and placement of windows, and other compositional elements. On the corner nearest the Royal Victoria Hospital, for example, he placed what appears to be the largest and most important part of his building in order to confront the hospital's massiveness. In actual fact, this end bay, situated where University Street and Pine Avenue meet, is identical in size to its fellow to the north, except for an added stair tower. By adding the tower and a high, decorated dormer on the Pine Avenue front, Nobbs enhanced this corner visually and nicely echoed prominent decorative features of the hospital. He also treated the

third- and fourth-storey windows of the bay's University Street face as one large unit, another way of conforming to the hospital's grander scale.

The architectural progression leading away from the corner along University Street was also carefully controlled optically to increase visual emphasis where it was wanted. The horizontal lines of the central portion of the main façade, with its long rows of identical windows, lead the eye quickly past the northern gabled bay to the low, terminating museum wing, so that neither competes for attention with the dominant corner grouping. The architect's perspectival drawing shows his intent very well (Fig. 59), although a later heightening of the museum wing roof has lessened the effect.

The view down Pine Avenue was composed with equal care and skill. Here, the possibilities afforded by asymmetrical massing enabled Nobbs to adjust his larger building to the smaller, row houses in an extremely graceful manner. The use of the covered archway to link the main body of the Pathological Institute to its attached house meant that he could vary the scale of the two and also angle each so that it lined up with its respective neighbour. This was necessary due to the slanting nature of Pine Avenue. An extremely subtle touch is the polygonal base of the stair tower, which eases the transition between the differing angles of the two elevations. Practically, the separation provides effective isolation quarters;

aesthetically, it meant that the architect could create a little house like the other little houses, three storied, with windows and eaves line carefully aligned. The high pitch of the roof is different, but this relates it to the main building and provides a necessary visual stepping-down. Out of courtesy to the row houses, Nobbs eliminated the crow-steps which decorate the other gables. All the elements on the Pine Avenue façades have been arranged with great sensitivity so as to reinforce the gradual stepping down rhythm: roof, chimney, conical tower, decorated dormer, windows, each placed with exquisite precision to achieve the desired effect. While aesthetic concerns appear to dominate the exterior here, at the same time, the changing shapes and levels indicate varying functional requirements within. Nobbs once wrote, that compromise was often necessary--"Purity may be sacrificed for other virtues."[91]

It is interesting to look at the architect's early pencil and watercolour sketches for the Pathological Institute, since they show him working out the various relationships which have been discussed (Fig. 60).[92] The sizes and placements of windows were changed, the museum wing altered, all in order to create a more satisfying whole. In the end, although the Pathological Institute is far more delicate and elegant in its overall proportions than the hospital, its scale purposely human, it is not in the least overpowered by the larger structure. Nor does it,

in turn, overpower its smaller neighbours. "Urbanity," the architect wrote, "has something of mercy in it and mercy carries a double blessing."[93]

As elsewhere in Nobbs's work, delicacy and lightness also reflect twentieth-century structural techniques. Structural steel and reinforced concrete play their respective roles behind the Pathological Institute's limestone façades, whereas the heavy masonry walls of the hospital are fully load-bearing.

Nobbs's continuation of the Scottish Baronial mode, while architecturally courteous, may seem an anachronistic choice for a modern science structure. He was not, however, the last architect to do this in the hospital complex,[94] nor was he unique in adapting the popular Victorian style for a pathology building. There was an important and well-known late nineteenth-century prototype: Sir John Burnet's Western Infirmary Pathological Building (1894) in Glasgow (Fig. 61). Burnet (1857-1938), holder of a first-class diploma from the Ecole des Beaux-Arts and the leading Scottish architect of his day, had fallen for a time under the spell of the Scottish traditional style fostered by Rowand Anderson and Lorimer and had introduced various Scottish features into his pathology building.[95] Equally important, however, as David Walker points out, Burnet had used very modern horizontal windows without mullions.[96]

Nobbs, too, incorporated a modern window treatment into a structure that draws heavily on traditional forms. On his northeast or courtyard façade, largely hidden from view, the architect exploited and expressed the steel frame, producing an elevation quite different from the others. Here the two upper stories, which house the big student laboratories, are distinguished by almost uninterrupted glazing. The glass area is broken only by slender masonry piers and narrow spandrels (Fig. 62). The grid of windows occupies the full expanse between the gabled end bays, rising above a frankly utilitarian base that incorporates the basement and ground floor and is perforated by untrimmed, rectangular windows.[97] A skylight fills the roof area of this elevation. The picturesque, asymmetrical groupings of diverse architectural features and, for the most part, the applied decoration that characterize the other façades were dispensed with here. Instead, the architect created a symmetrical composition that accords with the simple geometry of his window grid. The expression of structure, the repetition of simplified, identical components, and the almost total elimination of applied ornament give the northeast front a modern, functional appearance--an appropriate reflection of the sophisticated laboratories within.

The obvious difficulty of integrating a progressive treatment such as this into a traditional building is surmounted by the device of the courtyard, which effectively

screens it from view. Yet Nobbs was obviously concerned with the problem of how to deal aesthetically and meaningfully with a spare, utilitarian elevation. While his usual manner tended toward restraint, he nevertheless belonged to a tradition that considered ornament to be "the main difference between architecture and mere building . . . between a gentleman's carriage and a brewer's dray."[98] His answer here was to decorate the spandrel panels with geometric mouldings and embellish the crow-step gable ends with urns and the private autopsy-room exteriors with blocked piers and obelisks. While the symbolism of urns and obelisks is appropriately funerary, to contemporary eyes, conditioned by the consistent, abstract aesthetic and spare, utilitarian look promoted by the International Style, such historical, applied ornament strikes a discordent note. Nobbs's decorative handling does not correspond with that of the modern, functional style as it developed in Europe in the 'twenties; rather, it reflects the eclectic approach that he and other twentieth-century traditionalists preferred. A continuation of the historicism of the previous century, this approach distrusted stylistic exclusivity of any kind, whether old or new. The eclectic selected what he felt to be the best and most appropriate elements from a multitude of sources and was not attempting to create a completely new style. He believed that architecture progressed not by revolution, but by slow adaptation.

The pioneer modernists, in contrast, were searching for a distinct and unified contemporary style consistent with the revolutionary nature of the new structural technology and programs. They violently rejected the traditional eclecticism of the nineteenth and early twentieth centuries, but even the most avant-garde architects found the problem of meaningful expression exceedingly difficult. With regard to ornament, the American architect Louis Sullivan (1856-1924) had written as the century opened: "For the new architecture a new decoration must evolve to be the worthy corollary of its harmonies."[99] Although Sullivan had suggested that it might clear the way to dispense with all ornament for a time, he believed, like Nobbs, that architecture could not be fully expressive without it and continued to ornament his buildings. William Jordy points out in his discussion of Sullivan that the Chicago architect's decorative vocabulary was hardly original in the manner of a Mackintosh or a Wright, but that he did dispense with conventional, historicizing motifs in favour of more universal forms derived from nature. With these he attempted to express a peculiarly modern conception of the dynamic energy permeating all creation.[100]

William Lethaby, chief inspirer of Arts and Crafts architects of Nobbs's generation, was a contemporary of Sullivan and shared some of the same views.[101] Perhaps the most advanced and perceptive of the British theorists, Lethaby too believed that modern buildings must have their

own imagery. "Imagery of any kind, be it ancient or modern, must be eliminated, until a new coalescence of society imposed it unconsciously from within."[102] He felt that the study of ancient monuments which comprised his own architectural training so ill-prepared him for the age of steel and concrete, that he gave up practice after 1902. Few of his British contemporaries were willing to follow Lethaby to this austere conclusion, and Nobbs, for one, remained close to Webb. Robert Macleod observes that "the wide eclecticism of Webb was prepared to absorb any 'strains' which had historic or material relevance, where the 'evasionism' of Lethaby allowed history to contribute only from its storehouse of materials and technology."[103]

In 1929, five years after the Pathological Institute was completed, Nobbs verbally defended traditional eclecticism while making some cautionary observations regarding European modernism. Le Corbusier's Vers une Architecture, first published in 1923, had appeared in English in 1927. Without referring to Le Corbusier by name, Nobbs noted:

> . . . among a host of architectural farceurs of the independent maniac type, a few real masters of our art, who seem to say, "Our problems are new; our methods of construction are new; let us find new solutions, with new rhythms and new scales! To do this, let us forget the past," or, on occasion more loudly "to hell with the past."

To Nobbs this was dangerous nonsense. He remarked, however, that the architectural realists could have enormous influence for good in Canada where there was no very great

architectural past "if we keep our heads, accept so much of the doctrine as will help us, and solve our own problems in our own way, with a weather eye on our climate."[104]

Nobbs was not alone in expressing wariness toward European modernism. John M. Lyle, the Toronto architect (1872-1945), voiced similar reservations in 1932:

> The extreme modernist is, in my opinion, equally at fault with the extreme traditionalist, in that he is trying to tie up architecture to a definite set of formulas. . . .
>
> While we may agree with the extreme modernist . . . that certain types of buildings lend themselves to a blocky, bald treatment and the elimination of all ornament, we most certainly do not accept this point of view as the last word in the development of a new architecture. . . .
>
> If all buildings are to be devoid of ornament and lacking in any special motifs that might indicate the character of that particular building, then architecture is deprived of its principal means of expression and becomes a standardized mechanical effort.[105]

Nobbs wanted his buildings "to say things . . . and do more than hum tunes."[106] He was inspired by the belief that it was essential to transmit certain values from the past to the modern era, and he continued to rely on recognizable, historical ornamentation to effect communication and maintain links with the past. For Nobbs, "ornament, like the spoken word, may hint at the ineffable, or merely state the obvious, and its phrases have values great or small, quite separate from the technical values of cadence and rhythm or colour scheme and composition brought into play by artistic elaboration."[107]

The traditional decorative handling of the Pathological Institute does indeed accomplish the archi-

tect's stated purpose. It adds significantly to the deep, human meaning that the building as a whole expresses. While consistency of style was not sought by eclectics like Nobbs, consistency of mood and expression was. Here he achieved this to a remarkable degree.

The old tower houses and castles of Scotland, which Nobbs alluded to in his pathology building through such things as asymmetrical composition and massing, random masonry, and the conical tower and crow-stepped gables, had also been embellished with pious mottos and with carved crests and monograms. These had served to edify medieval onlookers, and Nobbs employed the old methods to impart a message of comfort to his contemporaries. He included the kind of carved ornament he had used before at McGill to impart individuality to his structures: martlets and a shield to signify the university, the thistle of Scotland, and various references to pathfinders in medicine and the science of pathology. The latter include two medallions on the University Street façade referring to Asclepius, the Greek god of medicine and healing, and to Rudolf Virchow (1821-1902), the father of modern pathology. The Virchow medallion contains a representation of a pavilion of the famous Virchow Hospital in Berlin while Asclepius is indicated by his sacred sign, the cock. His other, more familiar symbol, the serpent, can be found in the dormer of the gable above the main entrance. The serpent is also

used together with the cock as a weathervane atop the autopsy theatre ventilator, and it can be seen again entwined around the finial which crowns the stair tower on Pine Avenue. Nobbs's beloved owl is carved over the students' entrance; but over the principal entrance, perhaps inspired by the Osler Library, he placed an inscription based on the title of a pioneering book on pathology. These words, "Sedibus et causis moriborum per anatomen et experimenta indagandis" ("Seat and causes of diseases to be studied through anatomy and experiments"), refer to the work of Giovanni Morgagni, the Italian anatomist, published in 1761.[108]

In three other Latin inscriptions which adorn this building, Nobbs stated most overtly the meaning of his structure. Over the covered archway facing Pine Avenue is carved: "Hic est locus ubi mors resurgens rediviva est" ("Here is the place where death arises to new life"). In the main entrance hall are two further Latin inscriptions: "Hic est locus ubi mors gaudet succerrere vitae" and "Nihil sic revocat a pecato quam frequens mortis meditatio" ("Here is the place where death rejoices to be of service to life" and "Nothing prevents error or sin so much as frequent contemplation of death"). The sacred nature of scientific endeavour, which Dawson and Osler had so successfully conveyed to their own contemporaries, was sensed with equal intensity by Nobbs and interpreted by him in a way which could be grasped in a new and secular

age. With his Latin inscriptions and by other means, the architect effectively transformed a twentieth-century laboratory structure devoted to the study of disease and death into a celebration of life. The theme closely relates to that expressed by the Osler Library, that death is not the end, but rather an essential part of the greater, endless process of creation. In the library, however, Nobbs had spoken of another man; here, he spoke for himself. Dr. Osler had said that medicine was an art, not a trade, and Nobbs felt this about his own profession. He could and did express his deepest feelings and ideals through architecture, just as Osler did through the practice of medicine. In this, the most personal of all his works, Nobbs reached a new level of artistic expression. Everything about this building speaks of the triumph of life over death: the structure's purpose and theme, the organic quality of its random masonry and asymmetry, the way in which the old forms and techniques find new uses, indeed the very use of those forms most closely linked with the architect's own Scottish heritage. When Nobbs himself died in 1964, the sensitive writer of one of his obituaries observed:

> He was a man steeped in the traditions of architecture, feeling the value of designing buildings for modern uses in such a way that they would not lose touch with the heritage of the past. It was his conviction that what is functional is quite compatible with what also expresses the continuity of mankind.[109]

The Pathological Institute is a most eloquent declaration of this belief.

PART IV: LATE PERIOD AT MCGILL

1. INTRODUCTION TO LATE PERIOD

The last major structures designed by Nobbs and Hyde for McGill were an institute for pulp and paper research, begun in 1927, and a dormitory extension to Royal Victoria College, designed in 1930. These projects do not achieve the profound expressive level that distinguishes the works of the early 'twenties. Perhaps the nature of these commissions did not inspire Nobbs in the way the previous ones had. He, himself, remarked on more than one occasion that opportunities for artistic expression in architecture varied from problem to problem. Current conditions may also have been a factor, preventing him from working in a manner compatible with his training and inclinations. Nobbs had commenced his career at a time when craftsmen were readily available, but as time went on, economics demanded machine-made products and correspondingly simplified detailing. With his love of handcraftsmanship and expressive ornament, this must have been a particularly difficult, if not impossible, adjustment for him to make.[1]

Another possible explanation for the lessened power of these late works relates to the personal growth of a man who was now in his fifties. Architecture <u>per se</u> may simply have become too limited a medium for the full

expression of Nobbs's deepest beliefs. Although he had always been a man of many and varied interests, in late maturity more and more of his energy came to be focused on the problems of urban planning and conservation. Planning was a widespread concern in the 'twenties, and Robert Macleod is not alone in pointing out that a major twentieth-century manifestation of Pugin's idea that architecture is bound in society is in the realm of planning--"the whole question of the relationship of the total environment to community need."[2]

In Canada the preliminary number of the Journal of the Town Planning Institute of Canada appeared in October 1920. The country's first zoning by-law was enacted in Point Grey, now a part of Vancouver, in 1922.[3] Four years later, Percy Nobbs publicly urged a general town plan for Montreal[4] and published an article, "Suburban Community Planning."[5] In 1928 he delivered an address before a Town Planning Institute meeting in London, Ontario, titled "On the Control of Architecture."[6] "Montreal and Town Planning" appeared in the same year. Here he wrote:

> Like many another city on this continent, Montreal has been the prey of unrestrained individualism. For generations no man gave much thought to his neighbour or his neighbourhood . . . . Urban land is not like movable property, to do with as one wills. . . . In cities, some compromise is necessary, and building regulations are the device for allowing a proprietor to damage a neighbour's property to a limited extent, in exchange for a like privilege.[7]

Neighbourliness was not something Nobbs restricted to his own creations. He acted as consultant to the

Montreal City Planning Department, which he was instrumental in forming, and drafted both municipal and provincial planning legislation. During the 'twenties and throughout the following two decades, the architect campaigned actively for city improvement. He concerned himself with public housing and slum clearance and called for a system of waterside parks for Montreal while land could still be acquired relatively cheaply. Unfortunately, this far-sighted scheme was never adopted. Nobbs was, in fact, far ahead of his time in his various planning ideas.[8]

Realizing fully that citizens only got what they themselves wanted and asked for, he devoted himself to creating an informed public. In addition to his own extensive writing and lecturing, he invited Raymond Unwin, designer of Letchworth and Hampstead Garden Suburb, to Montreal to speak in 1937. Nobbs furnished evidence to the Special Committee on Housing of the House of Commons and acted as president of the Town Planning Institute of Canada. This was not all, however. The architect's concern for the quality of life was also expressed in the area of conservation. An enthusiastic angler, Nobbs was dismayed at the damage which hydro-electric works and man's general carelessness were wreaking on the Atlantic salmon.[9] In his book Salmon Tactics, he outlined what needed to be done and subsequently founded the Atlantic Salmon Association to see that his proposals were carried out.[10] He served as president of the Quebec Association for the

Protection of Fish and Game and in 1952 earned the Outdoor Life Conservation Award as the man who had contributed the most to the conservation of wildlife in that year. In addition to these activities, he also found time to serve as president of the Province of Quebec Association of Architects, the Royal Architectural Institute of Canada, the Town Planning Institute of Canada, and the Royal Canadian Academy.[11] The idea of service to society was not one that Nobbs took lightly.

2. THE PULP AND PAPER RESEARCH INSTITUTE OF CANADA 1926-1929

Although North America's first groundwood pulp mill began production in 1866 at Valleyfield, Quebec,[12] by 1901 there were as yet only two chemists at work in the pulp and paper field in Canada.[13] They were obliged to rely on European expertize to deal with the industry's manifold technological problems. In 1911, however, a fourth-year student in chemical engineering at McGill with paper-mill experience began some pulp and paper research. His name was A. G. McIntyre, and he subsequently became the first-appointed head of the Forest Products Laboratories (FPL) which were set up in 1913 under the joint auspices of the federal government, the Canadian Pulp and Paper Association (CPPA), representing the industry, and McGill. Laboratories for this joint venture were located in the old Molson house and stables on the west side of University Street near Sherbrooke.

In 1925 Principal Sir Arthur Currie and the CPPA agreed to use a $200,000 bequest from Mrs. E. B. Eddy, widow of the pulp and paper magnate, to establish a chair of industrial and cellulose chemistry at McGill. The "tumbledown house with rat-infested stables" occupied by the FPL could not possibly accommodate a university

department, and so the pulp and paper industry, then in a buoyant position, agreed to put up $350,000 for a new building. Shortly thereafter, the non-pulp and paper divisions of the FPL were moved to Ottawa, and the remaining operations officially became known as the Pulp and Paper Research Institute of Canada (PPRIC).[14]

The project was one which would have pleased Sir William Dawson, for the former principal had believed strongly that McGill should not isolate itself from the community but take an active role in its well-being. The university was not to be regarded, he had once written, "as an institution for Montreal or for the Province of Quebec but for the whole of Canada."[15] The PPRIC, was and continues to be, such a cooperative and mutually beneficial effort. Skilled chemists and other experts at the institute have found new uses for wood and wood waste, discovered valuable saleable products, and in countless other ways contributed to improved technology and profits in one of the country's foremost industries. In addition, fundamental research, particularly on cellulose and lignin, has raised the level of man's basic knowledge.

Nobbs and Hyde were given the commission for the proposed structure, which would replace the old Molson house at a cost of $282,000. Preliminary plans are dated 25 May 1926; construction began in the summer of 1927 with E. G. M. Cape acting as general contractors. Messrs. Combe and Ryan were responsible for the complex and highly

specialized laboratory equipment and the engineering. The fittings were by Messrs. George Roberts and Sons of Montreal. The completed structure was formally opened in January 1929.[16]

Although in outward appearance the new building seems to bear little relation to the earlier Pathological Institute, many of the requirements were in fact the same. A number of laboratories with their individual lighting problems, a lecture theatre, and a library had to be accommodated in addition to the offices of the three organizations involved. At the same time, however, there were important differences. The site was rectangular and flat, and the neighbouring buildings did not present as complex a challenge. They included, to the west, the Macdonald Physics Building, and to the east, across University Street, the classical-style High School of Montreal, built in 1913-14 to the designs of Edward and William Maxwell.[17]

In response to these demands Nobbs devised a rectangular main building facing onto University Street and consisting of three stories set on a high basement. Housed within were the executive offices and chemical research laboratories. The principal doorway was placed in the short south façade providing equal access to the campus and the street. At the rear a one-storey structure was attached to contain a model paper mill (Figs. 63-64).

The various rooms of the main block are all arranged longitudinally with a long, north-south passage running

down the centre. In the basement were storerooms and laboratories which did not require natural light. From here one entered the model paper mill. The library and a large lecture room were located on the western side of the ground floor overlooking the McGill campus, while the executive offices of the CPPA and the FPL were placed along the street front. The next floor was largely taken up by the research laboratories of McGill's Department of Industrial and Cellulose Chemistry with the director's office occupying the south-west corner. The floor above was similarly arranged. Here the laboratories were occupied jointly by McGill and the Pulp and Paper Division, FPL. These joint accommodations included a physical chemistry and a colloid laboratory in two large rooms, a photographic room with a self-contained darkroom and microscopic benches, a nitration room, and a controlled temperature and humidity room. The chemical research staff of the Pulp and Paper Division had a suite of three labs and an adjoining larger laboratory for special apparatus installations and physico-chemical work. The large laboratories that required maximum illumination without the glare of direct sunlight were placed on the University Street side of the building to take advantage of the northeast exposure.

Because of the repetitive nature of so many of the rooms and in order to provide for future expansion, Nobbs created what he referred to as a unitary (now called modular) plan for his structure. This is reflected in the

repeating elements that characterize the exterior of the symmetrically disposed block.

An ambitious early design for the Institute proposed eleven bays, moderately elaborate detailing, and a main doorway situated in the centre of the long University Street façade (Fig. 65). Prominent end bays terminated the composition.[18] As built, the structure is smaller and far more severe (Fig. 66). It is only nine bays wide, the detailing is simpler, and the doorway is in the south front. However, provision was made for the addition of an attic storey and for a northern wing that corresponded to the south end of the building. This expansion, to be undertaken when need arose, has never been carried out. In 1958 the main offices and research laboratories of the PPRIC were moved to Pointe Claire, Quebec, and Nobbs's building was turned over to McGill to serve graduate students involved in pulp and paper research.

The exterior of the executed structure is distinguished by am emphatic string course that divides the façades into two nearly equal halves. The lower part consists of a high basement featuring heavily rusticated, segmental-headed versions of the Diocletian window and a main floor pierced by double-hung, rectangular lights. Above, the upper portion comprises two stories contained within one order of piers. The fenestration here is rectangular in shape and consists of large units with sliding sashes. The utilitarian window wall of the

Pathological Institute has not however been repeated, since this is a street façade. Instead the piers are much broader and serve to break up the continuity of the glazing. As noted, detailing is kept extremely plain with a minimum of architectural embellishment. A simple cornice runs below the straight parapet, while the piers are undecorated except for narrow mouldings taking the place of capitals. The main doorway, which had been classical in the first proposal, was changed to a Baroque form: a broken-bed segmental pediment supported by pilasters. This perhaps was a reference to the Engineering Building, which is not far distant, although this structure's distinctive blocked surrounds do not reappear. Characteristically, the architect maintained the scale and the limestone exterior of the nearby buildings on the university campus.

Nobbs described his work in the following manner: "The planning is on the unit principle and the utmost advantage is taken of the north-east exposure for laboratory lighting by large windows. The design is thus thoroughly modern in its general realism. The detail is sparing and of the free Anglo-Classic school."[19]

Nobbs's "thoroughly modern" solution is one that he and other traditional architects found extremely useful for commercial and public buildings throughout the second and third decades of the present century. The shallow verticals and horizontals of a stripped-down classicism could express the grid pattern imposed by skeletal framing,

while the minimal ornament accorded with the simplification demanded by modern technology without losing touch with cherished classical values in design.

In the years immediately prior to World War I, as steel framing became widespread, the extravagance of the Edwardian Baroque had drawn increasing criticism. Writing in The Architects' and Builders' Journal in 1911, one critic had observed: "We cannot help asking ourselves whether all these colossal columns, domes, towers, groups of sculpture and other imposing features are felt by their authors to be the only natural and inevitable expression of the necessities of the case."[20] Although what Alastair Service designates as "Stripped Classicism" represents a phase of the pervasive classicism of the early twentieth century,[21] it was, nevertheless, a serious, late attempt to adapt traditional forms to contemporary structural realities and needs. The contrast between the Macdonald Engineering Building, with its rich architectural detailing, and the extremely simplified Pulp and Paper Research Institute makes this shift clear. Stripped classicism was used with increasing frequency from the end of the first decade of the century and came to dominate British public architecture between the two world wars. In the early 1930s, refugees from Nazi Germany brought the rationalist ideas of the Bauhaus to England, and functionalism, which had made a brief appearance at the century's onset, began its ascent.[22]

Nobbs would have had ample opportunity to study English examples of stripped classicism at the time of his visit to Lady Osler in England in 1924. The most radical structure of this kind standing at the time was Sir John Burnet's Kodak Building (1910-11) (Fig. 67) in London, a famous early British steel frame building. The exceedingly severe treatment would probably not have appealed to Nobbs, however, whereas the more decorative Heal's Furniture Store (1916) (Fig. 68) in the Tottenham Court Road by Dunbar Smith and Cecil Brewer is more the type of building that anticipates Nobbs's first proposal for the Pulp and Paper Research Institute.[23]

Nobbs's continued traditionalism reflects the conservative atmosphere that prevailed in North America in the 'twenties. William Jordy, in his analysis of the pioneering Philadelphia Saving Fund Society Building (1929-32) designed in the International Style by Howe and Lescaze, points out that "to venture into modern architecture in the United States in 1929 was not only risky, but lonely as well."[24] Eclecticism still reigned supreme: classical, Gothic, and Spanish Colonial modes abounded, with pseudo-modernism, including Art Deco, providing a contemporary veneer for those who preferred a more up-to-date look.

Canada, as Alan Gowans has noted, still derived "practically all its culture from prevailing trends in

Britain and the United States [and France as well]; the theory and practice of modern architecture came to Canada as direct imports from elsewhere."[25] In 1926 Eric Arthur described the Toronto architectural scene:

> It is unusual, I think, to find in a city so large as Toronto, so few architectural camps. Indeed, there are but two . . . . . There are those who follow the traditional Renaissance style, and they are the big majority, led by Mr. John M. Lyle; and there is that small band which practices Gothic architecture, led by Messrs. Sproatt & Rolph.[26]

Nobbs, himself, observed three years later: "Just now the more serious clients and architects of Canada, as a class, belong to the group I described as architectural traditionalists, but they and their outside public are becoming a little suspicious of the genuineness of their stock-in-trade traditions."[27]

In Montreal the structures that were erected during the building boom of the 'twenties were overwhelmingly conservative and classicizing--largely the work of architects who had studied in Paris at the Ecole des Beaux-Arts or at Beaux-Arts-dominated schools in the United States such as the Massachusetts Institute of Technology.[28] The prevailing manner, even for tall commercial buildings, perpetuated the formal design qualities which characterized structures built a decade or two earlier: the axial symmetry, tripartite elevations, and classical ornament and detail. Nobbs remarked in this regard in 1929:

> The one American contribution to architecture at large is, after all, the tall building, and the tall building has yet to be built that is real in design in the

> sense that Greek Temples and English Parish Churches were real. So far these tall buildings have affected the arcaded complexities, the surfaced severities, or the trabeate solemnities of a dozen alien centuries.[29]

Nobbs might well have had in mind Darling and Pearson's monumental Sun Life Building, begun in 1914 as a neo-classical temple and ultimately completed in the early 'thirties (Fig. 69). This was surely Montreal's most noted edifice of the period: at the time of completion it was purported to be the tallest and most commodious office building in the British Empire. During the decade of the 'twenties, the Montreal firm of Ross and Macdonald designed a number of the city's commercial landmarks in the Beaux-Arts manner, including the Mount Royal Hotel (1921-22) and the Confederation Building (1927-28) (Fig. 70).[30] George Allen Ross had studied both at M.I.T. and at the Paris Ecole des Beaux-Arts. Montreal acquired its own Ecole des Beaux-Arts in 1922 with an architectural school offering instruction in the French language.[31]

More modern tendencies did begin to appear after the middle of the decade. One example of what in Hitchcock's terminology would be labelled "semi-modernism" was designed in 1925 by Ernest Cormier: the new buildings for the University of Montreal, which featured vertical strip windows and sparing ornament (Fig. 71). They were described by Cormier, a graduate of the Paris Ecole des Beaux-Arts, as "modern in design yet not modernistic"[32] and by Gowans, somewhat caustically, as "a few modern clichés . . .

imposed on a basically conventional design."[33] Ross and Macdonald's early essay in semi-modernism, the Montreal Star Building, was not begun until 1929; but in 1928, the year before the Pulp and Paper Institute was completed, an elegant little Art Deco façade had appeared on St. James Street: the Hanson Brothers Office Building by the Montreal architect H. L. Fetherstonhaugh (Fig. 72).[34] Art Deco marked a last effort by traditionalists to effect a compromise with modernity before the Depression and another world war seriously curtailed building.[35] It should be noted that in none of these later Montreal structures is the kind of modernity attempted that distinguishes Howe and Lescaze's Philadelphia Saving Fund Society Building with its functional assymetry, transparency, and continuous space (Fig. 73).[36] As the 'twenties ended, a streamlined appearance was all that was deemed necessary in those instances where an up-to-date look was required. This was true both in Canada and, with a few notable exceptions, in the United States.

The Pulp and Paper Research Institute represents a careful application of essential principles of modernism as it was then generally understood, notably streamlining and structural expression, to a design situation in which a classical manner was entirely appropriate. The building preserves the classical mood that had long dominated the eastern side of the McGill campus and fits in well with the Maxwells' classicizing high school across

University Street. Yet the semicircular shapes of its Baroque doorway pediment and basement windows echo the great arches of Andrew Taylor's neo-Romanesque Physics Building, which was clearly visible. Unfortunately, this felicitous relationship has been obscured by subsequent building, but it is readily apparent in Nobbs's perspective drawing. Respect for the past, neighbourliness, and humanity continued to guide this architect.

Although it is not a large structure, it is instructive to compare Nobbs's Institute with the contemporaneous Sun Life Building, which, in the early stages, displayed a similar rectangular shape and was only a few stories higher. Eric Arthur criticized the first phase in 1926: "It has a certain dignity, but its manners might be improved. . . . In its colossal temple front it is reminiscent of Imperial Rome. What other company with fewer millions could ever be noticed in its vicinity? And mere man, how insignificant is he!"[37] Arthur signalled out the gargantuan order as the main contributor to the intimidating effect described, and Nobbs, characteristically, saw to it that his new building maintained a human scale, which did not overpower the users or nearby domestic structures. The Pulp and Paper Research Institute achieves dignity without resorting to grandiosity.

Sparely ornamented as Nobbs's building is, decoration continued to be a means by which the architect

distinguished his English school of classicism from that of the American and French academics. "In decoration sentiment pertaining individually to the work is the motif; not introduced with rigid formality, empanelled and isolated, but cropping up on all occasions where the disposition to decorate is felt."[38] In addition to the classical and Baroque architectural features already discussed, there is more personalized decoration. Within the pediment of the main doorway of the Pulp and Paper Research Institute, Nobbs placed a single acanthus scroll beneath a rondel containing a pine tree and sun motif (Fig. 74). In this way he related antiquity and the present. The pine motif is continued on the entrance façade in the form of carved garlands, and similar garlands adorn the spandrel panels facing University Street. The architect perhaps chose pine not only because it is used for making paper, but because he considered white pine the greatest of all timbers. The street front also featured an Indian head, long a symbol of the New World. Nobbs also eschewed the extreme degree of finish aspired to by Beaux-Arts practitioners; he preferred a more handcrafted quality both in the masonry handling and the decoration.

Despite a handsome and dignified appearance, the high quality of craftsmanship, and the thoughtful appropriateness of the decorative treatment, the intensity of feeling that inspires the Pathological Institute is missing in this later building. Traditional applied

ornament, carrier of so much Nobbsian sentiment, had to be sharply reduced in keeping with current necessities. Moreover, this structure is far more homogeneous, less idiosyncratic than any of the previous works that have been analyzed. The wildly eclectic mixing of many stylistic elements, which marked even the restrained McGill Union, was abandoned in favour of a more consistent handling. Consequently, certain essential ingredients that heretofore had imparted personality and expressiveness to this architect's buildings have succumbed before the overwhelming drift of the times. Jordy writes:

> Antagonistic as the approaches of the Beaux-Arts and International Style may have been, they substantially agreed in opposing the emphasis on naturalism, nationalism, and individuality which had constituted design in the mid-nineteenth century (following the period of the Greek revival). Both movements favored instead a greater dependence on abstract geometry in design, and commitment to a more cosmopolitan and collective view of society than architects of the mid-century had held.[39]

The days of the traditional eclectic were indeed drawing to a close.

3. THE ROYAL VICTORIA COLLEGE EXTENSION 1930-1931

In November 1929, as the stock market continued its disastrous decline, the Montreal Star announced that additional residential facilities were being planned for McGill's Royal Victoria College. The Star informed its readers that P. E. Nobbs, Professor of Design in the School of Architecture, had been instructed to make a preliminary study of possible plans and make a report to the governors.[40] Although times seem hardly to have warranted such an undertaking, funds were available from annual surpluses, which had accrued over thirty-two years, thanks to the generosity of the college's founder, Lord Strathcona.

Royal Victoria College (Fig. 75) was the first separately endowed women's college in Canada. It had grown out of a gift of $50,000, the "Donald A. Smith Endowment for the Higher Education of Women," which McGill had received in 1884.[41] Subsequently called the "Donalda Endowment," the female collegians were known as "Donaldas." In 1895 construction began on a building for the college, the entire cost of which, including the site, was borne by Smith. The founder, who would be granted the title of Baron Strathcona and Mount Royal by Queen Victoria before his building was

completed in 1899, undoubtedly chose the architect entrusted with the design, the noted American, Bruce Price (1845-1903).[42] Price was a favourite of the men who had made their fortunes building the Canadian Pacific Railroad, so much so that he had established a Montreal office. Frederick Bullock Marvin, in charge of this office, appears to have been mainly responsible for the design of Royal Victoria College.[43]

Bruce Price specialized in the kinds of fashionable, impressive edifices which self-made millionaires in the late nineteenth century generally enjoyed, and Lord Strathcona was no exception. In addition to being a millionaire, "the lord," as William Macdonald referred to him behind his back, was also a staunch imperialist. He carried this to the point of strenuously opposing the appointment of a Canadian as Governor-General.[44] If the Royal Victoria Hospital does not express sufficiently where this benefactor's sympathy lay, his college assuredly does. The spandrels of its battlemented portico are decorated with lions' heads, and high above the passers-by, stone lions sit regally atop the principal gables. A majestic sculpture of the Queen by her talented daughter, the Princess Louise, dignifies the grand approach to the building. On the base of the statue, Lord Strathcona's name is prominently displayed.

In many ways the college is like the hospital: monumental, symmetrical, set-apart. Its 190-foot frontage was separated from Sherbrooke Street by a thirty-foot lawn and palisading, and it was given a grand staircase forty

feet wide. A newspaper account of the time noted that "the Scotch baronial style was chosen as the ground work, modified by some renaissance features."[45]

The extravagance of the exterior was matched on the interior by an extravagant use of space. Despite its grandeur and the fact that Lord Strathcona had anticipated accomodation for 100 students, much of the building was given over to public areas.[46] This had caused Principal Peterson to write to the founder that he feared

> . . . the architect must have led you to believe that the building is more elastic than actually appears to be the case. . . . I know I told Mr. R. A. Peterson [chief engineer of the C.P.R., who directed the construction and furnishings of the college] more than once when the building was going up that he seemed to be over-estimating the number it would accommodate.[47]

By 1906 Strathcona had already called for additional bedrooms, and alterations to the existing structure had been carried out by Nobbs.[48]

To provide for future expansion Lord Strathcona, prior to his death in 1914, purchased the Learmont and Tiffin properties, which lay between Royal Victoria College and University Streets facing onto Sherbrooke. His foresight is commendable, for by the fall of 1929, more than 500 women were registered. The extension that Nobbs and Hyde designed in 1930 was essentially a residential wing to house some of these additional students.[49]

Nobbs's major challenges were planning for as many bedrooms as possible and finding a way to attach his addition to the old college without interfering with the light

and air which both residences required. He managed to provide sixty-two new student bedrooms, the bulk of which he placed in a long, rectangular, four-storied block, set on a basement, which extended back along University Street (Fig. 76). This is symmetrically fenestrated and flat-roofed except for a gable at the south end (Fig. 77).

Attaching this portion of his addition to the old college was complicated by the awkward nature of the corner site which forced him to place the dormitory block at an acute angle to Lord Strathcona's building. In order to join the new wing to the original structure and mask this disparity, Nobbs drew in part on his own previous experience with the Pathological Institute. The problem was not dissimilar, but whereas the solution there had been to create two linked but independent buildings which were set at different angles, in this case the architect exploited offsetting. This device had been employed by Shaw in several of his country house designs, mostly to achieve a picturesque effect.[50] For Nobbs, an offset plan was a practical measure, allowing him to fuse the southern extremity of his canted University Street block with a second, higher section which fronts on Sherbrooke Street and is aligned with Royal Victoria College (Fig. 78). At the corner, where the two streets meet, the building takes the form of three interpenetrating gabled blocks, joined in an asymmetrical manner and consisting of four main stories, an attic, and a basement. The attic provided space for five additional

bedrooms.

A narrow, communicating link, set far back from Sherbrooke Street, connects the new and old sections of the college. Lower than either, it provides a transition, and interferes only minimally with the openings of the original building (Fig. 79). By means of this link and the stepping-out of the various components of his gabled block, Nobbs assured maximum light and air circulation and at the same time created visual complexity which serves to mask the awkward corner junction.

Even as he solved the practical problems relating to site, Nobbs had to find a way of relating his addition to a Victorian structure which he could hardly have found very sympathetic. He referred to it in this way: "The NW end of Windsor Station, the Place Viger Hotel and the Royal Victoria College, all by Bruce Price . . . bear witness to the 'Battle of the Styles' as waged in the USA, spreading to skirmish over our border."[51]

The Baronial mode of this structure was not by any means the same as Nobbs had encountered at the hospital. Snell's British version is of the antiquated type that Nobbs would have met many times during his training, and against which Lorimer and his generation fought.[52] The college's style is something else. It is a mixture, as the contemporary newspaper article cited earlier indicated, and Harold Kalman has recently called attention to its imprecise nature.[53] What distinguishes it especially,

however, is the influence of Shaw. Both Ramsay Traquair and John Bland have pointed to this connection,[54] which is hardly a surprising one, since Shaw had been influencing American architects since the 'seventies.[55] The triple-gabled front pierced by dormers and oriels certainly owes a debt to Albert Hall Mansions, but this is an Americanized version of Shaw. The Shavian references, along with the more obvious battlements and lions, were undoubtedly the architect's way of conveying "Britishness." Nevertheless, it is the work of a designer not as familiar with Shaw as Nobbs was. Stylistic mixing was characteristic of Shaw, but not the ponderousness achieved here. Royal Victoria College exhibits little of the lightness, delicacy, or humour which were as intrinsic to Shaw's manner as his versatile and free-wheeling eclecticism. For Nobbs, these qualities were part of the joy of architecture.

Nobbs's extension, nevertheless, courteously echoes the major architectural features of the old college: the high gables and chimneys, the polygonal oriels. He neatly made his connecting link the most symmetrical part of his building, battlementing its flat roofline. Yet the centralized doorway, a principal student entrance, while receiving emphasis, is hardly monumental. It is approached by a few shallow steps at the end of a walkway which meanders in from Sherbrooke Street. The original plans indicate that Nobbs meant the landscaping here to be informal, an effective means of combatting pomp. The remainder of this front is,

as indicated previously, asymmetrically massed and, consequently, not in the least forbidding. The warden's entrance is placed off-centre and is of modest proportions. It is situated at sidewalk level conveniently near Sherbrooke Street. The tall polygonal bay which rises to the right of the warden's door lights her sitting room and those of the tutors' suites on the floors above. The openings of the new addition are all less aggressively scaled than those of the old college, making Nobbs's work both less pretentious and more human.

The University Street elevation is the most formal. Its regularity is necessitated by the multiple windows of the bedrooms within, but this regularity fits in nicely with the classical buildings nearby. A balustrade masks the flat roof and the high segmental windows of the drawing room on the ground floor add importance to the façade. Another main student entrance opens directly onto University Street at the extreme north, conveniently near the Milton Street gate of the McGill campus. This doorway, fan-lighted as is the other student entrance, is mildly classical in feeling. Despite the greater formality of this façade, however, it is not overpowering, once again thanks to the modest scale of the various components.

As in the architect's earlier additions, the new building acknowledges the old while reflecting its own time and place. Nobbs's work is much plainer than Lord Strathcona's building. There are greater expanses of flat

wall surface left almost completely unadorned. The multiple stringcourses and mouldings, which add variety and texture to the Victorian building, are kept to a minimum in the twentieth-century structure. Diverse window treatments are exchanged for like groupings, and the many, bulbous-based oriels which help to give the exterior of the old college such a plastic, undulating appearance, become shallow and straight-sided in Nobbs's addition. "Scotch random pick stone", as contemporaries called it, had been chosen for the original college, and the textural quality of the façades was increased by using rock-faced masonry for the high basement. Nobbs kept to the same random pick, but carried it throughout, not varying his basement level. A charming added touch, quite different from the masonry finish or decorative crenellations which suggest "Baronial" next door, is the pepperpot tower. This was a favourite Scottish medievalizing device of Lorimer's, and Nobbs used it to advantage here. It not only imparts a Scottish flavour, but masks the point at which the roofs begin to diverge, helping as well to tie the many-faceted structure together.

As a composition, Nobbs's building as a whole has not the spread-out, space-encompassing character of the late Victorian college. The walls are sheer; everything appears lighter and thinner, reflecting the reinforced concrete supporting structure. Interestingly, the assertive massiveness of Royal Victoria College must have been determined by aesthetic and cultural needs, for Lord

Strathcona's monument boasts a steel frame.[56]

Nobbs's ornamental treatment does not include any grandiose statues with the donor's name prominently displayed. The decorations add the kind of engaging individuality to the structure which characterize his other efforts in this area. The warden of Royal Victoria College, Mrs. Walter Vaughan, who worked closely and amicably with the architect, was honoured by having her doorway embellished with forget-me-nots and her initials. These were ungallantly removed "by a humorless man who appears to have disliked the lady's popularity."[57] Another much-admired lady was also saluted, the late Queen Victoria. Since she was no longer alive, her device is shown on the west façade fittingly supported by angels (Fig. 80). On the otherwise plain, southeast wall, a laurel wreath surrounds her initials and supports her crown. Other decorations include the McGill shield surrounded by a garland, an owl, and, in the spandrels between the arched windows of the drawing room, medallions. These contain symbolic devices: the rose of England, the lily of France,[58] a harp standing for Ireland, and also the McGill motto.

While the exterior of Nobbs's extension is a success in the practical and humane sense, the aesthetic problems are not as well resolved as in the Pathological Institute. The University Street front is extremely crowded because of the many windows needed to light the bedrooms. The architect accordingly made these very plain

in the three upper stories, but their functional treatment clashes with the decorative balustrade and the rather more elaborate handling of the main floor level. The careful balancing of solid and void at which Nobbs excelled and which is such a satisfying part of the pathology building's façades, is not possible here. It does occur on the Sherbrooke Street elevations, however, where there is an increase in plain surfaces. The architect is most successful in his treatment of the corner where University and Sherbrooke Streets join. Here, the point at which the various elements of his architectural composition meet, great skill is displayed. The view along Sherbrooke Street is as elegantly contrived as Nobbs's earlier sequences on McTavish Street and Pine Avenue (Fig. 81). His capacities in this realm were truly outstanding.

With regard to the interior, Nobbs sought not only to maximize the accommodation, but also to create a humane, individualized environment. Most of the rooms consist of student bedrooms, studies and common rooms, small kitchenettes and laundries, plus suites for the warden and tutors. There is a drawing room on the main floor facing onto University Street, but no dining facilities were needed because these were so lavish in the old building. Alterations to the kitchen there provided for the increased numbers. The architect and the warden, Mrs. Vaughan, thus concentrated on making the new quarters as comfortable and homey as possible.

The beauty of the interior furnishings was largely Mrs. Vaughan's doing. As a young girl she had left her home in the Maritimes to come to McGill and knew very well the loneliness and discomfort of boarding-house life. She was determined to make the new residence attractive, cheerful, and personal. She "made the furnishing and decoration of the new building a labor of love."[59] The Gazette reporter noted in October 1931, on viewing the newly completed addition:

> While many people might feel that this was not the year in which to build a luxurious building, Mrs. Walter Vaughan (warden) stated that she and those who had planned the new wing had been actuated by William Morris's ideal and had attempted to provide "such things as we know to be useful and believe beautiful."[60]

Contemporaneous observers found the finished result exceedingly attractive. The Montreal Star reporter wrote:

> The furniture in the bedrooms was made to order. The single beds of maple or old oak resemble Roman couches with their bright colored spreads. Every room has in addition a chest of drawers, a writing desk, a table for the night lamp, a chintz covered chair and a marvelous piece of furniture designed by Mrs. Vaughan which serves as a spacious bookcase and hide-all.[61]

The Gazette was equally enthusiastic:

> The color scheme runs in threes, one room having yellow walls, the next green and the third gray. Prettily patterned rugs emphasize the note of each room. Battleship linoleum has been laid down throughout; sunlight floods the building on bright days and the light tint of the walls promise a cheerful atmosphere even in dull weather.[62]

The Montreal Star's reporter particularly liked the infirmary suite overlooking the rear courtyard, an example of Nobbs's usual thoughtfulness: "The infirmary suite is one of the most alluring in the building. Its windows give on

a quiet yard, and complete silence prevails. There is a kitchenette, tiled bathrooms and two bedrooms in addition to the nurse's room."[63]

Mrs. Vaughan was well pleased with the result. She wrote the following words in June 1931 as the structure was nearing completion:

> A beautiful and distinguished building ha s come into existence. Very subtly the lines of the old college ha[ve] been carried along, very cleverly the rather inadequate site ha[s] been utilized to its full extent, and instead of an old-fashioned house and a waste corner lot there is now a thoroughly modern dormitory building, grafted upon the somewhat grandiose pile of the familiar R.V.C. and marvelously harmonized with it. . . . In short, Professor Nobbs, of Nobbs and Hyde, ha[s] scored yet another triumph in his long record of beautiful and original buildings.[64]

PART V: CONCLUSION

1. CONCLUSION

Nobbs's concept of architecture, indeed his outlook on life, grew out of nineteenth-century Christian humanism, as did the beliefs of Pugin, Ruskin, Morris, and Webb. In consequence, the attitudes of all these men were coloured by ethical values. They viewed architecture, not in isolation from society, but as it affected and was affected by mankind. The Canadians, Sir William Dawson and Sir William Osler, were products of this same tradition, their life work similarly guided by ethical principles. Yet because they were involved with some of the outstanding discoveries of modern science, they viewed their own times more positively than did the four English idealists. Osler wrote: "The future belongs to science. More and more she will control the destinies of the nations. In her new mission to humanity she preaches a new gospel."[1] The doctor could look on the rapid advances in science as an unprecedented opportunity to benefit mankind.

Pugin, Ruskin, and their followers regarded contemporary life with dismay. They saw the other side of science and technology: the de-humanizing, materialistic, exploitive aspects. They were as devoted to improving the lot of humankind as the two scientists, but they looked to the past for solutions. Each of these worthy Victorians,

however, scientist and artist alike, was primarily concerned with bridging the ever-widening gap between the spiritual and physical sides of man and nature. Theirs was a whole view that has largely been shattered in the secularized twentieth century.

How to deal with the bewildering new challenges of the present, to lay adequate foundations for an unknown future, and to transmit important values from the past were the central problems facing sensitive architects of Percy Nobbs's generation. The manner in which Nobbs dealt with these personally as a designer and how he prepared his students were determined both by his nineteenth-century training and by his own nature.

McGill's Macdonald Professor of Architecture could not know what forms modern architecture would take when he assumed his chair in 1903. Not surprisingly, it was in the Arts and Crafts philosophy of Philip Webb that he found guidance. Webb's architectural ideas, tinged by current evolutionary and historicist theory, centred around the belief that "if a thing were done well and rationally--responding to climate and site, and using native materials--it would assume a style quite naturally and unconsciously."[2] This was, Webb maintained, the way in which all the valid styles of history had evolved.

Such an approach encouraged practicality and technical expertise, and from the beginning Nobbs incorporated

it into his curriculum. The May 1904 issue of the Canadian Architect and Builder noted that

> . . . certain young gentlemen have lately been observed hard at work in their shirt sleeves with foot-rules, tape-lines and sketch-books, and it is understood that the McGill School of Architecture is in this way seeking to preserve an authentic record of some of the ancient land marks of Montreal and at the same time to wean its students from drawing paper, photographs and plaster casts and to introduce them to things as they are in solid fact.[3]

Like most British progressives, Nobbs perceived one of the great failings of the French system to be, in the words of Phené Speirs, "that it provided its students with no direct exposure to technology and practice."[4]

Yet Nobbs did not rely exclusively on Philip Webb. He may have deplored Canada's geographical and historical situation in that it unduly exposed her to outside influences in the realm of architecture. Nevertheless, like Dawson, he also saw that there were advantages to be enjoyed. Canada's infant architectural schools were in a unique position to draw on the best of French, British, and American methods, and Nobbs espoused an open-minded approach to teaching.

Even as he sent his students to measure old buildings, the Macdonald Professor saw to it that they became familiar with what he considered to be the best in contemporary design. In his report on the curriculum dated October 1903, he stated that the holdings of lantern slides and photographs acquired by his predecessor, Professor Capper, were very complete as far as historical buildings

were concerned, but he himself wished to add examples of contemporary architecture. He observed that "though the great mass of modern work is thoroughly bad architecturally, there are happily modern masters whose work can be studied with very great profit."[5] These masters included, in addition to Shaw, Lorimer, and Webb, other traditionalists: McKim, Bertram Goodhue and the Germans, Ludwig Hoffman and Alfred Messell.[6] Nobbs later wrote that "the most important chapter in the history of architecture for future architects must ever be that of the last fifty years; all else is valuable just in so far as it can serve as interpretation and explanation of that."[7]

In a time of broken traditions and rapid change, Nobbs, following Webb's example, attempted to dispense with superficialities and get back to first principles. In this way it was hoped that the architecture of the future would evolve from healthy roots. As time passed, Nobbs, like Lethaby, sensed dangers in the developing International Style, worrying that so-called modernism was rapidly becoming just another superficial mannerism, used just as senselessly and indiscriminately as any historical mode dredged from the past. Wrote Lethaby: "M. Corbusier has called houses 'machines to live in,' and the thought is suggestive; but a reasonable building is not necessarily a series of boxes or a structure of steel. The most scientific and sensible building for given conditions might still be of brick and thatch." Being truly modern for

Lethaby, as for Nobbs, was being "right and reasonable."[8]

Nationalism had been an important factor in Nobbs's training, and it strongly affected his own designs. During his years at McGill, the problem of an appropriate contemporary architecture was intertwined with the no less vexing question of how to create a truly Canadian expression. Here too, Webb's ideas influenced Nobbs's thinking. Included in Webb's conviction that valid forms were generated in use, was the idea that "stylistic novelties from any source could be 'naturalized' and made subservient to the basic requirements of climate, craft, and site."[9] This attitude, too, led Nobbs to direct his students to study and record the early architecture of Quebec, the traditions "inherited from the France of the Louis and the England of the Georges," where this process of architectural acclimatization had taken place.[10] These observations, it was hoped, might assist Canada's future architects in solving for themselves the problem of a national style.

It is important to note that Nobbs did not recommend to his students the rapidly changing manners which affected Canada in the latter part of the Victorian era. These, he felt, were largely undigested imports, insufficiently adapted either to Canadian climatic conditions or materials. This applied as much to Gothic Revival work in which crockets and pinnacles crumbled after two or three Canadian spring thaws as to the more "virulent" Victorianisms with their sham materials.[11] All these imports, he opined, had

appeared and disappeared too quickly to undergo the slow evolutionary process that had eventually Canadianized the early French and English work.

For Nobbs, a national architecture could not be simply a matter of diverse, superficial styles which, in Alan Gowan's discussion of "The Canadian National Style," evoked "pastness in general."[12] It had to be as genuinely historical as the early French and English traditions, for it involved the gradual development of appropriate methods of building which were as various as the country itself. Nor could a national style be a more or less standardized product that could be applied from coast to coast, as the railroad hotels led some to believe.[13] "Standardization," wrote Nobbs, "is the vice of the Americans." Individuality was what gave the old towns of Canada their bouquet and savour. "Strenuous efforts are made from time to time in magazine articles, novels, histories and caricatures to elaborate a Canadian type--so far without success, for the all-sufficient reason that there are many types, all abundantly characteristic, and much water will pass down the Great Lakes before there is assimilation."[14] Nobbs accurately recognized the Canadian reality, that it was a nation of regions rather than a melting pot.

As late as 1924 Nobbs remarked that "at the moment Canadian architecture is a polite fiction." He noted that only in the past twenty years had the means been available in Canada for a complete technical professional education

for architects. "By the middle of the century it will perhaps be possible to judge the architectural schools of the Canadian Universities by their fruits."[15]

By the middle of the century, what Nobbs had hoped for had not come to pass, and, like many Arts and Crafts-oriented architects, he was greatly disillusioned.[16] His students inhabited a very different world from the one in which he had matured, a world which largely rejected the ideals of the past. The romantic view of the oneness of man and nature which had inspired the Gothic Revival and Arts and Crafts architects was superseded in the twentieth century by a totally different conception of man. Architecture reflected these new values. Vincent Scully refers to Frank Lloyd Wright's difficulties in adjusting to these changes, for Wright (1869-1959), too, had been deeply influenced by Arts and Crafts principles. Writes Scully:

> The new European forms of the beginning of the twentieth century were thus generally to express a separateness between man and nature and to embody a sense of the hard clarity of human experience. These ideas were counter to Wright's evolutionary continuities and his mesmeric space, though they were eventually to be affected by both.[17]

Yet Wright's growth was not halted by this philosophical impasse. He was not only to adjust to, but also to shape, the modern era. Like other great creative spirits of the early years of the century, he reached beyond his own immediate environment into a wide variety of non-European cultures with vital traditions for forms and images that would broaden and reanimate the dying forms of Western

art. The Chicago architect was able to draw on the angular and abstract forms of Japan and pre-Columbian America, for example, and re-think them in terms of new uses and new structural systems. In so doing he effectively synthesized permanence and innovation.[18] Wright's receptivity to the world at large was also crucial in that it added universality to his own instinctive feeling for place, another necessary coalescence in an age of increasingly rapid communication.

Unlike Wright, Percy Nobbs was unable to achieve this twentieth-century synthesis in his own designs. While his work and teaching consistently stressed the essentials for good building in any age, he lacked two important qualities which the innovators possessed: the fascination with the new, which, as Lewis Mumford points out, "roused the imagination of the best architects,"[19] and the inability to reach beyond the confines of his own tradition for fresh sources of inspiration. There were valid reasons for this. Nobbs was by nature and training a conservative. His background, in contrast to Wright's, had not included engineering school, while the Arts and Crafts movement that had nurtured him had originated as a protest against modern industrialism, laying stress on the therapeutic beauties of old materials and ways rather than on the possibilities of the new. Therefore, although Nobbs saw great promise in the new materials and methods, nothing could ever supplant his deep feeling and preference for finely-laid stone and brick.

Factors such as these had led Lethaby to prophesy the death of the Arts and Crafts movement, but, in fact, it took on new life in Germany where mechanical production was accepted.[20] In Wright's designs, old and new can co-exist in mutually enhancive ways. "Fallingwater" in Pennsylvania (1937-38) (Fig. 82) consists of rough, indigenous stone sections combined with cantilevered concrete slabs.[21]

In the realm of form and imagery, several factors prevented Nobbs from going beyond the boundaries of European tradition as innovators like Wright did. Nineteenth-century nationalism and Britain's ingrained insularity had led most of her talented architects to seek solutions in the country's own architectural past rather than search for meaningful answers elsewhere. Sentiments such as these and also a sensitivity to his clients kept Nobbs well within the confines of Western tradition and perhaps, too, his ethical standards. "The architect," he observed, "must be a good agent before he acquires the right to exercise aesthetic activity--that is, presume to use other men's land, stone and labor to express his personal outlook on life."[22] Yet Mumford draws attention to another aspect of the architect-client relationship:

> . . . namely, that the great periods of architecture are those in which the client has, by his sympathy and understanding, brought forth the architect's utmost powers, as the clients of Richardson, Sullivan, Root, Holabird, and Wright brought forth theirs. And that is why architecture is perhaps a better indication of the general vitality of a society than any other art.[23]

Nobbs, of course, worked in a conservative milieu to which his traditionalism was well suited. Designs by Wright or Le Corbusier would hardly have met with the approval of McGill's Board of Governors. Canadian standards and capacities, as well as taste, were still relatively undeveloped, and Nobbs correctly saw his role as one who prepares the ground for future growth. In this capacity he was, perhaps, somewhat encumbered by his faith in the "majestic and relentless" evolutionary process, that nineteenth-century concept which permeated the architectural philosophy he inherited.[24] Change occurs today at a pace inconceivable to Darwin; furthermore, contemporary scientists challenge Darwinian theory. Sudden, convulsive change alters life significantly, yet Darwin, in an age racked by revolution, perhaps chose not to see so unsettling a side of nature. Certainly Webb's (and later Nobbs's) valid style did not have time to flower, whereas Wright's more radical approach was attuned to an age of accelerating change.

If Nobbs's situation in time meant that many of the enduringly valid principles he taught and which his work embodies were largely obliterated by the architectural mainstream during the first half of the century, a number are again being recognized in the post-modern period. The social, ecological, and energy crises of the 'sixties and 'seventies have reminded all thinking people, architects included, of man's basic dependence on nature and on other human beings. The failure of so much modernist archi-

tecture to take this into account led Vincent Scully to revise his book Modern Architecture in 1974, thirteen years after its original publication date. In his new assessment Scully writes:

> Events have forced us toward a humbler and perhaps more analytical view of ourselves and a gentler stance in relation to other human beings and to the outside world. . . .
>
> . . . [I]f we have learned anything during the last decade it is that we need reject nothing and should avoid puristic solutions to anything.[25]

Scully considers "a lively vernacular" and "more humanely democratic" methods of dealing with urban planning as essentials in improving the contemporary human environment. Although the cheerful vulgarity of Robert Venturi's Pop vocabulary might not be quite what Nobbs had in mind when he urged an equally people-oriented approach, he would have applauded the reemergence of architectural views that place the emphasis on human reality rather than abstractions.

The modernist view would undoubtedly dismiss Nobbs's deep regard for the past as a form of escapism, a failure to fully accept contemporary realities, but he was, in fact, quite correct in insisting on its relevance even in an age of steel and reinforced concrete. "The monuments of the past," he once remarked, "being very well built . . . have a way of outlasting the schools of thought and entering into the residue of past experience of the man in the street of today and even of tomorrow."[26] As he well knew, architecture is a major part of human civilization, "a means for recording the cultural and economic history

of peoples."[27] With this in mind, it is interesting to read Ada Louise Huxtable's recent assessment of the new French towns that began to be introduced into the Paris region in the mid-1960s, planned developments following the precepts of Le Corbusier:

> But the basic problem is the curious way that the buildings do not seem to relate to the people and places they serve in any way except the directly functional. . . .
>
> What they discarded, actually, was urban civilization. . . . Le Corbusier's concept of towers in a park was meant to remake the 20th-century city, but it eliminated its humanity and connective tissue, instead.

Huxtable concludes that "the ultimate loss can be urbanity itself, in the most civilized sense of the word."[28]

Urbanity was a quality Percy Nobbs actively sought, not in the slick sense, but in the most humane. Gentleness and humanity, the true essence of Arts and Crafts teaching, infuse his work. The fact that his buildings reflect the end rather than the beginning of a tradition does not negate the value of his message. Architecture for Nobbs was not simply "the economic improvement of real estate" but an artistic medium "in which the physical is enlisted as a bridge between spirit and spirit, artist and public."[29] Through this uniquely public medium, Nobbs was able to express his deepest feelings as a human being and, within his own parameters, to grow and mature as a creative artist. For these reasons, Percy Erskine Nobbs most assuredly belongs to that group of architects which his contemporary, John Lyle, called the inspired traditionalists.[30]

NOTES

PART I - EARLY LIFE AND TRAINING

1. Early Life and Training

[1]Nobbs noted in an unpublished MS "Those Russians," now in the Nobbs Room, that his paternal forebears had established themselves in Russia shortly after Waterloo. Biographical information was obtained from a number of sources: John Bland, "Percy Erskine Nobbs," McGill News 46 (April 1965):44; The Canadian Architect and Builder (hereinafter CAB) 16 (Oct. 1903):159; Ross Hamilton, ed., Prominent Men of Canada 1931-32 (Montreal: National Publishing Co. of Canada, 1932), p. 84; Henry James Morgan, ed., The Canadian Men and Women of the Time: A Handbook of Canadian Biography of Living Characters, 2nd ed. (Toronto: William Briggs, 1912), p. 854; McGill Scrapbook 2 (1 March 1902 to 29 Oct. 1910): 34 (Montreal Gazette, 15 July 1903); McGill Scrapbook 4 (10 May 1916 to 29 Oct. 1921):147 (Montreal Gazette, 20 Jan. 1919); McGill Scrapbook 17 (20 April 1964 to 28 Feb. 1968):72 (Montreal Gazette, 10,11 Nov. 1964; Montreal Star, 11 Nov. 1964); and conversations with Percy Nobbs's son Frank.

[2]In other Scottish centres, particularly Glasgow, classicism remained strong.

[3]Percy E. Nobbs, "Ramsay Traquair, Hon. M.A. (McGill) F.R.I.B.A. On His Retirement from the Macdonald Chair in Architecture at McGill University," The Journal, Royal Architectural Institute of Canada (hereinafter JRAIC) 16 (June 1939):147.

[4]For Lorimer and Anderson see Christopher Hussey, The Work of Sir Robert Lorimer (London: Country Life, 1931) and John Stirling Maxwell, Shrines and Homes of Scotland (1937; rpt. London: Chambers, 1957).

[5]Alexandra Gordon Clark, "A.W.N. Pugin," in Victorian Architecture, ed. Peter Ferriday (Philadelphia: Lippincott, 1964), p. 140.

[6]Mackintosh was, in fact, responding to Rowand Anderson's influence by way of Sir John Burnet. See David Walker, "The Early Works of Charles Rennie Mackintosh," in The Anti-Rationalists, ed. Nikolaus Pevsner and J.M. Richards ([London]: Architectural Press, 1973), p. 126.

[7]After serving articles with Anderson, Lorimer worked in London for G.F. Bodley (1827-1907), friend and patron of William Morris. Lorimer found the ideas of the Morris circle supported his own inclinations and became thoroughly familiar with the emerging architecture associated with this group. He carried out some important English commissions, notably Lympne Castle, Kent (1907-9), but preferred to work in Scotland. He started his own practice in Edinburgh in 1892. Lorimer did not work solely in a medieval vein. Wemyss Hall, Fife (1905-7) and New Library, St. Andrews University, are examples of his classical manner. Lorimer's work is best compared with that of Lutyens. Neither Lorimer nor his pupil Nobbs carried the Arts and Crafts philosophy to extremes. Both rejected the amateurishness and eccentricity which characterized some aspects of the movement.

[8]Quoted in Alastair Service, ed., Edwardian Architecture and Its Origins (London: Architectural Press, 1975), p. 7.

[9]His prize-winning design, which can be seen in the Nobbs Room, is for an isolated clock tower and belfry. It was reviewed by G.F. Bodley who noted: "Mr. Percy Nobbs's sombre perspective does not do justice to his design, which looks better on his elevation. It no doubt has merit." Journal of the Royal Institute of British Architects (hereinafter JRIBA) 7 (10 Feb. 1900):130.

[10]An excellent account is contained in John Summerson, The Turn of the Century: Architecture in Britain around 1900, 5th W.A. Cargill Memorial Lecture in Fine Art, 5 Nov. 1975 (Glasgow:University of Glasgow Press, 1976). Also useful is Andrew Saint, Richard Norman Shaw (New Haven: Yale University Press, 1976).

[11]Summerson, Turn of the Century, p. 4.

[12]CAB 16 (Oct. 1903):159.

[13]For London County Council see Saint, Shaw, pp. 344-46. Saint notes that both groups managed to work together amicably until after the First World War.

[14]Service, Edwardian Architecture and Its Origins, p. 407. Service, p. 406, notes that these young archi-

tects were disciples not only of Webb but also of Lethaby and to some extent Holden and Pite. William Lethaby (1857-1931), pupil and principal assistant of Shaw, was both an architect and educator. A founder of the Art Workers' Guild begun in 1884, he served as the first principal of the London Central School of Arts and Crafts, which was established in 1894 and followed Morris's principles. Nobbs refers to Lethaby in "Present Tendencies Affecting Architecture in Canada," McGill University Publications, Series XIII (Art and Architecture), No. 29 (Montreal: McGill University Press, 1930), p. 5.

[15]Saint, Shaw, p. 345.

[16]Drawings for these projects are in the Nobbs Room.

[17]See, in addition to Service and Saint, Robert Macleod, Style and Society (London: RIBA, [1971]), pp. 96-97. Macleod points to the two streams in what he calls the classic camp: one eclectic, emerging from the Queen Anne; the other continental and academic. As he notes, they did not always remain distinct.

[18]Subsequently, Belcher together with Mervyn Macartney, a pupil of Shaw, published an important book, Later Renaissance Architecture in England, which first appeared in 1898. This served as an important source for the Edwardian Baroque. The buildings analyzed were non-ecclesiastical and dated from ca. 1600 to ca. 1780.

[19]Summerson, Turn of the Century, p. 11. Saint, Shaw, pp. 269-70, discusses this change extensively noting that the intermediary between Shaw and Belcher was Mervyn Macartney.

[20]Service, Edwardian Architecture and Its Origins, p. 304, notes that progressives felt "that ancient rules of proportions should not be imposed on modern structures." Nationalism also played an important role in anti-French feeling at the time.

[21]Ibid. The English Baroque Revival did not die out, however, in the first decade of the century; it continued even beyond the First World War.

[22]Indeed, Belcher was on Nobbs's mind by 1899. His Tite Prize Design for a clock tower is already in the Belcher Baroque tradition. It shows the influence of Belcher's much praised competition design for the Victoria and Albert Museum of 1891 and his Colchester Town Hall, designed in 1897 and completed in 1902. Initially, the neo-Baroque manner of Belcher was heavily indebted to

Italian sources. By Colchester Town Hall, however, he was moving toward a more English Baroque. See Service, Edwardian Architecture and Its Origins, pp. 68, 70.

[23]C.H. Reilly, Representative British Architects of the Present Day (1931; rpt. Freeport, N.Y.: Books for Libraries Press, 1967), p. 30. I am especially grateful to Claude Bergeron for bringing this to my attention.

[24]CAB 16 (Oct. 1903):159.

[25]Nobbs, "Competition Reform," JRAIC 12 (Sept. 1935): 150.

[26]The design is reviewed in JRIBA 10 (7 Feb. 1903): 197. The original is in the Nobbs Room. In the same year Nobbs's unsuccessful submission for the Soane Medallion of a design for a town church was reproduced in The British Architect (20 March 1903). Robert Lemire kindly brought this design to my attention.

[27]For Victorian decorative tradition see Julian Barnard, The Decorative Tradition (London: Architectural Press, 1973). A long article devoted to Westminster Cathedral appeared in JRIBA 10 (21 March 1903):250-76.

[28]The Builder 85 (15 Aug. 1903):177 (Harold Kalman located this notation). A number of Nobbs's architectural drawings appeared in The Architectural Association Sketch Book, 3rd series, 5-8 (1901-4). In 1903 Nobbs was a member of the Standing Committee on Art of the RIBA.

[29]John Bland, "The Architect of the First Osler Library: Percy Erskine Nobbs," Osler Library Newsletter (June 1973):n.p.

PART II - EARLY PERIOD AT MCGILL

1. McGill Background

[1]A good early history of McGill is Cyrus Macmillan, McGill and Its Story: 1821-1921 (Toronto: Oxford University Press, 1921).

[2]Macmillan deals with Dawson extensively. An autobiography exists: Rankine Dawson, ed., Fifty Years of Work in Canada, Scientific and Educational: Being Autobiographical Notes by Sir William Dawson (London: n.p., 1901). Dawson served as the first president of the Royal Society of Canada in 1882, as the president of the British Association in 1886, and of the American Association for the Advancement of Science in 1892.

[3]Since two leading Anglican clergymen, Dr. (later Bishop) John Strachan and the Reverend (later Bishop) G.J. Mountain, were involved in McGill's early years, expediency was the deciding factor. Both men founded Anglican institutions: Bishop's College, Lennoxville, and King's and Trinity College in Toronto, which perpetuated the ideals of the older English universities.

[4]Edgar Andrew Collard, "Sir William Dawson's Principalship, 1855-1893," in McGill: The Story of a University, ed., Hugh Maclennan (Toronto: Nelson, 1960), pp. 69-70. Dawson wrote a book, The Bible Confirmed by Science (London: Marshall, Morgan and Scott, n.d.). See also Goldwin French's relevant chapter, "The Evangelical Creed in Canada," in The Shield of Achilles, ed. W.L. Morton (Toronto: McClelland & Stewart, 1968), p. 33.

[5]Collard, "Dawson," p. 70.

[6]Unfortunately, no biography of this fascinating individual has been published. The best accounts of Macdonald are to be found in newspaper clippings in the McGill scrapbooks preserved in the University Archives. He received a knighthood in 1898 for his services to education and at this time changed the spelling of his name from McDonald to Macdonald.

[7]Macdonald did not restrict his gifts to McGill or Quebec. However, there is an unusual but characteristic singleness of purpose about his giving. He gave only after long and careful thought, concentrating on projects which

would provide the young of Canada with the tools they needed to build the country. At Macdonald College, Ste Anne de Bellevue, for example, the most up-to-date methods in agricultural and household sciences would be developed and taught and many of Canada's future teachers would receive their training.

[8]Collard, "Sir William Peterson's Principalship, 1895-1919," in McGill, ed. Maclennan, pp. 73-97.

[9]Ibid., p. 86.

2. The Early Architecture of McGill

[10]Nobbs [Concordia Salus], "Montreal Notes," CAB 17 (Nov. 1904):177. Nobbs's characteristic style and concerns betray him as the author of a series of pseudonymous articles which appeared in CAB in 1904 and 1905. These critical accounts of Montreal architecture, appearing under the heading "Montreal Letter" or "Montreal Notes," were signed "Gargoyle," "The Gargoyle," "Ye Gargoyle," or "Gargoyle II" until the Oct. 1904 issue, when the signature became "Concordia Salus." Signed articles also appeared in CAB and other architectural journals from time to time. See Bibliography below.

[11]For discussions of McGill's architecture see Ramsay Traquair, "The Building of McGill University," McGill University Publications, Series XIII (Art and Architecture), No. 2 (Montreal: McGill University Press, 1925) and John Bland, "The Story Behind the Buildings of McGill," McGill News 39 (Autumn 1958):2-4,39; 40 (Winter 1958):14-17; 40 (Spring 1959):26-27.

[12]Nobbs, "The General Scheme for the University of Alberta," JRAIC 2 (Sept.-Oct. 1925):159.

[13]Stephen Vickers, "Building," in University College: A Portrait 1853-1953, ed. Claude Bissell (Toronto: University of Toronto Press, 1953), pp. 22-34.

[14]Taylor's McGill buildings are cited as being by Taylor and Gordon (the Redpath Library), or by Taylor, Hogle, and Davis (the Macdonald Physics and Chemistry Buildings). Gordon was Taylor's London partner who, according to John Bland's research, probably never came to Montreal. Hogle and Davis were Montreal architects.

[15]Nobbs, "Sir William Macdonald," McGill News 4 (June 1923):2.

[16]Ibid., p. 1. The Y.M.C.A. project was first

announced in the newspapers in January 1904. The building was formally opened in October 1905.

[17]McGill Scrapbook 4:58 (Montreal Star, 11 June 1917).

[18]Ibid., p. 59 (Montreal Herald, 11 June 1917).

3. The McGill University Union

[19]McGill Scrapbook 2:50 (Montreal Star, 25 Mar. 1904).

[20]Ibid., p. 23 (no paper cited).

[21]According to the Annual Report of the Governors, Principal and Fellows of McGill University, Montreal: For the Year 1905-1906 (Montreal, 1906), p. 4, the ultimate cost to Macdonald, including the land, was $225,000.

[22]This is supported by Nobbs's own comments in his article on Macdonald referred to above.

[23]Board of Governors Minute Book 1897-1910 (15 June 1904), p. 290.

[24]The provisions of the agreement between Hutchison and Wood and Percy Nobbs (Department of Architecture File, Peterson Papers, Record Group 2P/641/14, McGill University Archives) stipulated that "Mr. Nobbs was to take charge of the preparation of the drawings, . . . Hutchison and Wood [were] to prepare the specifications and carry out the work from their office and superintend the work. . . . and assist Mr. Nobbs in the preparation of the design with their advice and experience."

[25]355 McGill St. and 759 Victoria Square, Montreal. Hutchison and Wood's commercial buildings are listed in Phyllis Lambert and Robert Lemire, Inventaire des bâtiments du Vieux Montréal, Dossier 25 (Quebec: Ministère des Affaires Culturelles, Direction du Patrimoine, May 1977).

[26]Philip David Bobrow, "The Mount Royal Club" (Undergraduate architectural paper, McGill University, n.d.), n.p. This MS is in the Nobbs Room. Bobrow's paper states that the building committee for the Mount Royal Club was instructed in April 1904 to ask for sketch plans from McKim, Mead and White; Professor Nobbs in conjunction with David R. Brown; Finley and Spence; and Hutchison and Wood. In May, McKim's sketches were accepted. It is not known whether the other firms submitted sketches.

[27]Nobbs, "Present Tendencies," p. 4.

[28]Nobbs [The Gargoyle], "Montreal Letter," CAB 17 (June 1904):90.

[29]This drawing, in the Nobbs Room, is signed "P.E. Nobbs des & delt," and dated "1st Sep. 1904."

[30]Nobbs [Gargoyle], "Montreal Letter," CAB 17 (April 1904):73.

[31]Nobbs [Gargoyle II], "Montreal Letter," CAB 17 (August 1904):126.

[32]John Ruskin, The Seven Lamps of Architecture (1849; rpt. New York: Noonday, 1974), p. 28.

[33]CAB 10 (June 1897):110.

[34]CAB 17 (August 1904):126.

[35]Nobbs, "Macdonald," p. 2. Nobbs would have his chance to work in brick a few years later when he was commissioned to design the University Club on Mansfield Street, not far from the campus. The building was formally opened in December 1913. The masterly handling of the Flemish bond reflects Nobbs's thorough training as a craftsman.

[36]Ibid.

[37]Ibid.

[38]Nobbs, "Opening Lecture of the Department of Architecture, McGill University," CAB 17 (Oct. 1904):156.

[39]"Montreal Notes," CAB 19 (Jan. 1906):13.

[40]Inigo Jones had introduced these alternating mouldings to England in his Banqueting House.

[41]This attenuation is characteristic of the time. Nobbs, like most British Arts and Crafts architects, would have found the Art Nouveau aspect of Mackintosh uncongenial. A supporter of "sane design," Nobbs called Art Nouveau a "temporary aberration" (CAB, Oct. 1904, p. 155). Nevertheless, his own design for a presiding officer's chair for the McGill Union, although uncharacteristic, is as long and slender as some of Mackintosh's work.

[42]Winston Weisman, "Commercial Palaces of New York 1845-1875," Art Bulletin 36 (1954):285-304. The earliest palazzo-style club in North America was John Notman's Philadelphia Atheneum (1854-57), although Weisman is careful to note that controversy still surrounds the introduction

of the palazzo mode to the United States. Montreal's early clubs appear to have been originally private homes. The old Sir James Club and the first Mount Royal Club were both former mansions. For an extensive account of Barry, see Henry-Russell Hitchcock, Early Victorian Architecture in Britain, 2 vols. (1954; rpt. New Haven: Yale University Press, 1972).

[43]The Victorian palazzo, symbol of wealth and respectability, was dealt a final death blow by modern technology and economics. The skyscraper, with its elevator, became the urban symbol of the modern age.

[44]1440 Drummond St., Montreal. The house was designed by the English-trained architect, W.T. Thomas, who practised in Montreal between 1860 and 1890. The house was built for Lord Strathcona's cousin and fellow C.P.R. financier, George Stephen (later Lord Mount Stephen). It is now the Mount Stephen Club.

[45]Carroll L.V. Meeks, "Wright's Eastern-Seaboard Contemporaries: Creative Eclecticism in the United States around 1900," Acts of the Twentieth International Congress of the History of Art, vol. 4:Problems of the 19th and 20th Centuries Studies in Western Art (Princeton: Princeton University Press, 1963), p. 64.

[46]See Nobbs's remarks on Shaw's use of disparate windows in New Scotland Yard in Design: A Treatise on the Discovery of Form (Toronto: Oxford University Press, 1937), p. 397. The oriels on the McGill Union are quoted from Shaw's offices of the White Star Line.

[47]See a contemperaneous comparison of these two buildings in "McGill Students Union and Mount Royal Club," CAB 19 (June 1906):84.

[48]Summerson, Turn of the Century, p. 8.

[49]McGill Annual (Montreal, 1908), n.p.

[50]McGill Scrapbook 2:168 (Montreal Daily Witness, 11 Aug. 1906).

[51]Ibid., p. 111 (Montreal Star, 5 Aug. 1905).

[52]Ibid., p. 130 (Montreal Gazette, 15 Dec. 1905).

[53]Nobbs, "Macdonald," p. 2.

[54]McGill Scrapbook 2:168 (Montreal Daily Witness, 11 Aug. 1906).

[55]Ibid., (Montreal Herald, 8 Feb. 1907).

4. The Macdonald Engineering Building

[56]Even CAB 20 (April 1907):50,59 was moved to comment on the tragedy. Lord Strathcona looked after the Medical Building. The architects chosen were Brown and Vallance of Montreal.

[57]Details of the commission are in the Board of Governors Minute Book (1897-1910), pp. 417, 420, 423-24, 430, and 460.

[58]McGill Scrapbook 2:225 (Montreal Gazette, 18 July 1907).

[59]There were three proposals for the main façade of the Engineering Building, all of which are preserved in the Nobbs Room. The first, dated 5 May 1907, lacked dormers and had a single, rather than double, main staircase, which did not curve. The portal pediment was closed. This principal entrance was closer to Belcher's at the Institute of Chartered Accountants than is the existing one. The second proposal included both the dormers and double staircase of the final version. The entrance porch, however, was lowered to accommodate sculptured figures crowning the pediment. On 15 Nov. 1907 Nobbs had submitted sketches and models for these figures which symbolized "Exact Science" (female) and "Skill" (male) and were based on Michelangelo's Laurentian Library sculptures. Michelangelo was very au courant in English architectural circles at the time. A.L. Perry of Montreal, a former student of Nobbs, told the writer (29 April 1977) that these nude figures scandalized conservative Montreal taste. The final proposal shows the portal without the figures. CAB 21 (April 1908):17, noted that Nobbs showed designs for his Macdonald Engineering Building and a proposed front for the old Medical Building at the twenty-fourth annual spring art exhibit at Montreal.

[60]Annual Calendar of McGill College and University, Montreal, Session 1908-1909 (Montreal, 1908), pp. 312-13, 323.

[61]Photographs of the first Macdonald Engineering Building are available at the McGill University Archives.

[62]McGill Scrapbook 2:40 (Montreal Gazette, 4 Dec. 1903).

[63]Nobbs, "Report on the Department of Architecture, McGill University, Montreal" (Oct. 1903). A copy is in the Department of Architecture File, Peterson Papers.

[64]S.H. Capper, the first Macdonald Professor of Architecture, was appointed in 1896. A graduate of the University of Edinburgh with first-class honours in Classical Literature, he had studied the architecture of Portugal and Spain while serving as private tutor and secretary in the household of the British Plenipotentiary in Lisbon and Madrid. He studied at the Ecole des Beaux-Arts in Paris from 1887 to 1891 and afterwards practised architecture in Edinburgh. He was elected an Associate of the RIBA in 1891 and gave numerous courses on architecture in Edinburgh, Perth, and Dundee before coming to Canada. He resigned from McGill in 1903 to become Professor of Archaeology and Architecture at Owens College, Manchester. CAB 9 (Nov. 1896):175; 16 (Oct. 1903):159.

[65]I am grateful to Professor John Bland for pointing out these various methods of fireproofing.

[66]The plaster decoration resembles similar work by Ernest Gimson (1864-1920), the prominent Arts and Crafts figure who established a crafts workshop in the Cotswolds in 1900.

[67]This handwritten document, dated Dec. 7, 1904, is in the Department of Architecture File, Peterson Papers. The portion cited is on p. 2.

[68]In his proposal for disposition of future buildings Nobbs noted on p. 2 "that the Arts Building although thoroughly out of date, insanitary and delapidated inside, forming as it does the most dignified group in the quadrangle as well as being the oldest should never be pulled down. When the time comes for the urgently required new premises for the Faculty of Arts a sympathetic remodelling of the old façade should be attempted."

[69]Dawson's tree planting activities stemmed from a dual desire to beautify the campus and thereby gain needed public support and to provide a variety of botanical specimens for instruction. The imposing tree-lined central avenue, he recorded, was occasioned by the passage of the main pipes of the reservoir through the grounds. Lesser thoroughfares meandered--probably more in keeping with his own tastes. With regard to his tree planting at McGill, Dawson wrote: "I have always regarded the sight of trees and other beautiful or impressive natural objects as an educating influence of no small value, . . . [and] rural beauty . . . elevating . . . . For this reason I had hoped to leave behind me, in connection with McGill, a college park, which, if not large, should be attractive and instructive." Sir William Dawson, "Notes on Trees on the Grounds of McGill University," Canadian Record of Science

4 (Oct. 1891):431.

[70]Meeks, "Creative Eclecticism," Society of Architectural Historians Journal, (hereinafter JSAH) 12 (Dec. 1953):15-18.

[71]Hitchcock, Victorian Architecture.

[72]For biographical sketch of Taylor see CAB 9 (Nov. 1896):174.

[73]McGill Scrapbook 1 (1 Sept. 1853-19 March 1902): 74 (Montreal Daily Witness, 25 Feb. 1893).

[74]Certainly Nobbs was also aware of the famous Queen Anne Board Schools erected in London beginning in the 1870s. Their high Flemish gables and dormers provided well-lit classroom space while economizing on walling. They were widely imitated. A Montreal example is Roslyn Elementary School (Ross and MacFarlane, 1907-8), 4699 Westmount Avenue. For Queen Anne style see Mark Girouard, Sweetness and Light: The 'Queen Anne' Movement 1860-1900 (Oxford: Clarendon Press, 1977), pp. 64-70.

[75]Reginald Bloomfield, Richard Norman Shaw, R.A. Architect, 1831-1912: A Study (London: Batsford, 1940), p. 39.

[76]Saint, Shaw, p. 269, notes that "Shaw is the first and cleverest imitator of Belcher's baroque, having lighted upon his blocked columns and boldly broken pediments as the things to give braggadoccio to a set of previously insipid details."

[77]Summerson, Turn of the Century, p. 11.

[78]For a discussion of the offices of the White Star Line, see Saint, Shaw, pp. 357-59. Since the building occupied a corner site, it had only one single-gabled street elevation.

[79]Ibid., p. 384.

[80]As built, the Picadilly Hotel was missing one of its gables.

[81]Macleod, Style and Society, p. 120.

[82]R.H. Hubbard, "Viceregal Influences on Canadian Society," in The Shield of Achilles, pp. 271-72.

[83]Summerson, Turn of the Century, p. 16.

[84]Service, Edwardian Architecture and its Origins, p. 315, distinguishes between three categories of English Edwardian Baroque: the Grand, the Capricious, and the Arts and Crafts, and also admits combinations of any two. Shaw's Piccadilly Hotel is an example of a Grand Manner handling of Edwardian Baroque.

[85]William H. Jordy, American Buildings and Their Architects, vol. 4: The Impact of European Modernism in the Mid-Twentieth Century (Garden City: Anchor, 1976), p. 134, suggests that Gropius acted similarly in his design for the Bauhaus, providing a demonstration of the full range of visual possibilities of the International Style for his students.

[86]Summerson, Turn of the Century, p. 19.

[87]Nobbs, Design, pp. 397-98.

PART III - MATURE PERIOD AT MCGILL

1. Introduction to Mature Period

[1]Board of Governors' Minute Book, 1897-1910 (13 Dec. 1909), p. 537.

[2]Letter from Nobbs to Peterson, 16 April 1904, Department of Architecture File, Peterson Papers.

[3]Ibid.

[4]Board of Governors' Minute Book, 1897-1910 (13 Dec. 1909), p. 537.

[5]Information on Hyde was obtained from a conversation (Sept. 1977) with a son, the Hon. G. Miller Hyde, and from an obituary in the Montreal Star, 20 June 1944 in McGill Scrapbook 10 (22 May 1940-15 Dec. 1944):536. His role in the partnership has been discussed with former students of Nobbs who are now practising architects in Montreal: Professor John Bland, Harry Mayerovitch, and A.L. Perry. Mr. Perry worked for a time in the office of Nobbs and Hyde.

[6]Nobbs describes the project in "The University of Alberta," pp. 159-65. Dr. Tory knew Percy Nobbs and George Hyde from his McGill days, where he had been a student and then a teacher for over twenty years. Before taking on the challenge of setting up the University of Alberta, Tory had been involved in establishing the McGill University College of British Columbia, which was replaced by U.B.C. in 1908.

[7]McGill Scrapbook 4:147 (Montreal Gazette, 20 Jan. 1919).

[8]Nobbs published a book entitled Fencing Tactics in 1936.

[9]David L. Thompson, "McGill Between the Wars," in McGill, ed. Maclennan, p. 105.

2. The McGill University Library Extension

[10]Board of Governors Minute Book 1919-1935 (28 Feb. 1921), p. 139.

[11]Redpath's interest in libraries was not limited to McGill. He had served as president of the Mercantile Library Association, one of Montreal's earliest subscription libraries, and was governor of the city's first free public library, the privately endowed Fraser Institute. Information on Redpath is contained in obituary notices in McGill Scrapbook 1:204-6 (Montreal Daily Witness, 2,6 Feb. 1894; Montreal Gazette, 6 Feb. 1894). A good account of Montreal's early libraries may be found in Edgar C. Moody, The Fraser-Hickson Library: An Informal History (London: Clive Bingley, 1977).

[12]Symposium 1977, "The McGill Campus," Canada 1880-1914: The End of an Era (Montreal: n.p., 1977), n.p.

[13]A good account of library planning and the Boston Public Library, in particular, is in Jordy, American Buildings and their Architects, vol. 3: Progressive and Academic Ideals at the Turn of the Century (Garden City: Anchor, 1976), pp. 314-75.

[14]In Toronto, not only was the University Library Romanesque, but also the Biology Building (D.B. Dick, 1888-92), Burwash Hall, the rebuilt University College (Dick, 1890-92), and, of course, E.J. Lennox's City Hall (1890-99). Montreal's Richardsonian Windsor Station (Bruce Price) had been built from 1887-89 and Hutchison and Wood's imposing Erskine Church (1893-94) was begun the year McGill's Redpath Library opened.

[15]Richardson's designs for Trinity Church (1873-77) and his unexecuted proposal for the Episcopal Cathedral in Albany (1883) seem relevant. Both are illustrated in Henry-Russel Hitchcock, The Architecture of H.H. Richardson and His Times, rev. ed. (1961, rpt. Cambridge: M.I.T. Press, 1975).

[16]The tiny chapter-house library was a slightly later addition, which specifically acknowledged the library of Parliament (1876).

[17]CAB 8 (Aug. 1895) 96.

[18]Hitchcock, Richardson, p. 187.

[19]Philip Turner, "The University and College Libraries of Canada," McGill University Publications, Series XIII (Art and Architecture), No. 33 (Montreal: McGill University Press, 1931), p. 3. Turner also notes on p. 24 that it was not until 1925 at the University of British Columbia that a university library was built in Canada using a unit system which specifically allowed for periodic expansion without disturbing the existing structure.

[20]Ibid., p. 7.

[21]McGill Scrapbook 5 (13 Oct. 1921-11 Mar. 1925):17 (Montreal Gazette, 25 Nov. 1921).

[22]Ibid.

[23]These can be seen in the working drawings which are preserved in the Nobbs Room.

[24]Richardson's Crane Memorial Library in Quincy, Mass. (1880-83) is a good example, as is Shaw's Merrist Wood (1877) near Guildford, or Adcote, Shropshire (1877).

[25]Nobbs, Design, p. 339.

[26]In the Nobbs Room. Robert Macleod, Style and Society, p. 92, states that the "uniquely British architectural drawing of the period [late 19th century] was the highly coloured, romantic, and often unexplicit perspective." Nobbs did indulge in creating perspectives in this tradition, but the bulk of his drawings are precise and explicit. Phené Speirs at the RA schools had cautioned against English romantic drawing, stressing the importance of precise mechanical methods for architects.

[27]The sculptural decoration was the work of Henry Beaumont, a Montreal sculptor who worked extensively with Taylor.

[28]Maxwell, Shrines and Homes of Scotland, p. 207.

[29]Nobbs, "Architecture in Canada," JRAIC 1 (July-Sept. 1924):93.

[30]See R.H. Hubbard, "Modern Gothic in Canada," Bulletin of the National Gallery of Canada 25 (1975):3-18.

[31]Nobbs, "Architecture in Canada," p. 92. In 1925 Sproatt and Rolph would win a Gold Medal awarded by the American Institute of Architects for their Hart House Design.

[32]T.G. Jackson, Modern Gothic Architecture (London: Henry S. King, 1873), pp. 34, 109-10. See also Girouard, Sweetness and Light, p. 60. Jackson and Shaw were joint editors of Architecture, a Profession or an Art?, a response to the stricter professional examinations proposed by the RIBA.

[33]Beaumont's stonecarvings also included, in addition to the interlace and the symbolic figures of the four Evangelists, the College arms, and the crest and motto of the donor of the library.

[34]Bland, "Percy Erskine Nobbs," p. 44.

[35]McGill Scrapbook 5:17 (Montreal Gazette, 25 Nov. 1921).

[36]Turner, "College Libraries," pp. 6-7.

[37]Hitchcock, Richardson, p. 248.

[38]Nobbs, "Present Tendencies," p. 5.

3. The Osler Library

[39]E.H. Bensley, "The Osler Library Reception Committee (1920-1928)," Osler Library Newsletter (Feb. 1973), n.p.

[40]Viola Whitney Pratt, Famous Doctors (Toronto: Clarke, Irwin, 1956), p. 27.

[41]Ibid., p. 13.

[42]Browne (1605-82) was an English physician and mystic. Among his writings was Hydriotaphia, Urne-Buriall (1658) which also deeply affected Osler. Browne had written: "But man is a noble animal, splendid in ashes, and pompous in the grave."

[43]Religio Medici was not, as Viola Pratt relates on p. 7 of Famous Doctors, "laid with him in his grave." The doctor's remains were never buried.

[44]Information on the Osler Library Reception Committee has been obtained from Bensley, "Osler Library Reception Committee;" Board of Governors' Minute Book, 1919-1935; and Osler Library Reception Committee File.

[45]Memo from Whitnall, n.d. Jan. 1902? , Osler Library Reception Committee File.

[46]John Bland, however, said in conversation with the author that he does not think this is Wray's sketch.

[47]This report is among the papers in the Osler Library Reception Committee File. The quotation appears on p. 4.

[48]Memo from Whitnall, n.d., Osler Library Reception Committee File.

[49]Ibid.

[50]Dr. Osler had requested that this be done before the books left England. His own unusual but interesting system was followed. The first section contained the writings of about seventy of the greatest medical pioneers arranged chronologically. Hippocrates was first, and Roentgen, discoverer of X-rays, was last. Florence Nightingale was the only woman represented. The next section contained works by men not of pioneer rank organized alphabetically. There were also sections for literary works, history, and bibliography. Approximately 137 fifteenth-century books were part of the collection.

[51]These sketches are in the Nobbs Room.

[52]Minutes of the third meeting of the Osler Library Reception Committee, 12 June 1922, Osler Library Reception Committee File, includes the following: "Principal asked whether present doorway would not do; Nobbs demurred as being undignified."

[53]Nobbs to Whitnall, 14 June 1922, Osler Library Reception Committee File.

[54]The steps are now rectangular rather than rounded as originally proposed.

[55]Osler did not leave all his books to McGill, although this was the largest collection and his favourite. He left two other collections to Johns Hopkins: old editions of poets together with his son's books, and a group of modern works on the heart and lungs.

[56]Harvey Cushing, The Life of Sir William Osler, 2 vols. (1925; rpt. London: Oxford University Press, 1940), 1:344-45.

[57]Bland, "The Architect of the First Osler Library," n.p.

[58]Nobbs to Currie, 15 Nov. 1921, Osler Library Reception Committee File.

[59]Nobbs, "Bibliotheca Osleriana-McGill University, Montreal," JRAIC 7 (June 1930):204.

[60]To the left of the central window is the device of Johns Hopkins; to the right, of the University of Pennsylvania. In the lunette opposite, starting from the left, are Toronto, McGill, Osler's personal crest (he was knighted in 1911), Oxford and Christ Church. Osler's crest contains his motto, "Aequanimitas," the title of one of his famous collection of essays, which was given to medical

students upon graduation. Nobbs relates in the article cited above that the shields were executed by E.T. Adney.

[61]Bland, "The Architect of the First Osler Library," n.p.

[62]Currie to Nobbs, 14 Nov. 1921, Osler Library Reception Committee File, contained these suggestions from Lady Osler.

[63]First proposals are in the Nobbs Room. Reduced photographic copies in the Osler Library Reception Committee File.

[64]Nobbs to Currie, 15 Nov. 1921, Osler Library Reception Committee File.

[65]Ibid.

[66]Correspondence regarding this medal is in the Osler Library Reception Committee File.

[67]Osler's ashes were brought to North America by Lady Osler's sister and deposited in the library in 1929. Prior to this, they reposed in the "Watching Chamber" in the Shrine of St. Frideswide in the Cathedral at Oxford.

[68]Dr. Francis, first Osler Librarian, recorded in an unpublished, dictated MS, "Showman's Patter: A Description of Books in the Osler Library (1950-1957)," now in the Osler Library, that Lady Osler did not want it known that her ashes were also in the library. "What would McGill want with the cinders of an old woman like me?"

[69]Arnold Muirhead, Grace Revere Osler: A Brief Memoir. Printed for private circulation at the Oxford University Press, 1931.

[70]Pratt, Famous Doctors, p. 39.

[71]Macleod, Style and Society, p. 67.

[72]When planning began in the mid-1950s to replace the Strathcona Medical Building with the McIntyre Medical Sciences Building, the Osler Library caused considerable concern as well as controversy. Those who wished to preserve it were opposed by others who felt "that the designers of a large new building and a round one, at that should not be handicapped at the very beginning by being required to incorporate in their designs a considerable element of an older pattern." Fortunately, the preservationists won, and funds from the Wellcome Trust and the John and Mary R.

Markle Foundation in New York enabled McGill to move the library intact to the new medical structure. It is now the principal focus of a large reading room, the "Wellcome Camera." While thanks are due for its preservation, the Osler Library has lost something in the transition. Axial planning gives the room a prominence which is at odds with its underlying meaning. Nobbs's marble steps have been removed, so that there is no change of levels between the reading room and the Osler Room (as it has been renamed). Most of the glazed doors of the bookcases have been taken off to permit open shelves, the valuable books being stored elsewhere. Finally, certain modifications to the windows were necessary, since there is now no natural light in the room. Nevertheless, the mellow, friendly quality endures, a quiet reminder of certain deficiencies in the building that the library now occupies. An account of the transfer can be found in the Osler Library Newsletter, Oct. 1973, from which the quoted sentence above was taken.

4. The Pathological Institute

[73]Pratt, Famous Doctors, pp. 20-21.

[74]See H.E. Macdermot, "The Rockerfeller Benefactions," McGill News 13 (June 1932):21-26.

[75]A subsequent grant for the development of the Department of Medicine resulted in the establishment of the University Clinic.

[76]Board of Governors' Minute Book, 1919-1935 (27 Feb. 1922), p. 177.

[77]The McGill governors had originally favoured a site on the corner of University and Sherbrooke Streets.

[78]Board of Governors' Minute Book, 1919-1935 (1 May 1922), p. 188.

[79]Horst Oertel, "The New Pathological Institute," McGill News 5 (June 1924):2.

[80]Board of Governors' Minute Book, 1919-1935 (5 June 1924), p. 277. The original estimates were in the neighbourhood of $238,000.

[81]Nobbs, Design, p. 262.

[82]McGill Scrapbook 5:255 (Montreal Star, 7 June 1924). A good description of the new building may be found in Oertel, "The New Pathological Institute."

[83]A good history of the Royal Victoria Hospital is D. Sclater Lewis, Royal Victoria Hospital, 1887-1947 (Montreal: McGill University Press, 1969). Lewis suggests that Fyvie Castle (ca. 1600-1603) was also a source, and this is obvious from photographs. Fyvie was a suitable model for, unlike most medieval Scottish castles, it is symmetrical. It was also extremely large. Summerson discusses Fyvie in Architecture in Britain, 1530-1830 (Harmondsworth: Penguin Books, 1970).

[84]A reading of Lewis's book makes it clear that Smith and Stephen provided the extra funds which were needed to ensure the hospital's monumental exterior. Snell, himself, was torn between functionalism and what most people at the time considered architecture. He knew, however, what millionaires wanted.

[85]See A. Saxon Snell, "Modern Hospitals," JRIBA 20 (8 March 1913):265-80.

[86]Nobbs, Design, p. 340.

[87]In conversation with the author (in 1975).

[88]Nobbs, Design, p. 292.

[89]Godfrey Rubens, "William Lethaby's Buildings," in Service, Edwardian Architecture and its Origins, p. 135. Rubens's chapter makes it clear how close Nobbs and Lethaby were. On the same page, he describes Lethaby's theory of architecture as being that "each building is thought out from 'first principles': the purpose, the site, and local building traditions, materials and techniques."

[90]The rendering included the football stadium and fieldhouse as well as the Pathological Institute.

[91]Nobbs, Design, p. 324.

[92]These preliminary sketches, in the Nobbs Room, make it abundantly clear that the design is essentially Nobbs's.

[93]Nobbs, Design, p. 113.

[94]The JRAIC 3 (Mar.-Apr. 1926):55, criticized Stevens and Lee for using the mode for their Women's Pavilion (1925) at the hospital. Moss and Macdonald drew on it again in 1932 for the Neurological Institute, which was immediately North of the Pathological Institute.

[95]Thomas Howarth, Charles Rennie Mackintosh and the

Modern Movement ([London]: Routledge and Kegan Paul, 1952), p. 55.

[96]David Walker, "Early Works of Mackintosh," pp. 125-26.

[97]A possible source for Nobbs's window treatment is Halsey Ricardo's unsuccessful competition design for Oxford Town Hall, 1892. David Walker discusses this design as he attempts to trace influences on Mackintosh's Glasgow School of Art. Ricardo's design does have certain affinities with Nobbs's. The courtyard, itself, may have been suggested by Sidney Mitchell's romantic Well Court, Edinburgh (1899), which influenced Mackintosh's Glasgow High Street competition design. See Walker, "Early Works of Mackintosh," pp. 119, 127.

[98]James Fergusson's position referred to in Peter Collins, Changing Ideals in Modern Architecture 1750-1950 (London: Faber and Faber, 1965), p. 125.

[99]Hugh Morrison, Louis Sullivan: Prophet of Modern Architecture (1935: rpt. New York: Norton, 1962), p. 255.

[100]Jordy, "Functionalism as Fact and Symbol: Louis Sullivan's Commercial Buildings, Tombs, and Banks," in Progressive and Academic Ideals, pp. 83-179.

[101]Service, Edwardian Architecture: A Handbook to Building Design in Britain, 1890-1914 (New York: Oxford University Press, 1977), pp. 17, 46-48. In 1891 Lethaby published Architecture, Mysticism and Myth in which he discussed architectural ornament and symbolism. He pointed to nature as a source. The book was widely influential in the 1890s.

[102]Macleod, Style and Society, p. 59.

[103]Ibid.

[104]Nobbs, "Present Tendencies," p. 12.

[105]John M. Lyle, "Canadian Decorative Forms," JRAIC 9 (March 1932):70.

[106]Nobbs, "Present Tendencies," p. 12.

[107]Nobbs, Design, p. 123. Contrast this with Wright's conception of ornament as set down in the early 1940s: "True ornament, said Wright, was 'the inherent melody of Structure'; it should exist as the 'manifest abstract pattern of structure itself.'" (Donald Hoffmann, Frank Lloyd Wright's Fallingwater: The House and Its History

New York: Dover, 1978, p. 85). Wright also disliked the International Style.

[108]All of the Latin translations are taken from Oertel, "The New Pathological Institute."

[109]McGill Scrapbook 17:73 (Montreal Gazette, 11 Nov. 1964).

PART IV - LATE PERIOD AT MCGILL

1. Introduction to Late Period

[1]This suggestion was made by the Montréal architect and planner, Harry Mayerovitch, who was Nobbs's assistant in the preparation of Design.

[2]Macleod, Style and Society, p. 136.

[3]Harold D. Kalman, Exploring Vancouver 2, rev. ed. (Vancouver: University of British Columbia Press, 1978), p. 194.

[4]McGill Scrapbook 6 (12 March-30 May 1929):95 (Montreal Star, 11 Feb. 1926).

[5]Nobbs, "Suburban Community Planning, "McGill University Publications, Series XIII (Art and Architecture), No. 7 (Montreal: McGill University Press, 1926).

[6]Nobbs, "On the Control of Architecture," JRAIC 5 (Sept. 1928):317-18.

[7]Nobbs, "Montreal and Town Planning," Supplement to the McGill News 10 (Dec. 1928):13.

[8]Nobbs's extensive work in the field of planning is ascertainable from his papers in the Nobbs Room, including published proposals, MSS and his letters to Raymond Unwin.

[9]Bland, "Percy Erskine Nobbs," p. 44.

[10]Through this association Nobbs was able to force governments and power companies to build fish-ways.

[11]McGill Scrapbook 17:72 (Montreal Star, 10 Nov. 1964). In addition to being a FRIBA, he was also a FRSA.

2. The Pulp and Paper Research Institute of Canada

[12]C.J. Warrington and B.T. Newbold, Chemical Canada (Ottawa: The Chemical Institute of Canada, 1970), p. 45.

[13]Historical material on the PPRIC is taken from "The Pulp and Paper Research Institute of Canada Celebrates Fifty Years of Progress," PAPRICAN (a publication of the PPRIC), Nov. 1975.

[14]The Forest Products Laboratories, the Canadian Pulp and Paper Association, and the Pulp and Paper Research Institute of Canada are customarily referred to in the pulp and paper industry by their initials-FPL, CPPA, and PPRIC respectively.

[15]Macmillan, McGill, pp. 236-37.

[16]Nobbs, "The Pulp and Paper Research Institute-Montreal," JRAIC 7 (Jan. 1930):6.

[17]Lambert et Lemire, Bâtiments du Vieux Montréal, p. 58.

[18]The McGill University Archives retains a proposal by Nobbs for a library for scientific research (unexecuted) which is a more elaborate version of this first scheme for the PPRIC.

[19]Nobbs, "Pulp and Paper Institute," p. 6.

[20]Quoted in Service, Edwardian Architecture: A Handbook, p. 185.

[21]Ibid., pp. 185-86.

[22]Ibid., p. 187. One of the most important modernist proselytizers was Nikolaus Pevsner. See David Watkin, Morality and Architecture (Oxford: Clarendon Press, 1977), for a recent critique of Pevsner.

[23]Service, Edwardian Architecture: A Handbook, pp. 128-39, discusses these and other important British examples.

[24]Jordy, The Impact of European Modernism, p. 102. Jordy points out on p. 75 how essential a knowledge of modern painting and sculpture was to the European architects who developed modern architecture, a knowledge which was slow to reach North America.

[25]Alan Gowans, Looking at Architecture in Canada (Toronto: Oxford University Press, 1958), p. 193.

[26]Eric Arthur, "Toronto Chapter O.A.A. Architectural Exhibition," JRAIC 3 (Mar.-Apr. 1926):50.

[27]Nobbs, "Present Tendencies," p. 12.

[28]Kalman, "The Ecole des Beaux-Arts and Canadian Architecture," script for slide exhibition for the National Gallery of Canada, as revised 22 Sept. 1976. (Typewritten).

[29]Nobbs, "Present Tendencies," p. 12.

[30]Now Sheraton-Mount Royal Hotel, 1455 Peel Street and Confederation Building, 1253 McGill College Avenue. I am grateful to Robert Lemire for providing dates and architects for these and other major buildings of this period.

[31]Kalman, "The Ecole des Beaux-Arts," p. 8.

[32]"New Buildings for the University of Montreal: Ernest Cormier, Architect," JRAIC 8 (1931):248.

[33]Gowans, Architecture in Canada, p. 195.

[34]The Montreal Star Building, 245 St. James Street, and the Hanson Brothers Office Building (now the Lincoln Manson Building), 255 St. James Street.

[35]For an excellent discussion of Art Deco see Cervin Robinson and Rosemarie Haag Bletter, Skyscraper Style: Art Deco New York (New York: Oxford University Press, 1975).

[36]This building is extensively discussed in Jordy, The Impact of European Modernism, pp. 87-164.

[37]Arthur, "O.A.A. Architectural Exhibition," p. 50.

[38]CAB 19 (June 1906):84.

[39]Jordy, Progressive and Academic Ideals, p. 349.

3. The Royal Victoria College Extension

[40]McGill Scrapbook 7 (June 1929-Dec. 1933):40 (Montreal Star, 19 Nov. 1929).

[41]The best history of Royal Victoria College is an unpublished report in the McLennan Library, McGill University by Muriel A. Roscoe, "The Royal Victoria College 1899-1962: A Report to the Principal" (20 March 1964). Donald Smith's initial gift of money led immediately to his becoming a member of the McGill Board of Governors. In 1889, as Lord Strathcona, he became chancellor.

[42]Kalman, The Railway Hotels and the Development of the Château Style in Canada, Maltwood Museum, Studies in Architectural History, No. 1 (Victoria: University of Victoria, 1963), footnote 58, p. 42.

[43]Roscoe, "Royal Victoria College," p. 50, states that Marvin also worked on the Place Viger Hotel (1897) and the Château Frontenac (1890).

[44]See W.T.R. Preston, The Life and Times of Lord Strathcona (London: Eveleigh Nash, 1914).

[45]McGill Scrapbook 1:257 (name of newspaper and date missing).

[46]Roscoe, "Royal Victoria College," p. 52 notes: "It was to be in every sense the sort of institution which would provide for the mental attainment of young women, but additionally was to develop in its students a sense of culture, refinement and good taste." In fact, the building had to provide some of the services of a women's union, since the McGill Union was restricted at that time to men. The university is now coeducational.

[47]Ibid., p. 51.

[48]Ibid., p. 52.

[49]Mrs. Walter Vaughan, the warden of R.V.C., who worked closely with Nobbs on the new building, attributes the design to him alone. See Susan E. Vaughan, "The Royal Victoria College Extension," McGill News 12 (June 1931):18. Nobbs's perspective is dated 1930, the final plans by Nobbs and Hyde, 1931. A.F. Byers and Co. were the general contractors.

[50]See Saint, Shaw, p. 113. By now Nobbs was able to draw as confidently on his own past experience as on admired predecessors.

[51]Nobbs, "Architecture in the Province of Quebec during the Early Years of the Twentieth Century," JRAIC 33 (Nov. 1956):418.

[52]See analysis of the Royal Victoria Hospital's style in the author's "The Pathological Institute of Percy Erskine Nobbs" (Graduate seminar report for the Department of Fine Arts, Concordia University, 7 April 1975). This MS is in the Nobbs Room.

[53]Kalman, Railway Hotels, footnote 58, p. 43.

[54]Bland, "Buildings of McGill," McGill News 40 (Spring 1958):27, and Traquair, "The Building of McGill," p. 55.

[55]Hitchcock, Architecture: Nineteenth and Twentieth Centuries (Harmondsworth: Penguin Books, 1971), p. 362.

[56]Roscoe, "Royal Victoria College," p. 105, says that the original college was of steel frame construction. The Nobbs addition had a reinforced concrete frame and floors, terra cotta partitions, and a roof of combined

slate and tile.

[57]Bland, "Buildings of McGill," McGill News 40 (winter 1958):17.

[58]This flower is somewhat ambiguous. It could also possibly be a Scottish harebell.

[59]McGill Scrapbook 7:244 (Montreal Star, 5 Sept. 1931).

[60]Ibid., p. 245 (Montreal Gazette, 3 Oct. 1931).

[61]Ibid., p. 244 (Montreal Star, 5 Sept. 1931).

[62]Ibid., p. 232 (Montreal Gazette, 24 June, 1931).

[63]Ibid., p. 244 (Montreal Star, 5 Sept. 1931).

[64]Vaughan, "The Royal Victoria College Extension," p. 18.

PART V - CONCLUSION

1. Conclusion

[1]Cushing, Osler, p. 262.

[2]Macleod, Charles Rennie Mackintosh (Feltham: Hamlyn for Country Life Books, 1968), p. 16.

[3]Nobbs Gargoyle II , "Montreal Letter," CAB 17 (May 1904):88.

[4]Macleod, Style and Society, p. 93.

[5]Nobbs, "Report on the Department of Architecture," p. 2..

[6]Nobbs, "The Architects: A Talk to Clients," JRAIC 4 (May 1927):181, and "Present Tendencies," p. 4.

[7]Nobbs, "University Education in Architecture," JRAIC 2 (Mar-Apr. 1925):71.

[8]Macleod, Style and Society, p. 135.

[9]Ibid., p. 50.

[10] Nobbs, "Architecture in Canada," p. 91.

[11]Ibid. See also Nobbs, "Present Tendencies," p. 1.

[12]Alan Gowans, "The Canadian National Style," in The Shield of Achilles, p. 215. See also Robert Hamilton Hubbard, "Canadian Gothic," Architectural Review 116 (1954): 102-8.

[13]Discussed by Kalman in Railway Hotels.

[14]Nobbs, "Architecture in Canada," pp. 92-93.

[15]Ibid., p. 93.

[16]See Nobbs, "Architecture in the Province of Quebec," pp. 418-19.

[17]Vincent Scully Jr., Modern Architecture, rev. ed. (New York: Braziller, 1974), p. 25.

[18]Ibid., p. 29.

[19]Lewis Mumford, Roots of Contemporary American Architecture (New York: Dover, 1972), p. 23.

[20]See Reyner Banham, Theory and Design in the First Machine Age (1960: rpt. London: Architectural Press, 1977).

[21]See Hoffmann, Fallingwater.

[22]Nobbs, "University Education," p. 69.

[23]Mumford, "Contemporary American Architecture," p. 6.

[24]Nobbs, "University Education," p. 71.

[25]Scully, Modern Architecture, p. 60. A more recent statement of the new desiderata is Charles Jencks, The Language of Post-Modern Architecture (New York: Rizzoli International, 1977).

[26]Nobbs, "Present Tendencies," p. 12.

[27]Ibid., p. 1.

[28]Ada Louise Huxtable, "Old Comfort: The New French Towns," New York Times Magazine, 19 Nov. 1978, pp. 168, 169.

[29]Nobbs, "University Education," p. 69.

[30]Lyle, "Canadian Decorative Forms," p. 65.

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APPENDIX I

LIST OF BUILDINGS AND EXTENSIONS EXECUTED FOR MCGILL UNIVERSITY BY PERCY E. NOBBS

McGill University Union. 1904-1906
Percy E. Nobbs, Architect.
Hutchison and Wood, Associate Architects.

Macdonald Engineering Building. 1907-1909
Percy E. Nobbs, Architect.

Power House. 1910
Percy E. Nobbs, Architect.

Percival Molson Stadium. 1914-1919
Nobbs and Hyde, Architects.

Extension to McGill University Library. 1921
Nobbs and Hyde, Architects.

Osler Library. 1921-1929
Nobbs and Hyde, Architects.

Pathological Institute. 1922-1924
Nobbs and Hyde, Architects.
R. Traquair and W. Carless, Associate Architects.
Stevens and Lee, Consulting Architects.

Field House. 1922
Nobbs and Hyde, Architects.

Pulp and Paper Research Institute of Canada. 1926-1929
Nobbs and Hyde, Architects.

Extension to Royal Victoria College. 1930-1931
Nobbs and Hyde, Architects.

APPENDIX II

LIST OF DRAWINGS IN THE NOBBS ROOM OF UNEXECUTED PROJECTS DESIGNED FOR MCGILL UNIVERSITY BY PERCY E. NOBBS

Medical Building.
- -New front for Old Medical Building. P.E. Nobbs, 6 Mar. 1908.

Student Residences, Macdonald Park.
- -Molson Stadium and student residences. Nobbs and Hyde, Sept. 1914.
- -Student residences. Nobbs and Hyde, Dec. 1916.
- -Student residences. P.E. Nobbs, Dec. 1918.

Gymnasium, Macdonald Park.
- -James Ross Memorial Gymnasium. Nobbs and Hyde, Jan. 1915.

War Memorials, corner Sherbrooke and McTavish Streets.
- -McGill Convocation Hall, P.E. Nobbs, 2 Dec. 1918.
- -Memorial of the Great War. P.E. Nobbs, Jan. 1919.
- -War Memorial Hall. Nobbs and Hyde, 16 Jan. 1923.

Gymnasium, Sherbrooke Street.
- -Gymnasium, elevation to Sherbrooke Street. Nobbs and Hyde, 17 Feb. 1922.

Student Residence, Sherbrooke Street.
- -Douglas Residency. Nobbs and Hyde, 21 Feb. 1922.

Railing and Gateway, Sherbrooke Street.
- -Railing and Gateway for McGill University on Sherbrooke Street. Nobbs and Hyde, 11 Aug. 1922.

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3. R.S. Lorimer, Wemyss Hall, Fife. (Service, Edwardian Architecture: A Handbook)

4. C.R. Mackintosh. Hill House, Helensburgh. (Service, Edwardian Architecture: A Handbook)

5. P.E. Nobbs. Design for an Isolated Clock Tower and Belfry. Awarded RIBA Tite Prize 1901. (Nobbs Room)

6. Aston Webb. Buckingham Palace and Rondpoint, London. (Service, Edwardian Architecture: A Handbook)

7. London County Council Architect's Department. Millbank Estate, London. (Service, Edwardian Architecture: A Handbook)

8. Belcher and Pite. Institute of Chartered Accountants, City of London. (Service, Edwardian Architecture: A Handbook)

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11. P.E. Nobbs. Scheme for the mosaic decoration of a church of the form and scale of Sta. Fosca, Torcello. Awarded Owen Jones Studentship 1903. (Nobbs Room)

12. P.E. Nobbs. McGill University Union (now McCord Museum), Montreal. (T.J. Wagg)

13. Hutchison and Wood. Greenshields Building (now Canada Steamship Lines Building), Montreal. (T.J. Wagg)

14. McKim, Mead and White. Mount Royal Club, Montreal. (T.J. Wagg)

15. McGill University Union. Presentation drawing by Nobbs. (Nobbs Room)

16. Finley and Spence. Strathcona Hall, Montreal. (T.J. Wagg)

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29. Macdonald Engineering Building. Ground floor plan. (Nobbs Room)

30. First Macdonald Engineering Building before the fire of 5 April 1907. (McGill University Archives)

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36. New Scotland Yard. Detail, gable pediment. (Saint, Shaw)

37. Macdonald Engineering Building. Detail, gable pediment. (T.J. Wagg)

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54. Pathological Institute. Elevation to Pine Avenue, block plan and cross sections. (Nobbs Room)

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57. Pathological Institute. View east along Pine Avenue showing relationship with hospital and neighbouring buildings. (T.J. Wagg)

58. Pathological Institute and Field House. Watercolour rendering by Nobbs. (Nobbs Room)

59. Pathological Institute. Perspective drawing by Nobbs. (Nobbs Room)

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64. Pulp and Paper Research Institute. First, second, and third floor plans. (JRAIC)

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69. Darling and Pearson. Sun Life Building, Montreal. Initial stage. (T.J. Wagg)

70. Ross and Macdonald. Confederation Building, Montreal. (T.J. Wagg)

71. Ernest Cormier. Administration Block, Université de Montreal, Montreal. (T.J. Wagg)

72. H.L. Fetherstonhaugh. Hanson Brothers Office (now Lincoln Manson) Building, Montreal. (T.J. Wagg)

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74. Pulp and Paper Research Institute. Main doorway. (Nobbs Room)

75. Bruce Price. Royal Victoria College, McGill University, Montreal. (T.J. Wagg)

76. Nobbs and Hyde. Extension to Royal Victoria College. Ground and second floor plans. (Nobbs Room)

77. Extension to Royal Victoria College. Proposed University Street elevations. (Nobbs Room)

78. Extension to Royal Victoria College. Proposed Sherbrooke Street elevation. (Nobbs Room)

79. Extension to Royal Victoria College. Presentation drawing by Nobbs. (Nobbs Room)

80. Extension to Royal Victoria College. Detail of Queen Victoria's device on west façade. (T.J. Wagg)

81. Extension to Royal Victoria College. View east showing relationship with original building. (T.J. Wagg)

82. Frank Lloyd Wright. Fallingwater, Bear Run, Pennsylvania. (Hoffman, Fallingwater)

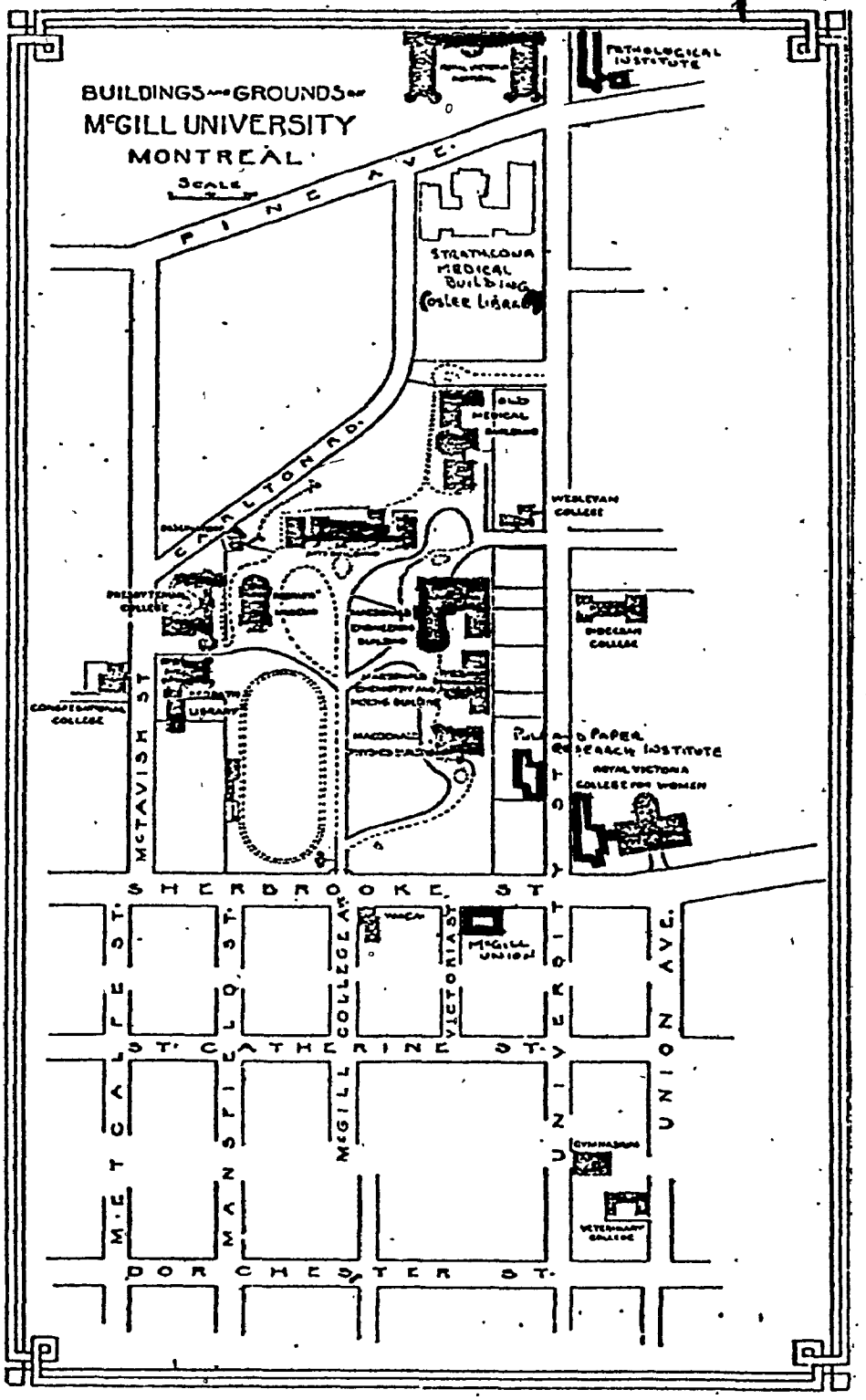


Fig. 1. Map of McGill University campus showing location of the major buildings and extensions designed by P.E. Nobbs.

Fig. 2. R.S. Lorimer. Balmanno Castle, Perthshire (ca. 1580, restored 1916).

Fig. 3. R.S. Lorimer. Wemyss Hall, Fife (1905-7).

Fig. 4. C.R. Mackintosh. Hill House, Helensburgh (1902-4).

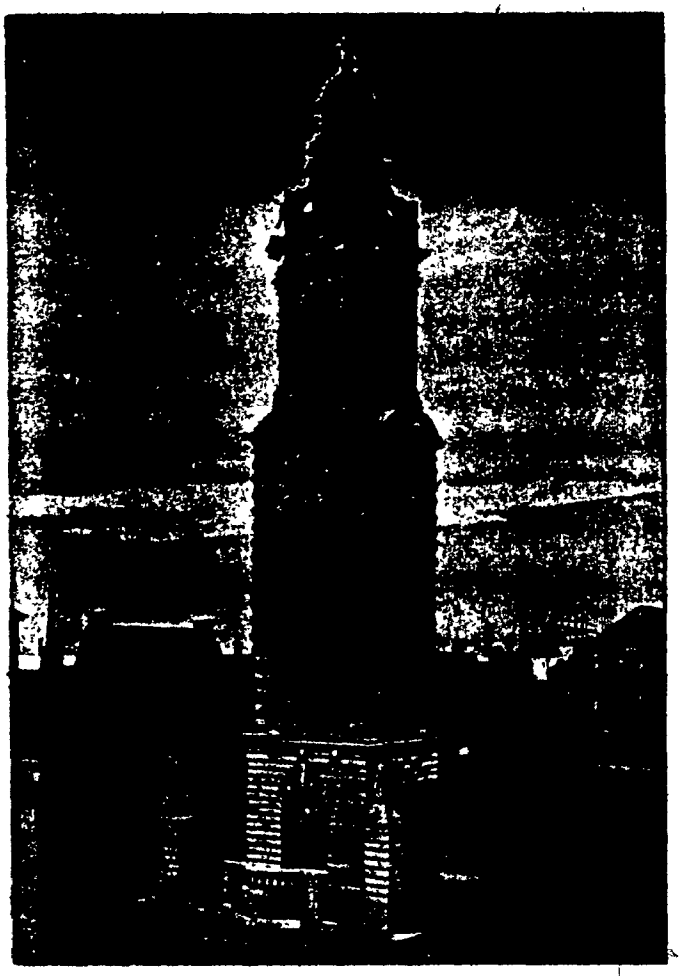


Fig. 5. P.E. Nobbs. Design for an Isolated Clock Tower and Belfry. Awarded RIBA Tite Prize (1901).

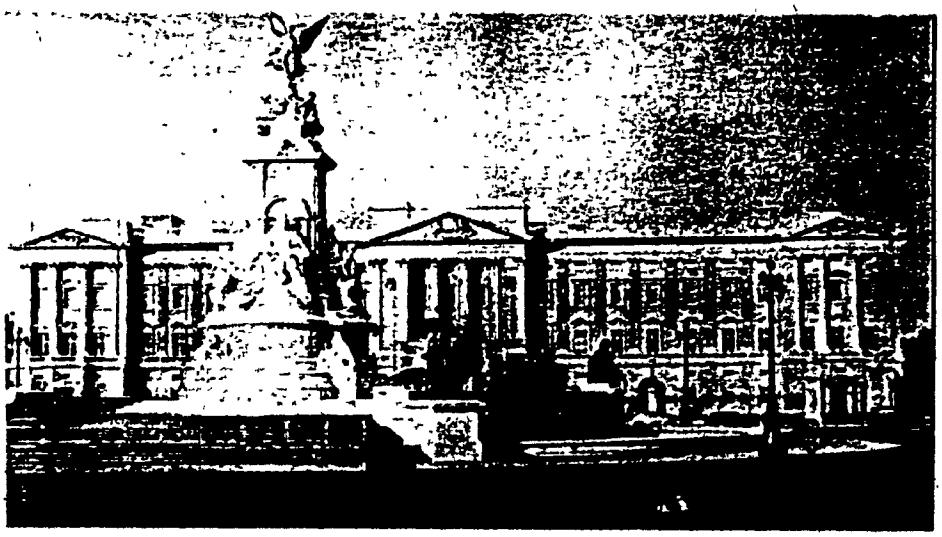


Fig. 6. Aston Webb. Buckingham Palace (refronted 1913) and rondpoint, London.

Fig. 7. London County Council Architect's Department. Millbank Estate, London (1899-1902).

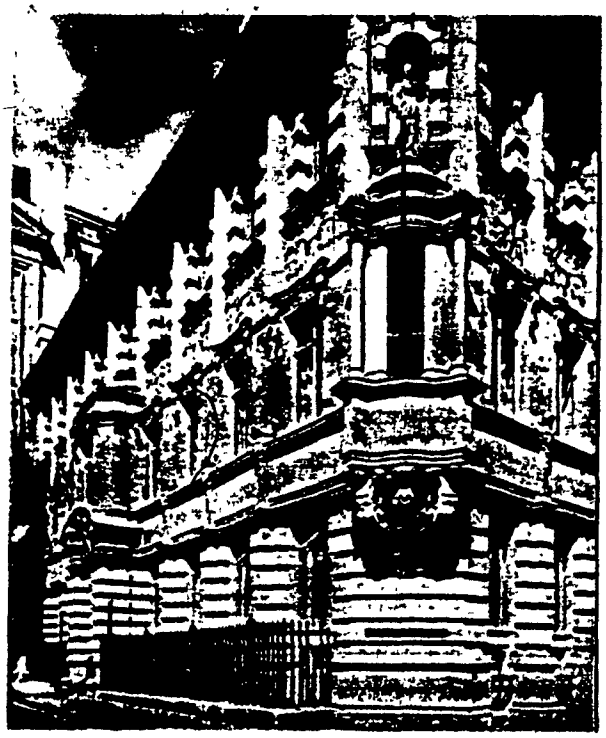


Fig. 8.
Belcher and Pite.
Institute of Chartered
Accountants, City of
London (1888-93).

Fig. 9. Institute of
Chartered Accountants.
Detail, main doorway.

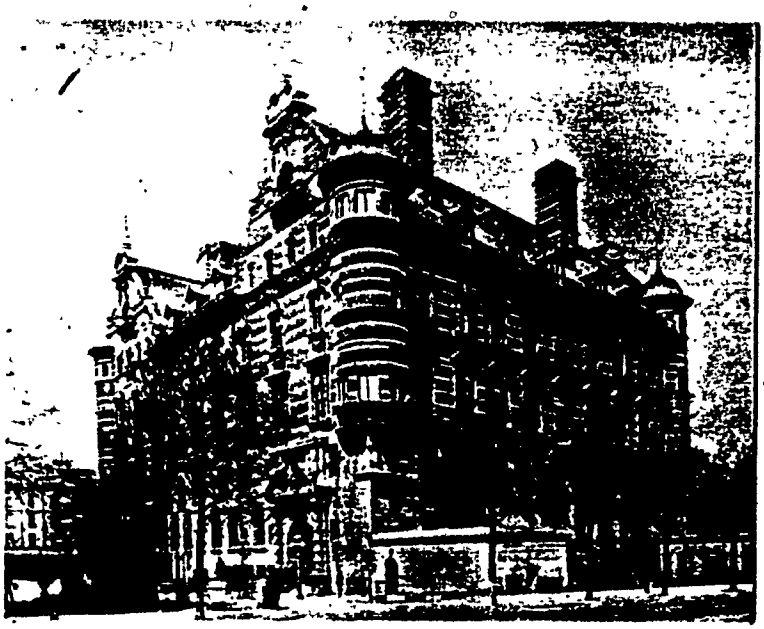


Fig. 10. R. Norman Shaw. New Scotland Yard, London (1887-90)

Fig. 11. P.E. Nobbs. Scheme for the mosaic decoration of a church of the form and scale of Sta. Fosca, Torcello. Awarded RIBA Owen Jones Studentship. (1903).

Fig. 12. P.E. Nobbs. McGill University Union (now McCord Museum), Montreal (1904-6).

Fig. 13. Hutchison and Wood. Greenshields Building (now Canada Steamship Lines Building), Montreal (1903).

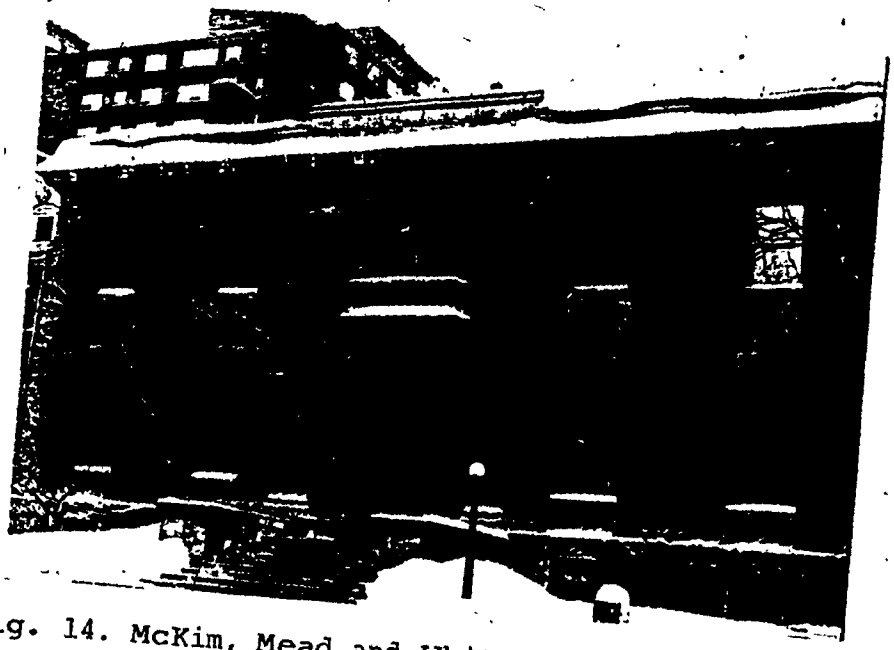


Fig. 14. McKim, Mead and White. Mount Royal Club, Montreal (1904-6).

Fig. 15. McGill University Union. Presentation drawing by Nobbs (1 Sept. 1904).

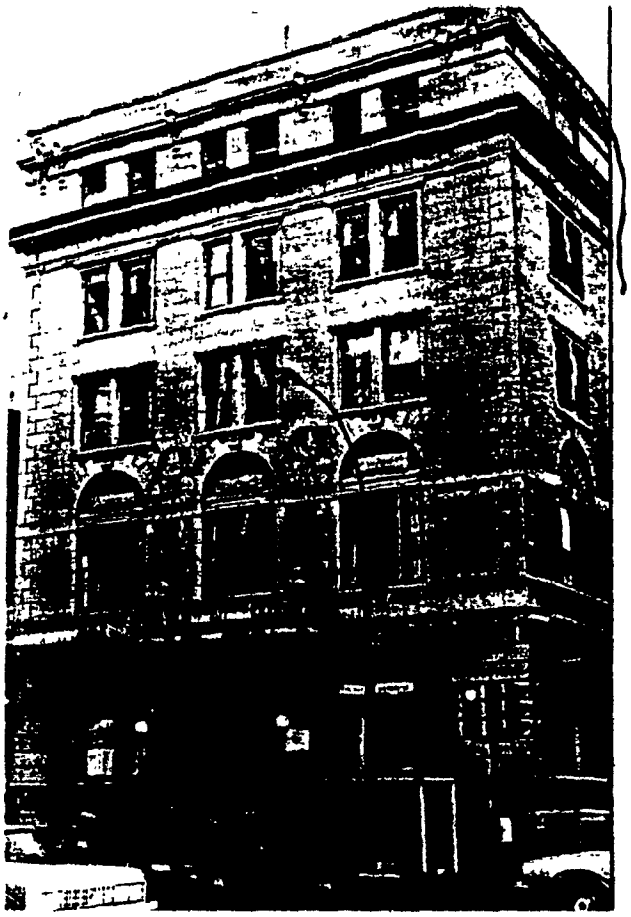


Fig. 16.
Finley and Spence.
Strathcona Hall,
Montreal (1904-5).

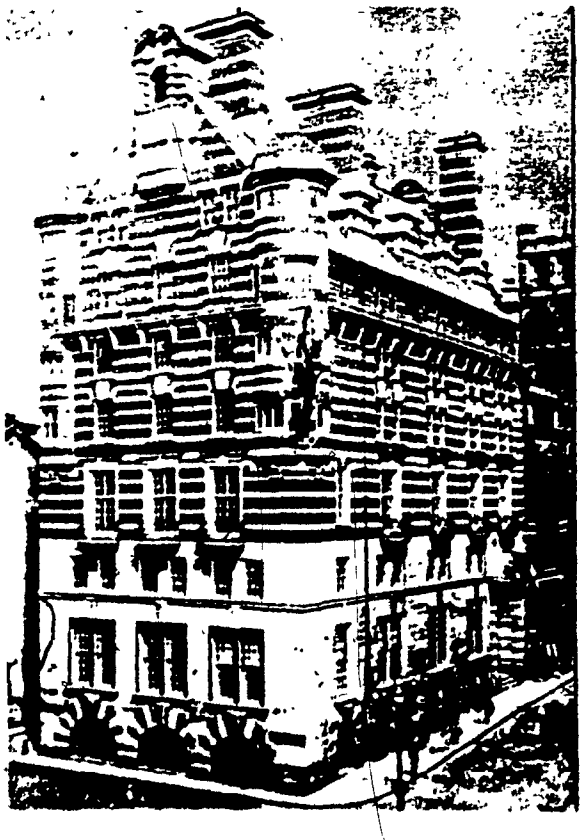


Fig. 17.
R. Norman Shaw.
Offices of the White
Star Line, Liverpool
(1896).

Fig. 18. McGill University Union.

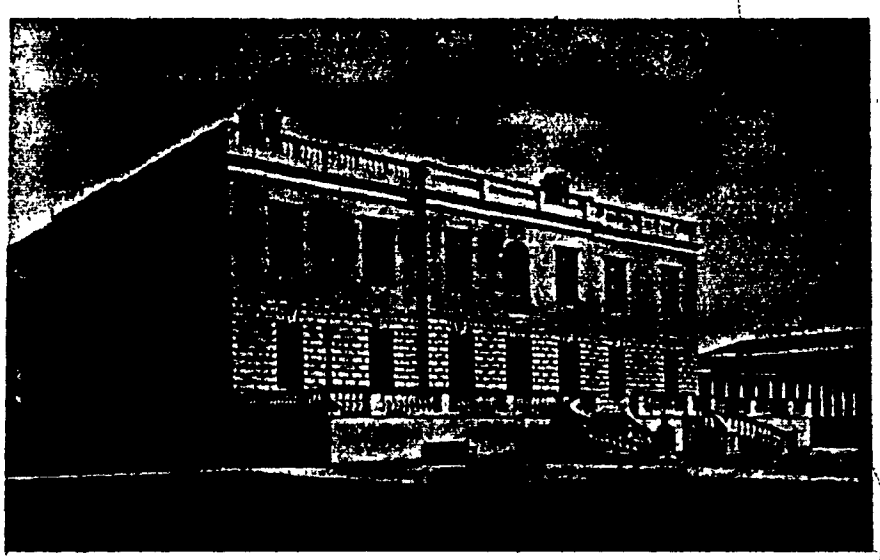


Fig. 19. Inigo Jones. Queen's House, Greenwich (1616).

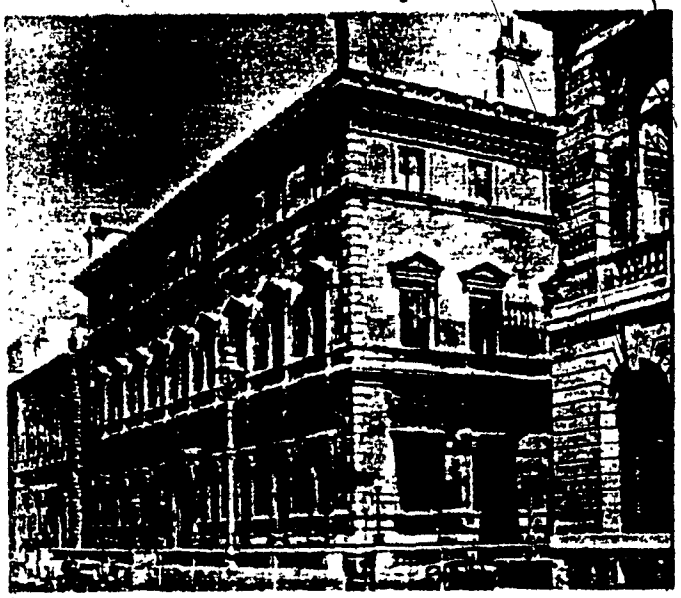


Fig. 20. Sir Charles Barry. Reform Club, London (1837), with Travellers' Club (1829) beyond.

Fig. 21. W.T. Thomas. George Stephen House (now Mount Stephen Club), Montreal (1884).

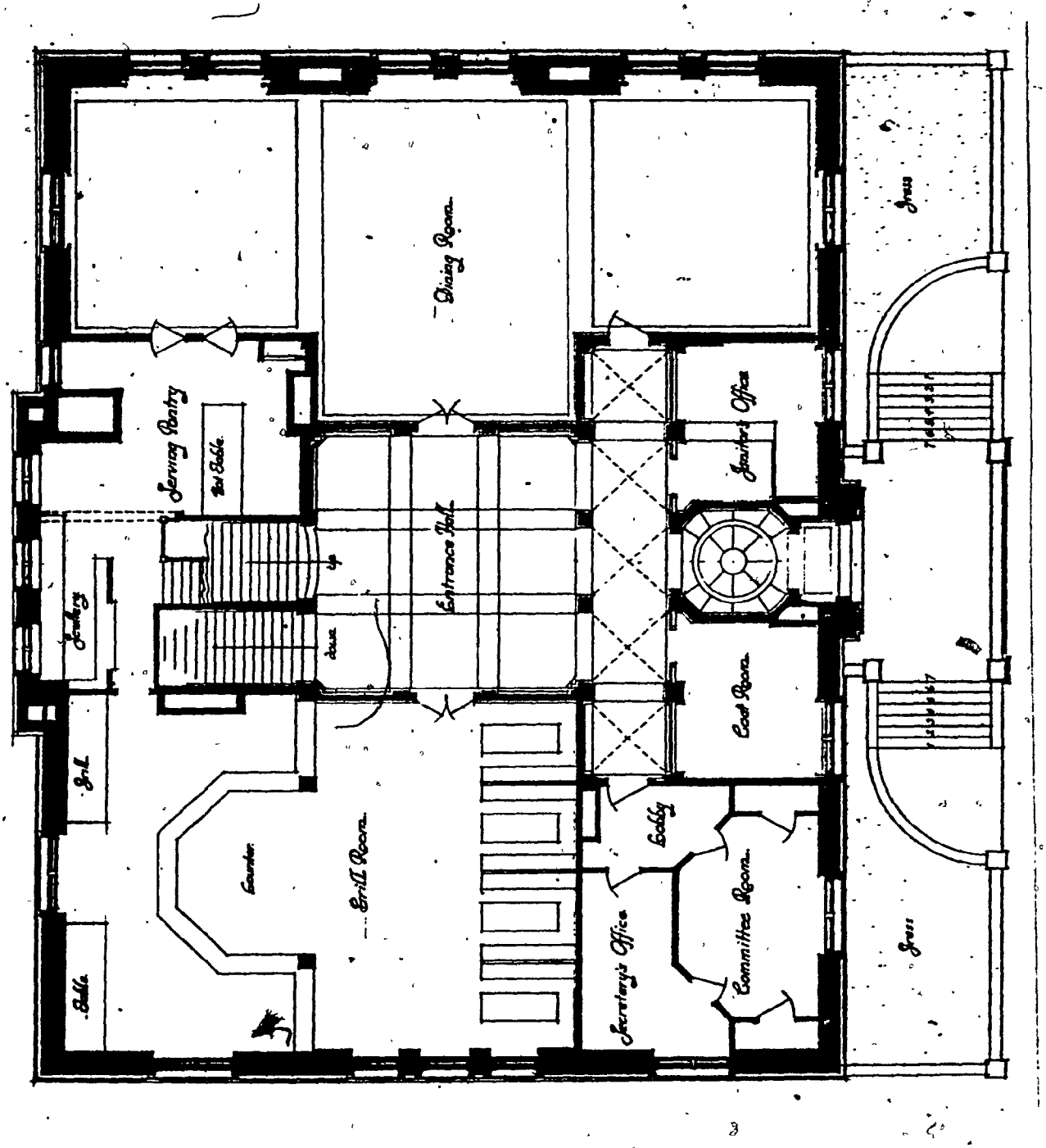


Fig. 22. McGill University Union. Ground floor plan.

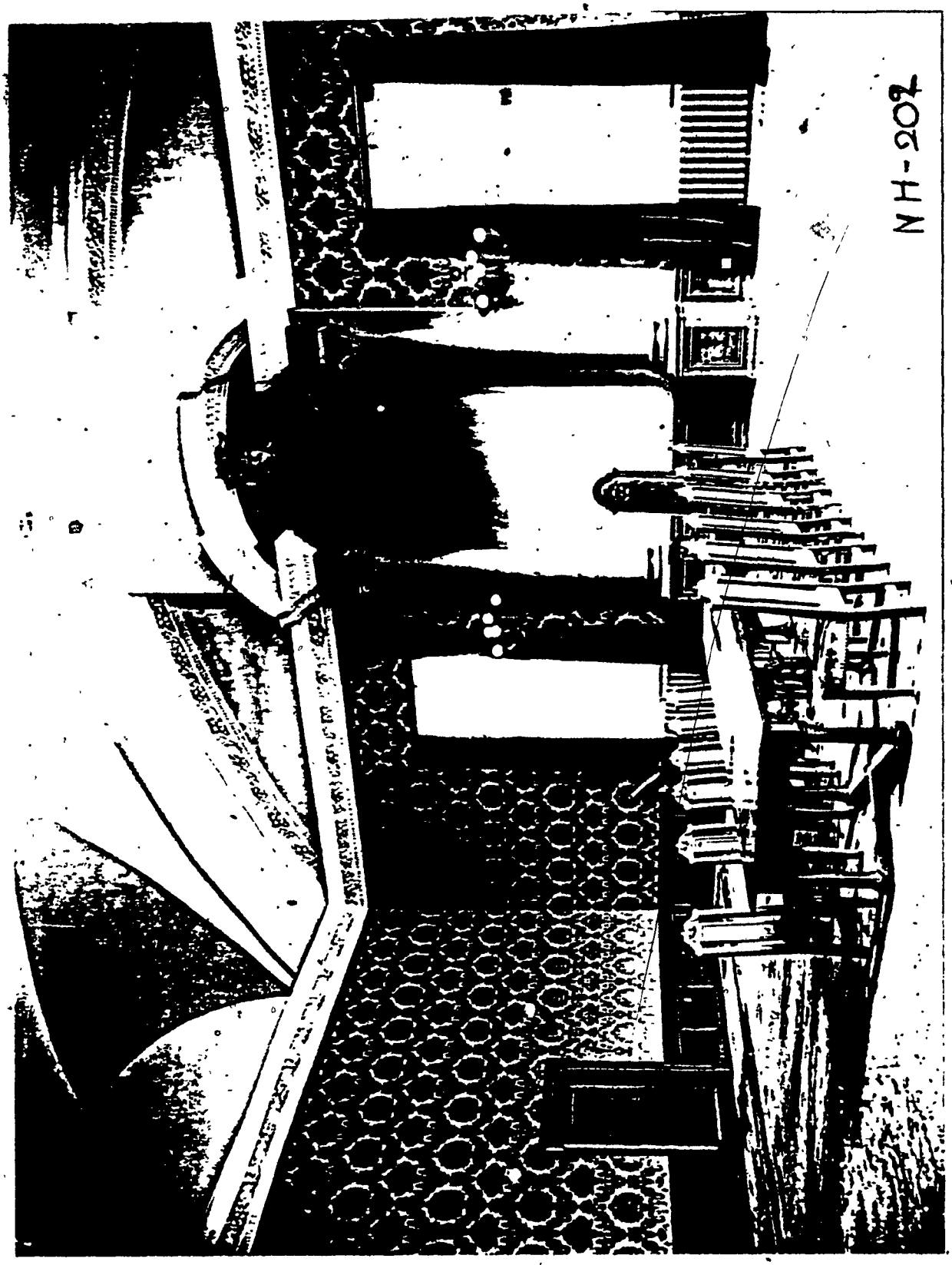


Fig. 23. McGill University Union. Great hall.

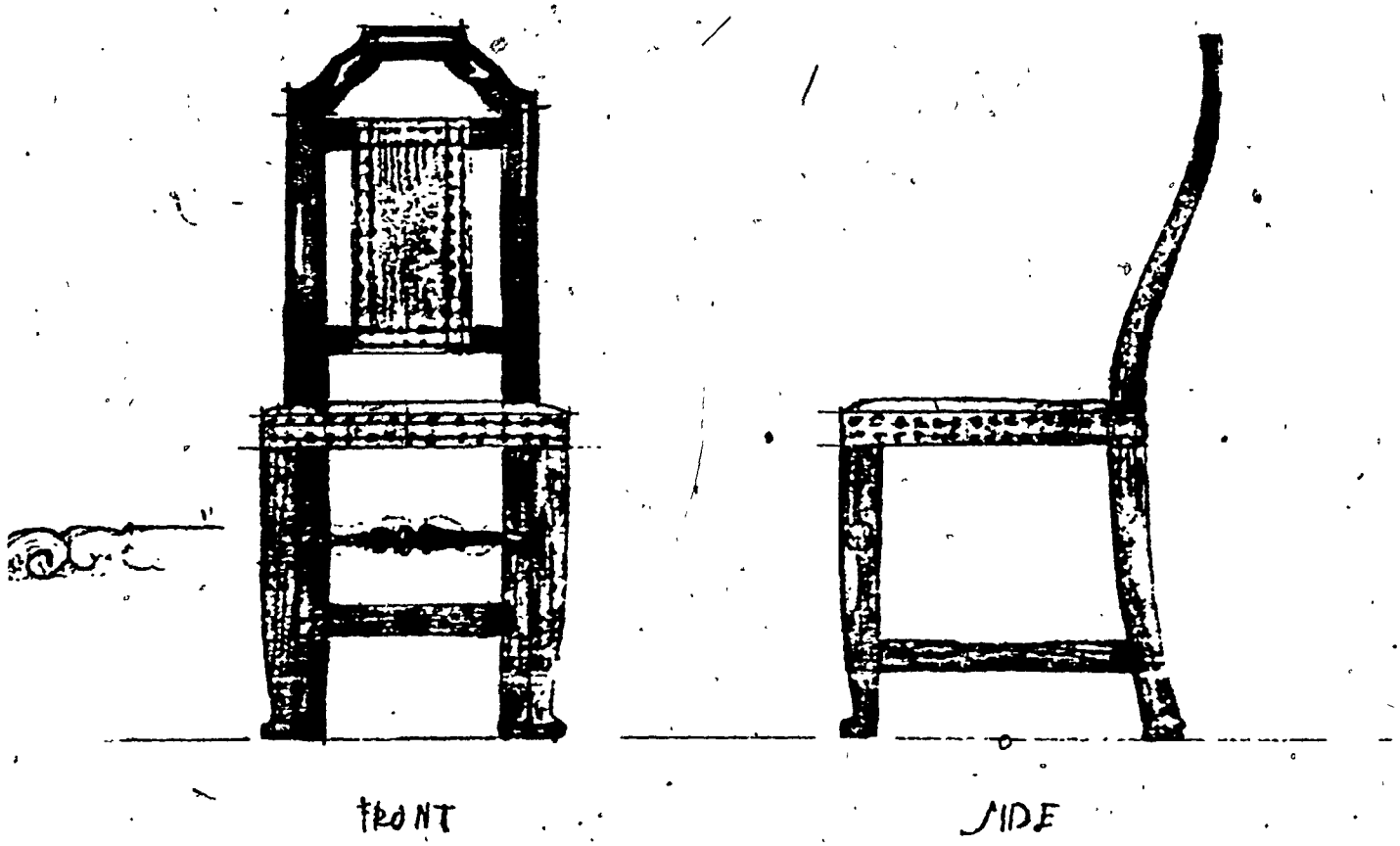


Fig. 24. McGill University Union. Chair design by Nobbs.

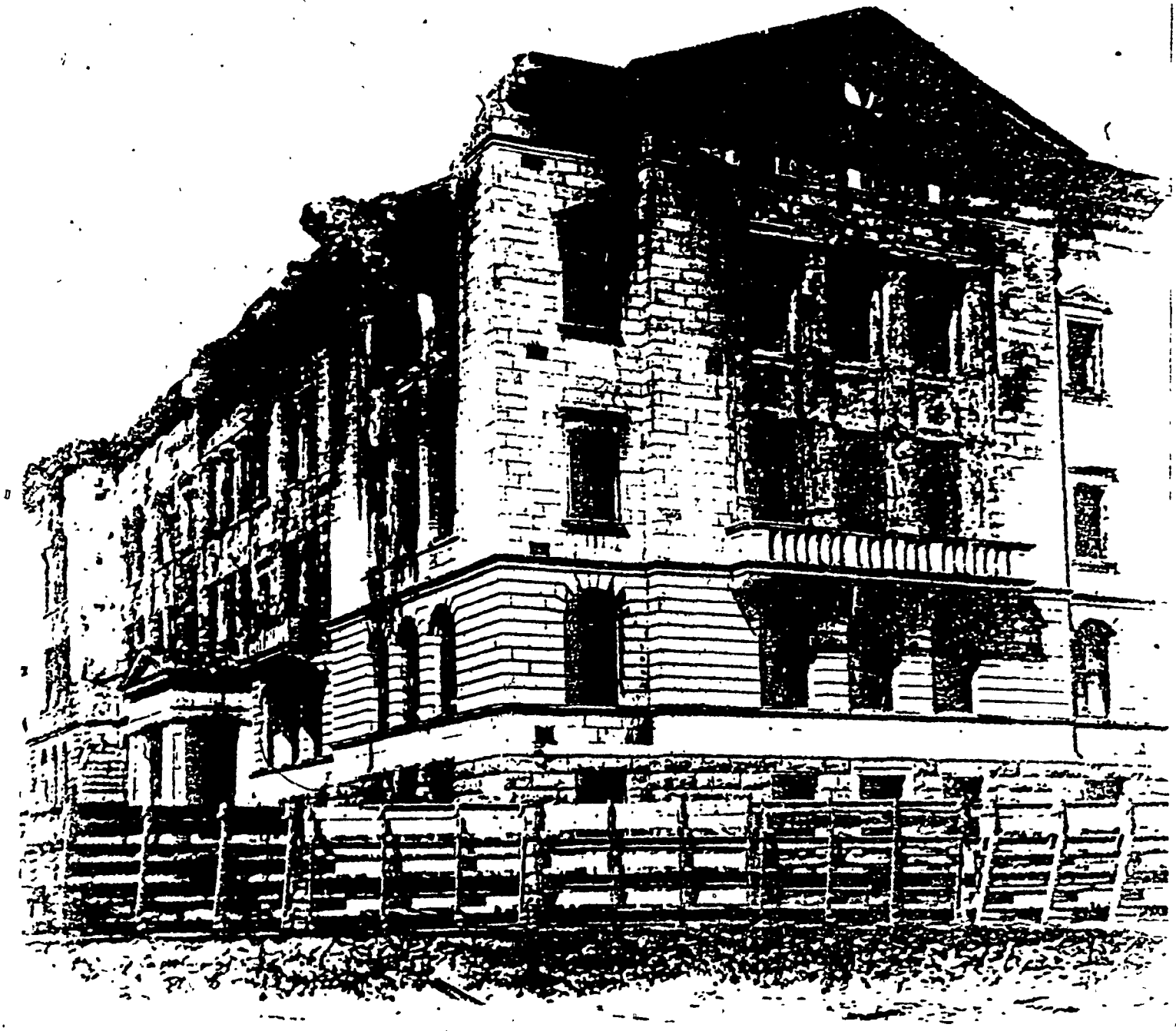


Fig. 25. Taylor, Hogle and Davis. First Macdonald Engineering Building, McGill University, Montreal (1893), following the fire of 5 April 1907.

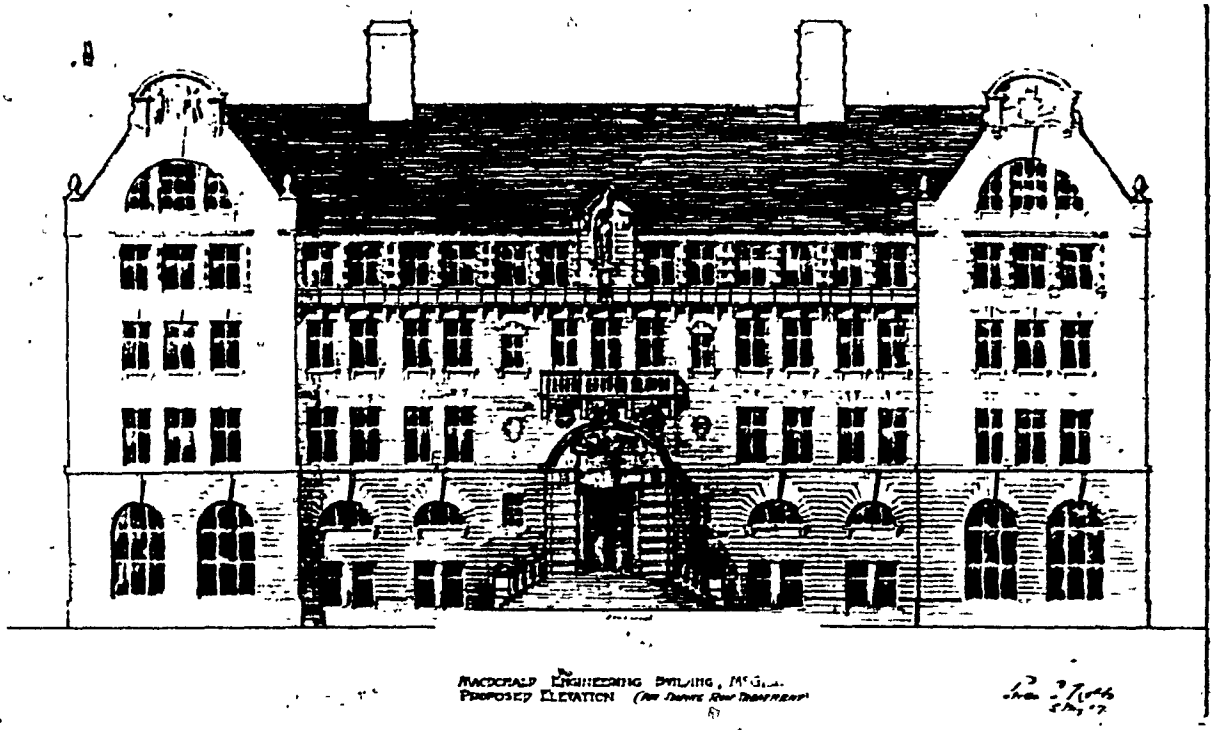


Fig. 26. P.E. Nobbs. Macdonald Engineering Building, McGill University, Montreal. First proposal for rebuilding - front elevation (5 May 1907).

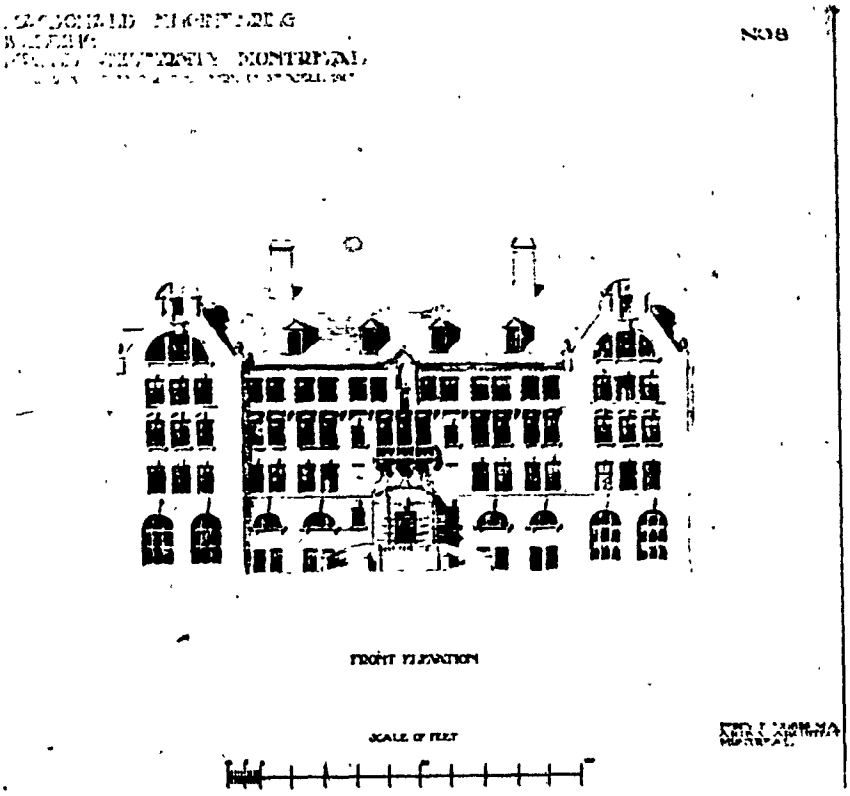


Fig. 27. Macdonald Engineering Building. Second proposal for rebuilding - front elevation.

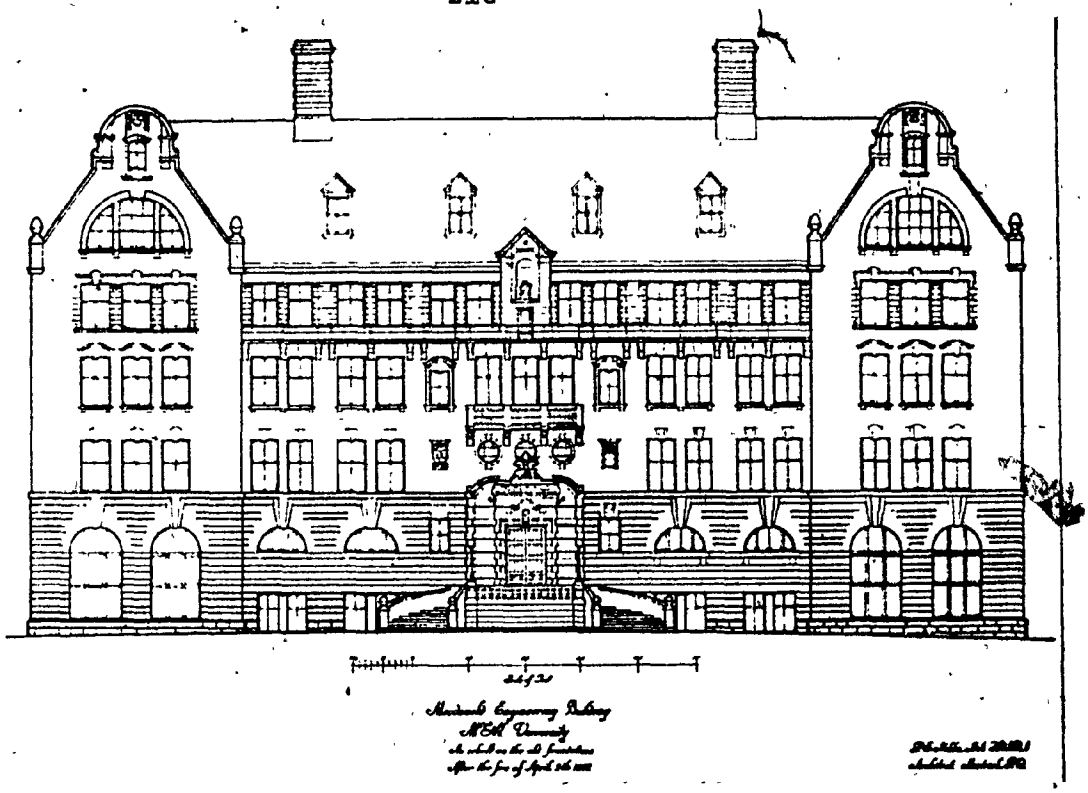


Fig. 28. Macdonald Engineering Building. Third proposal for rebuilding - front elevation.

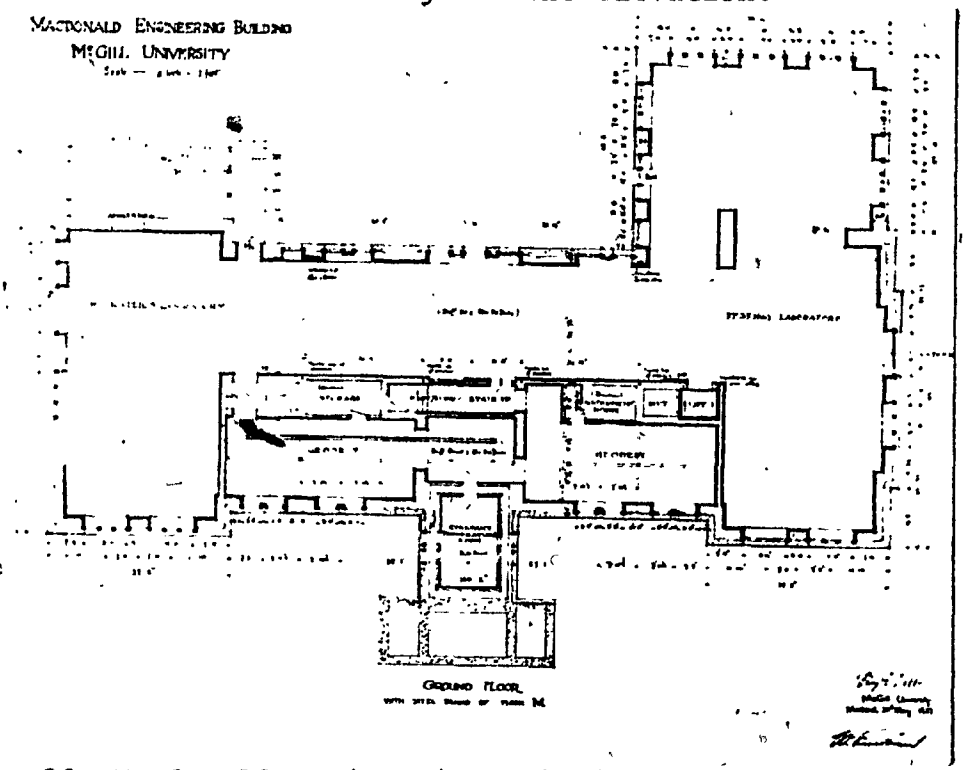


Fig. 29. Macdonald Engineering Building. Ground floor plan.

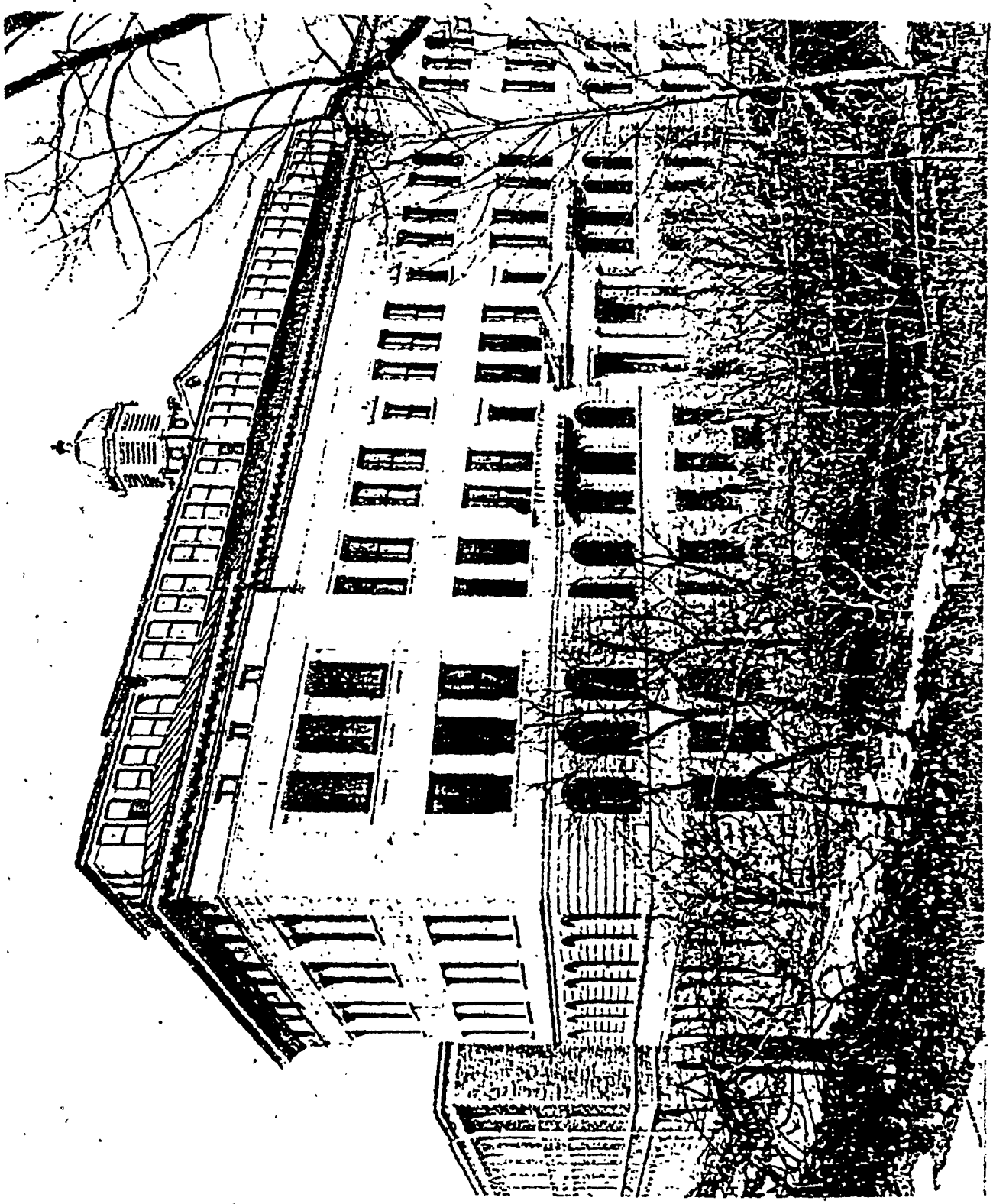


Fig. 30. First Macdonald Engineering Building before the fire of 5 April 1907.

Fig. 31 (p. 220). Macdonald Engineering Building. Interior, staircase hall.

Fig. 32. John Ostell. Arts Building, McGill University, Montreal (1843).

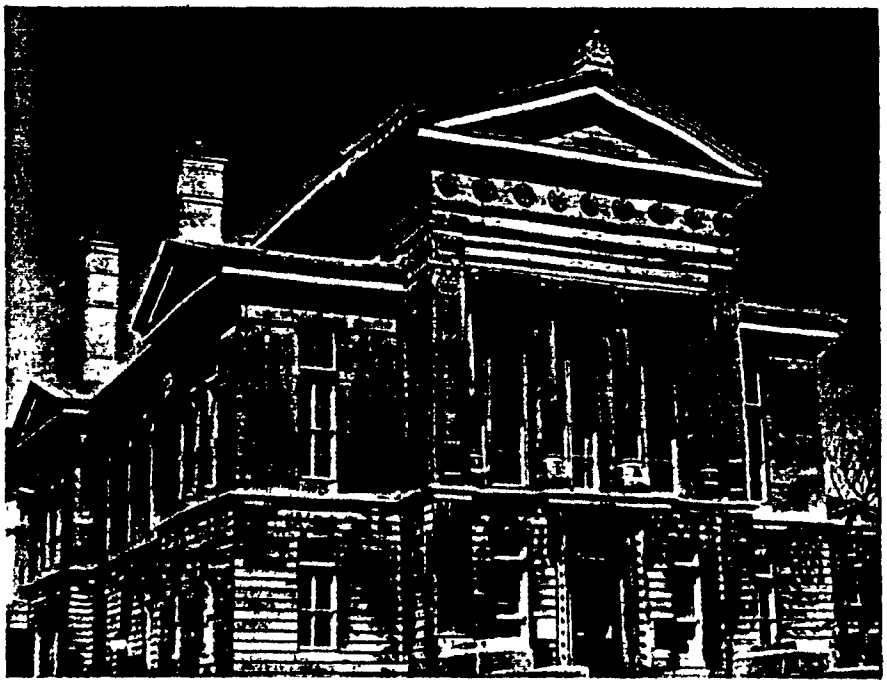


Fig. 33. Hutchison and Steele. Redpath Museum, McGill University, Montreal (1880).

Fig. 34. Taylor, Hogle and Davis. Macdonald Mining and Chemistry Building (1896, left), and Macdonald Physics Building (1893, right), McGill University, Montreal.

Fig. 35. R. Norman Shaw. Albert Hall Mansions, London (1879).

Fig. 36.
New Scotland Yard.
Detail, gable pediment.

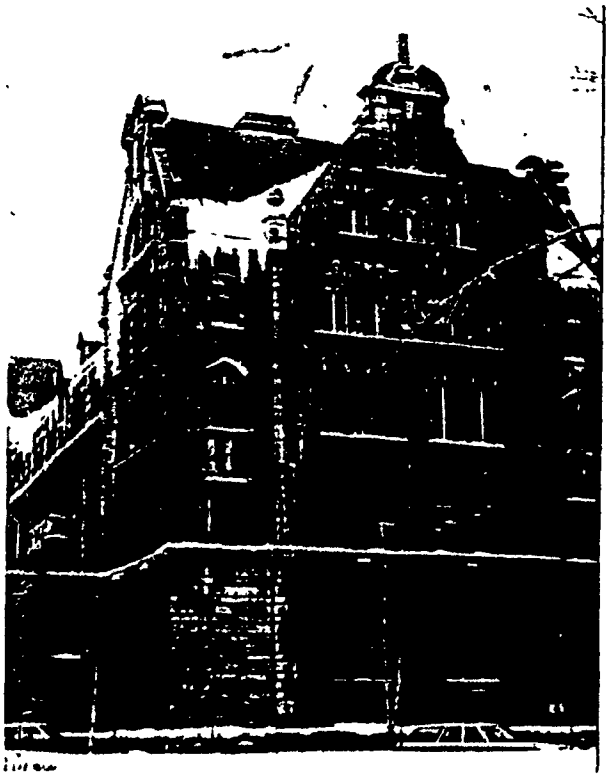


Fig. 37. Macdonald
Engineering Building.
Detail, gable pediment.

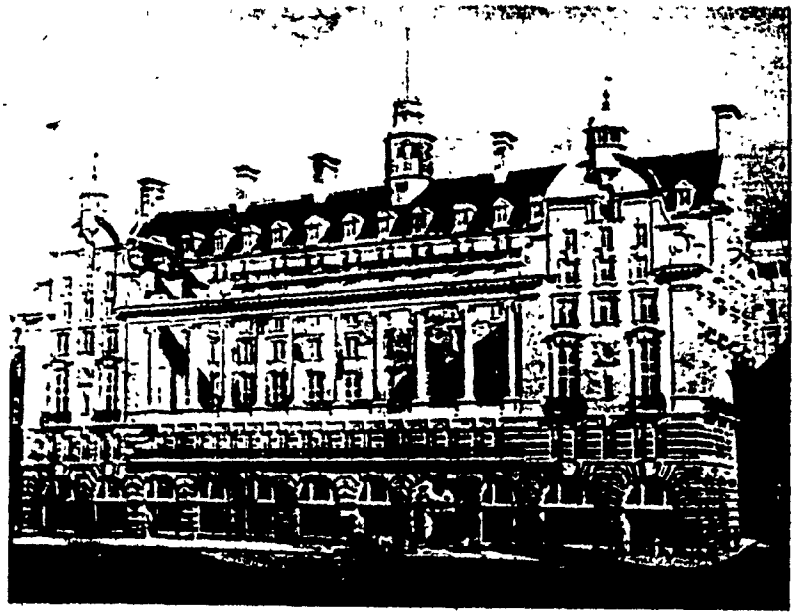


Fig. 38. R. Norman Shaw. Picadilly Hotel, London (1905-8).

Fig. 39. Macdonald Engineering Building. Detail, front façade.

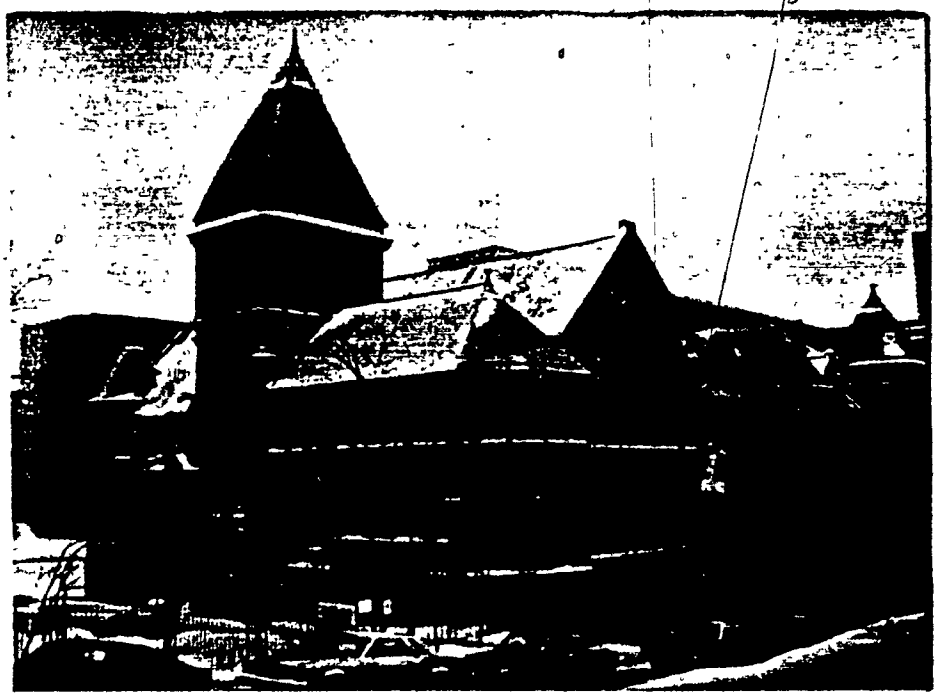


Fig. 40. Taylor and Gordon. Redpath Library. (McGill University Library), McGill University, Montreal (1893).

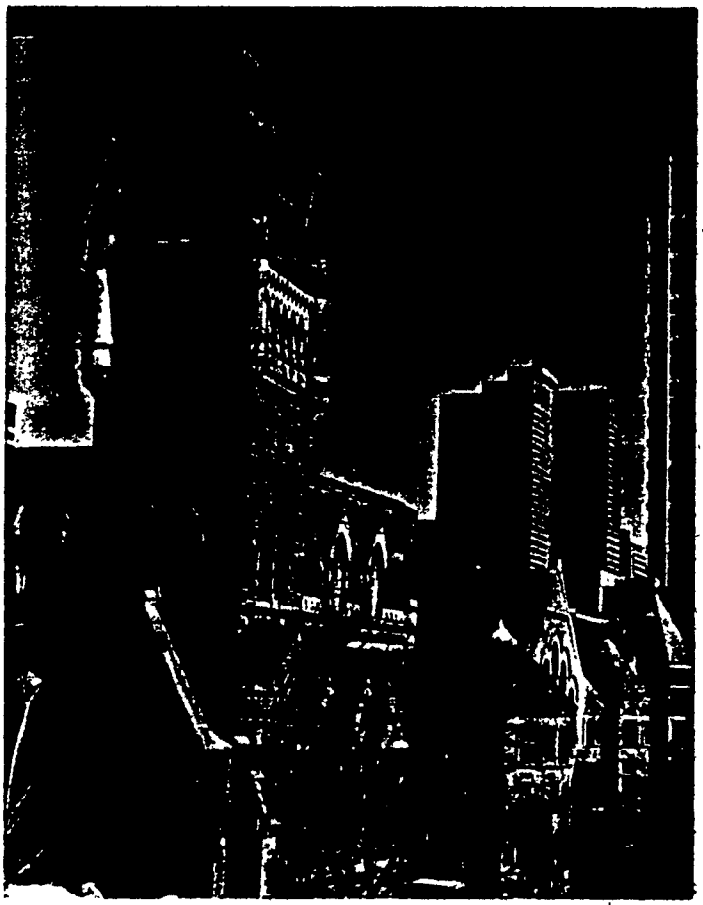


Fig. 41.
John James Browne.
Presbyterian College.
extant addition
(now Morrice Hall),
McGill University,
Montreal (1893).

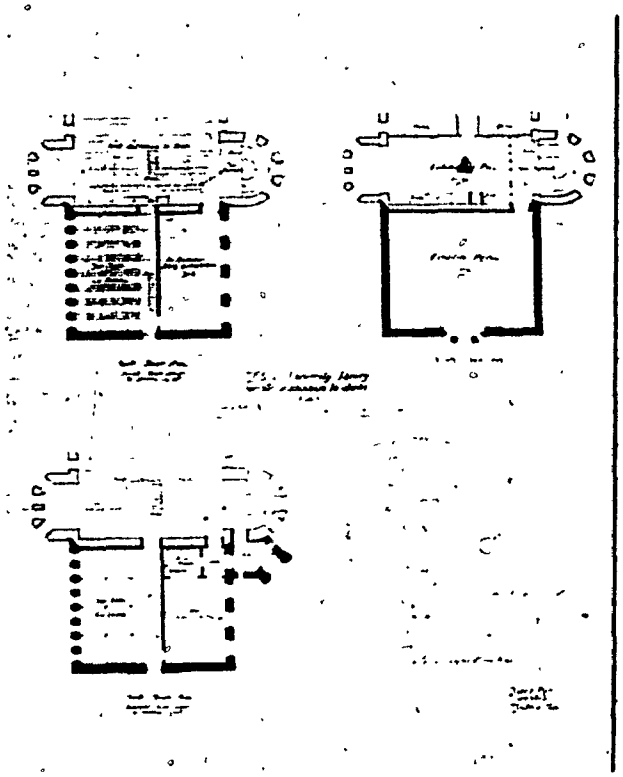


Fig. 42. Nobbs and Hyde. McGill University Library, second extension to stacks. First, third, and fourth floor plan (1921).

Fig. 43. McGill University Library, second extension to stacks. East, south, and west elevations (1921).

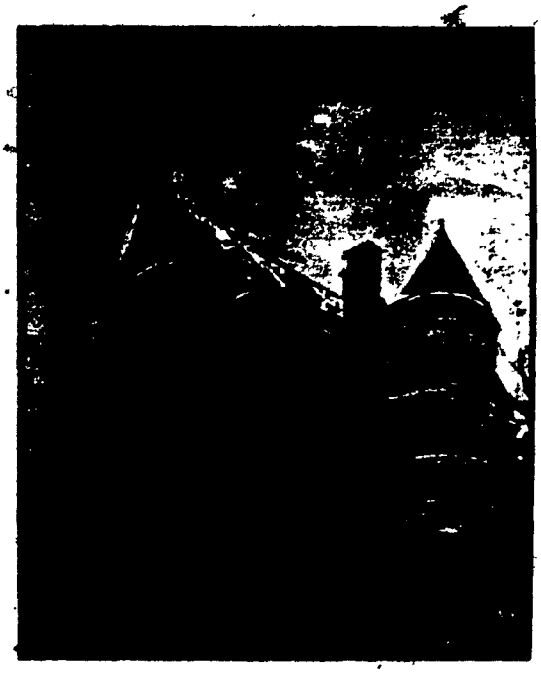
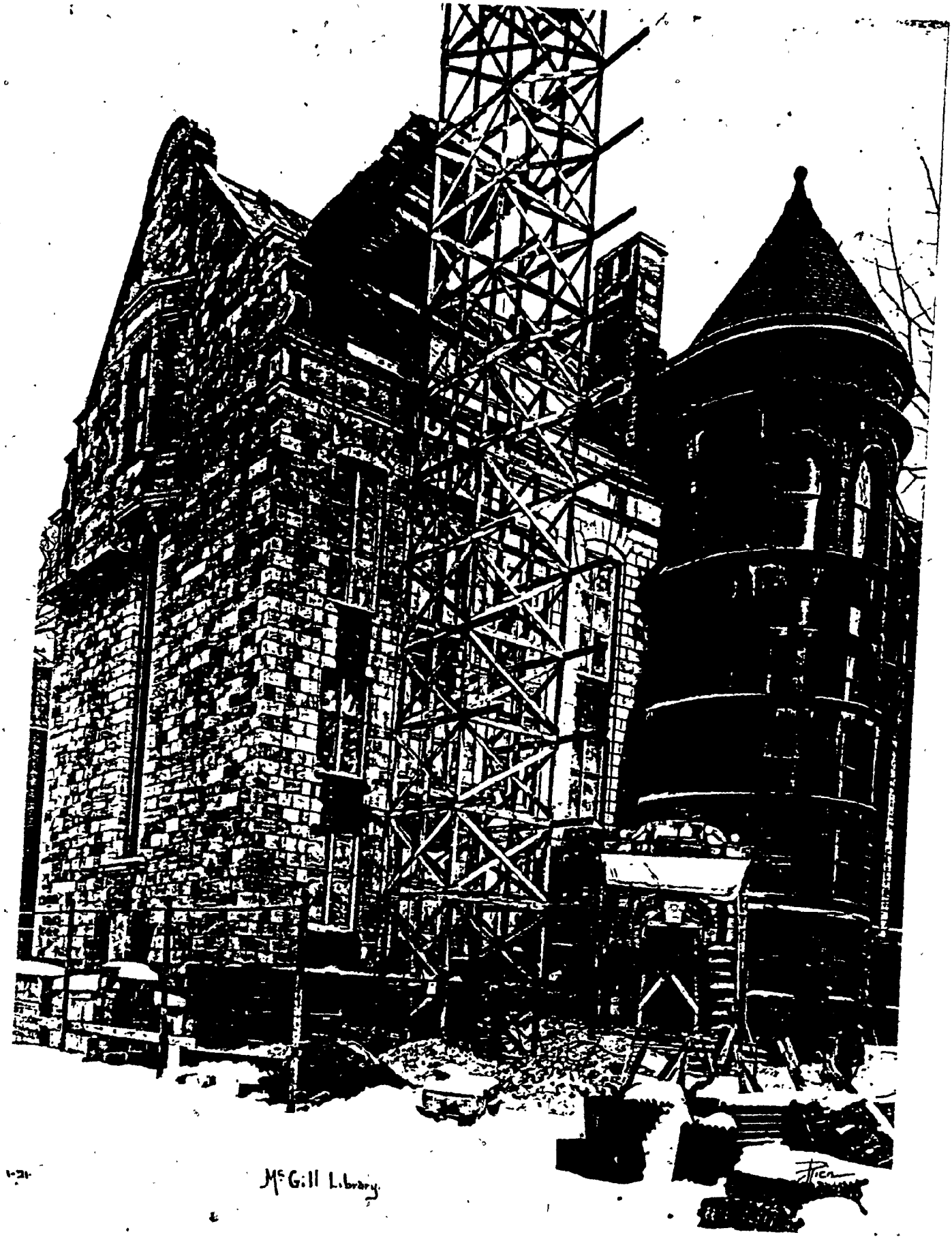


Fig. 44. McGill University Library, second extension to stacks. Presentation drawing by Nobbs (1921).

Fig. 45 (p. 228). McGill University Library, second extension to stacks. Construction photograph.



McGill Library

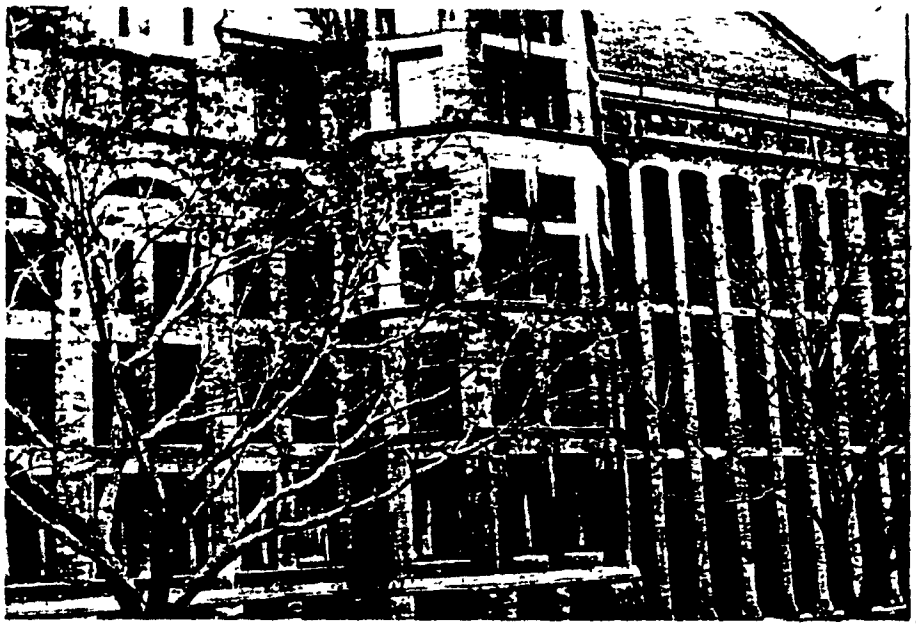


Fig. 46. McGill University Library, second extension to stacks. Detail of window wall along McTavish Street.

Fig. 47. McGill University Library. McTavish Street façade.

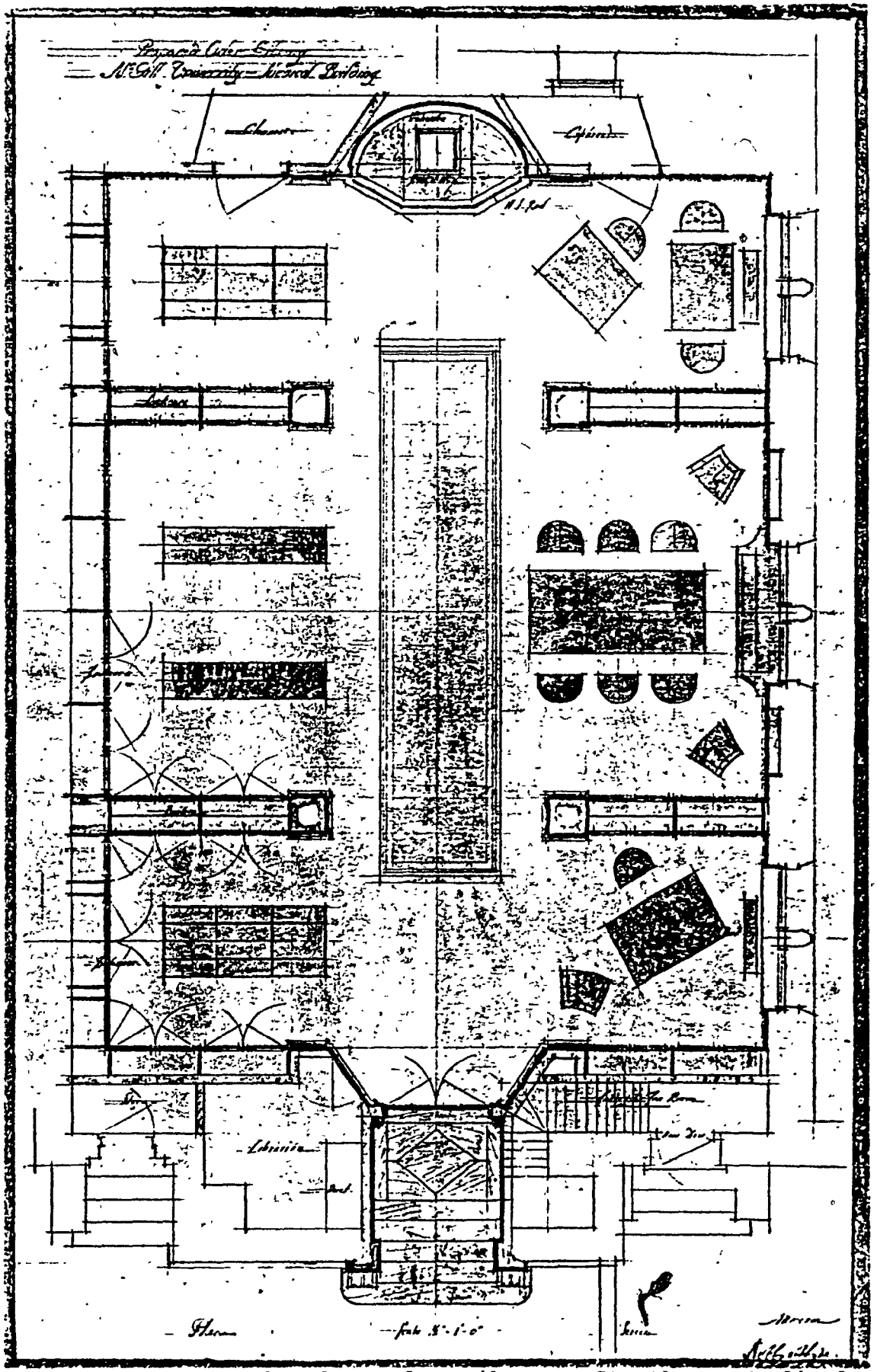


Fig. 48. Nobbs and Hyde. Osler Library, Strathcona Medical Building, McGill University, Montreal. First proposal - plan (10 June 1921).

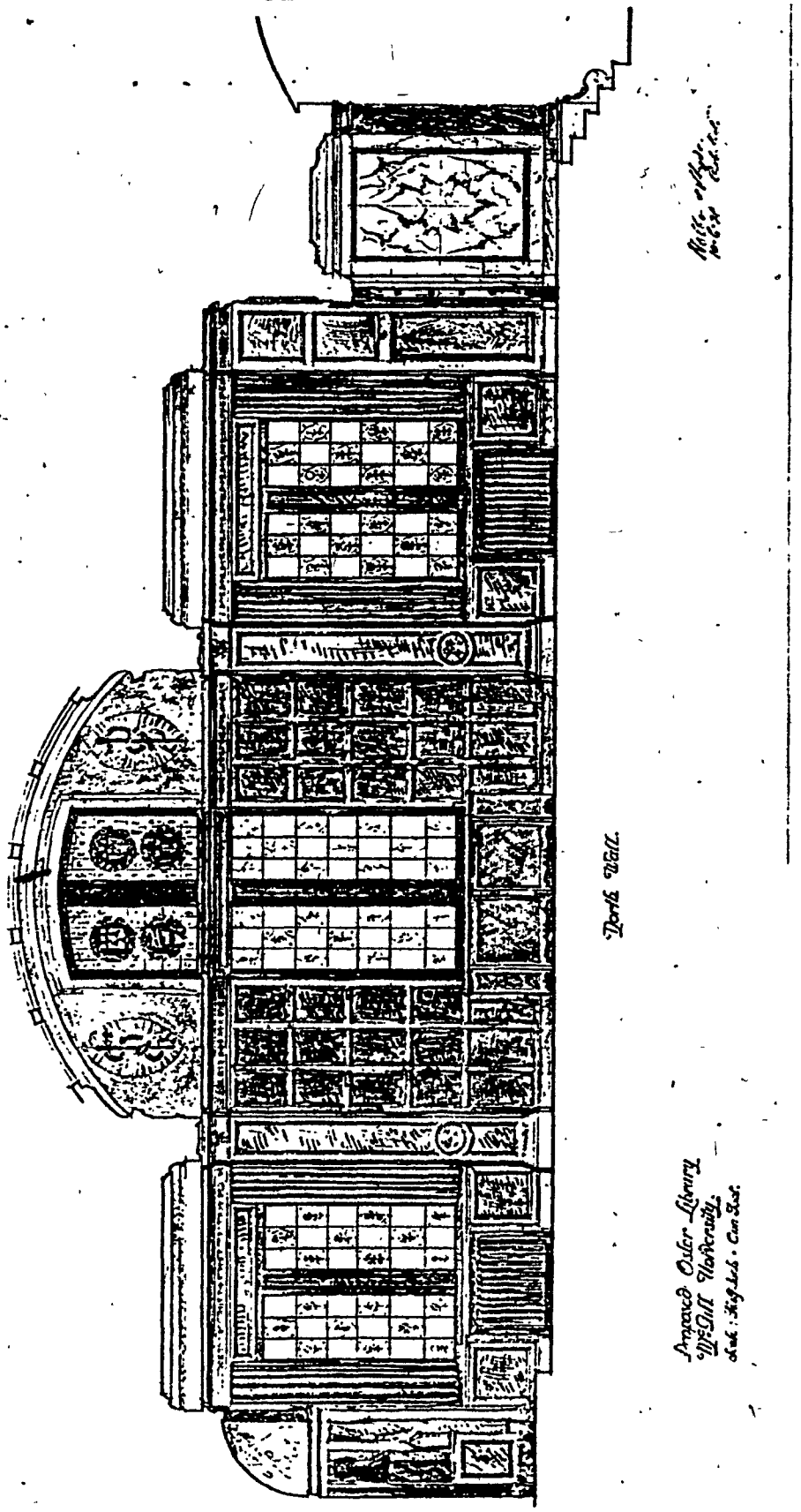


Fig. 49. Osler Library. First proposal - north wall elevation (10 June 1921).

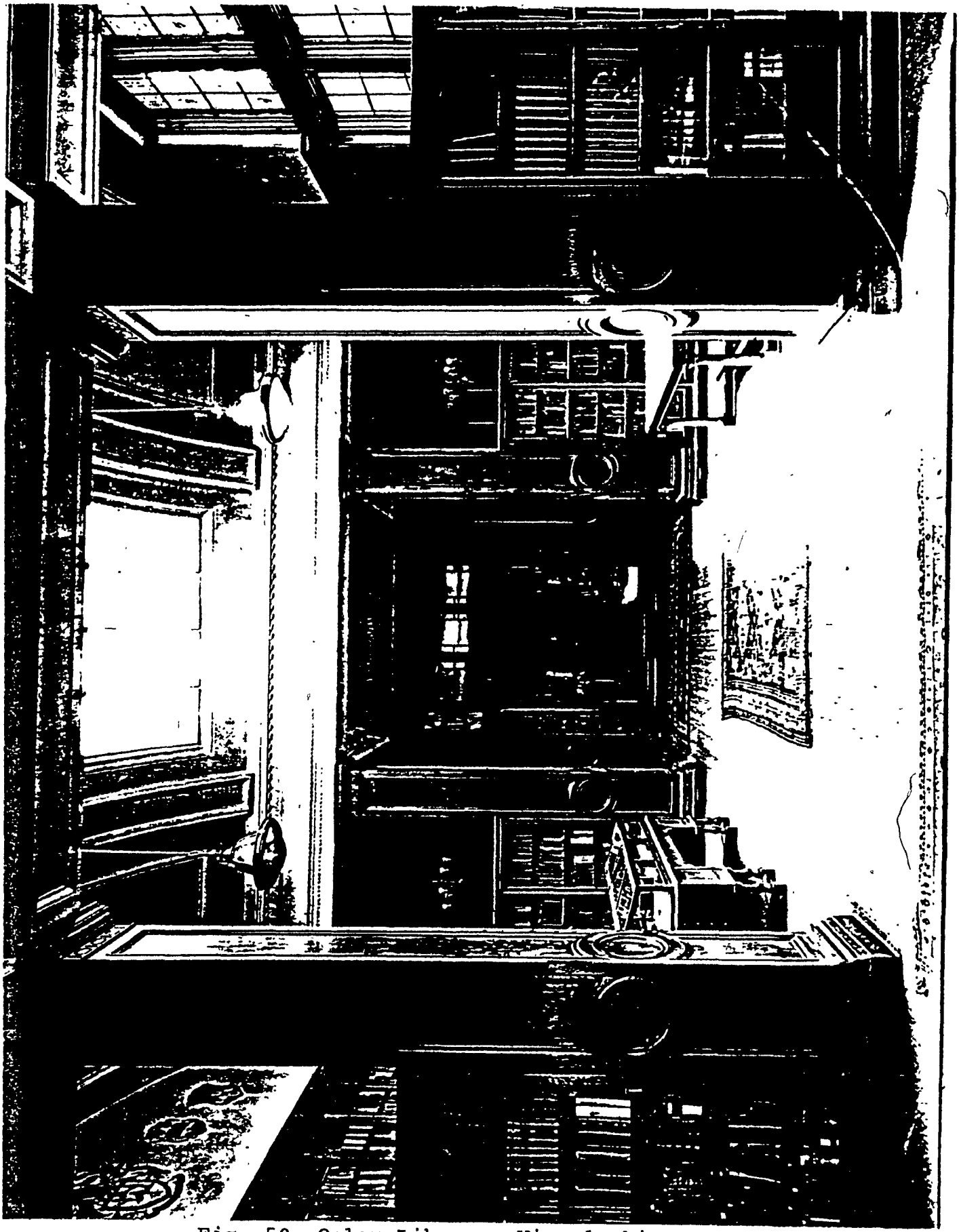


Fig. 50. Osler Library. View looking west.

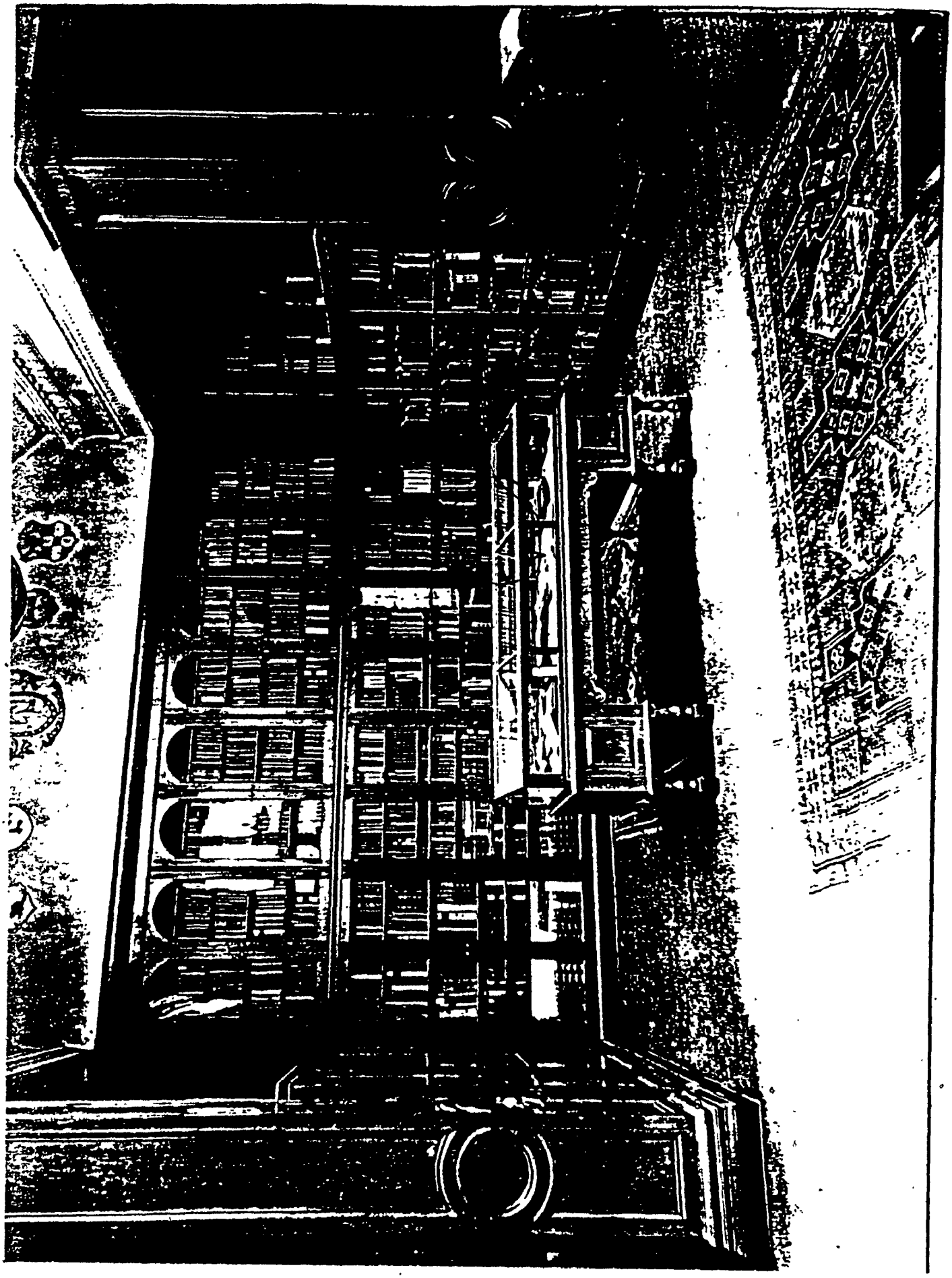


Fig. 51. Osler Library. South wall.

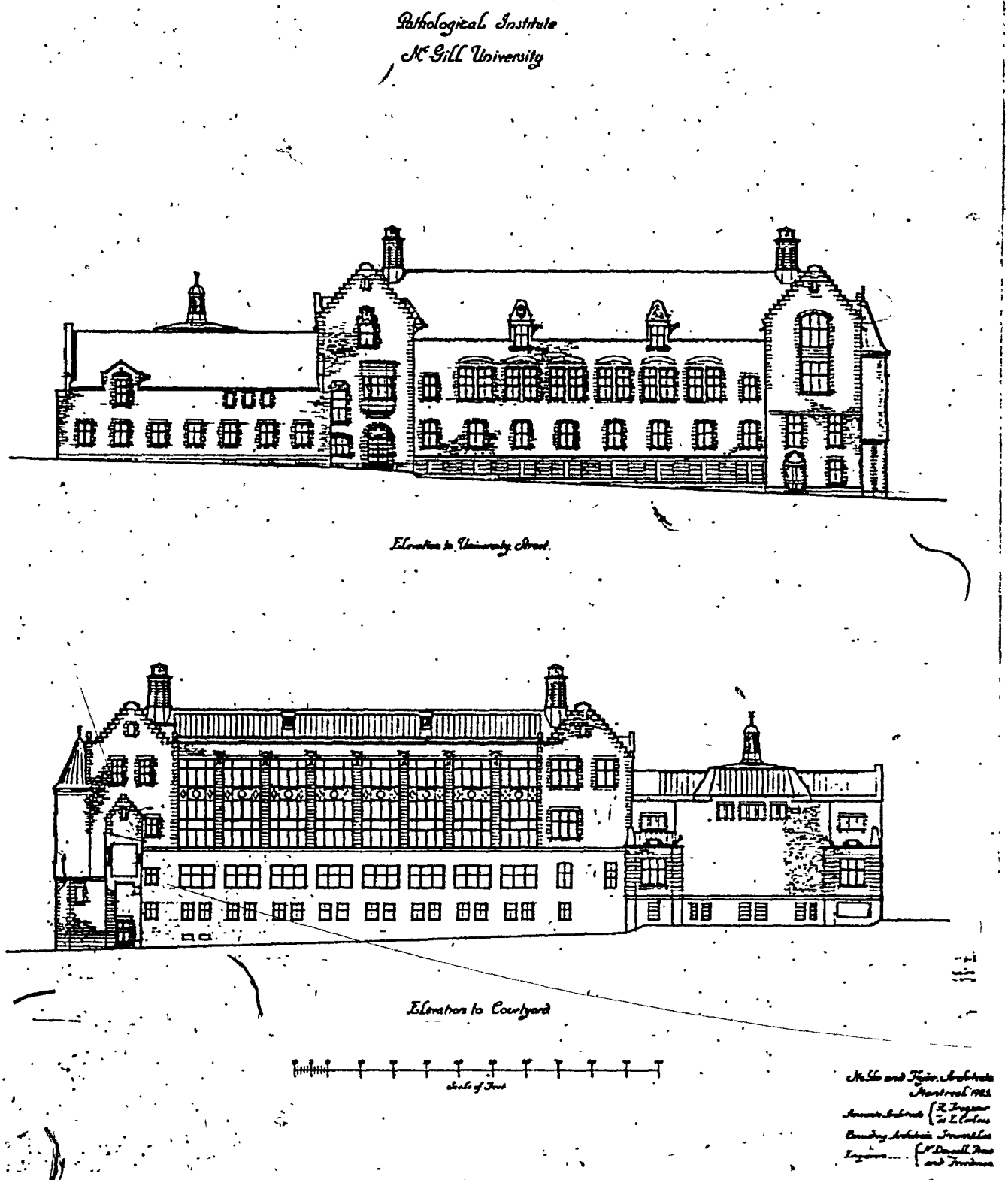


Fig. 52. Nobbs and Hyde. Pathological Institute. McGill University, Montreal. Elevations to University Street and to Courtyard (1923).

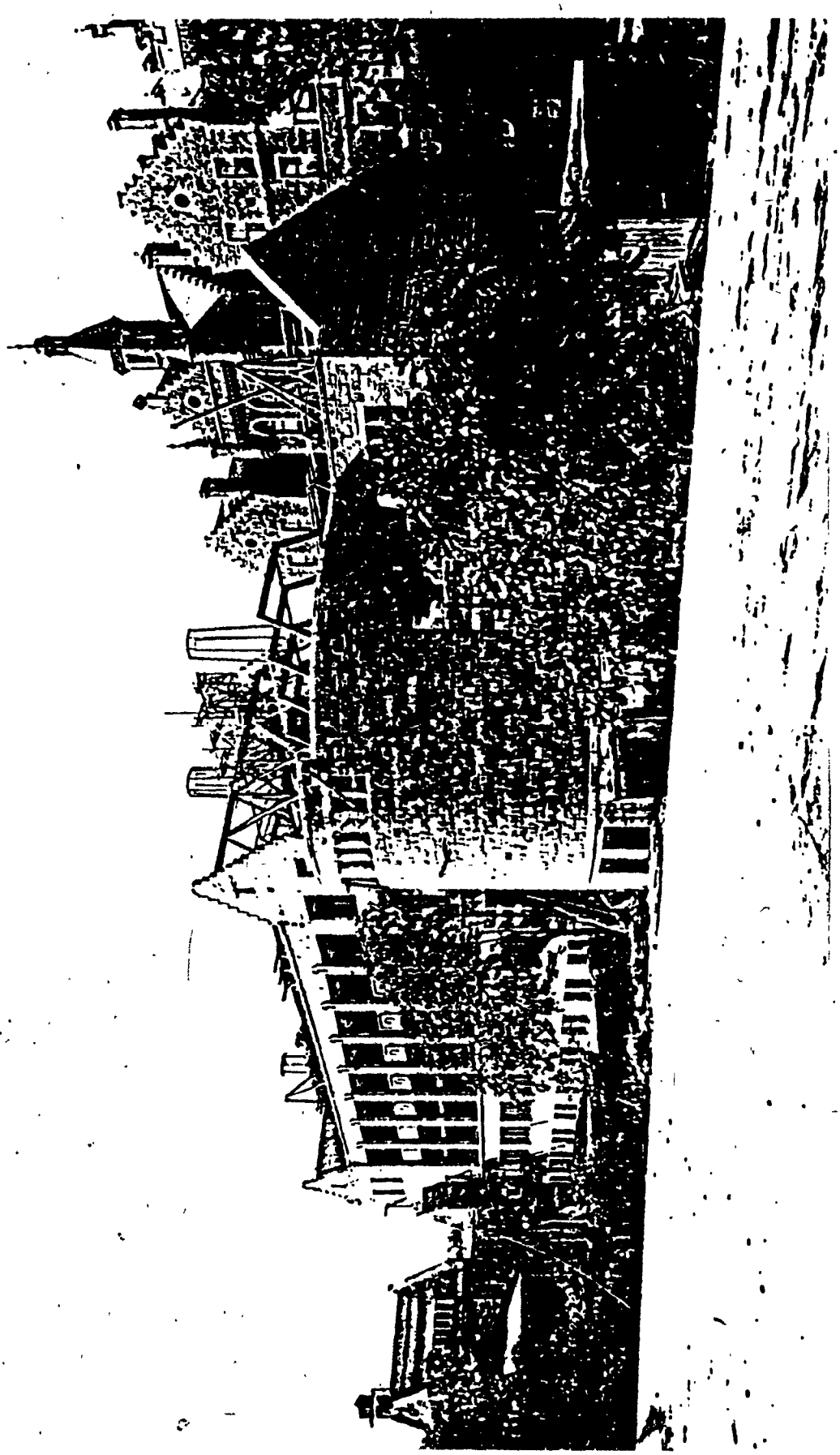


Fig. 53. Pathological Institute. Construction photograph of courtyard façade.

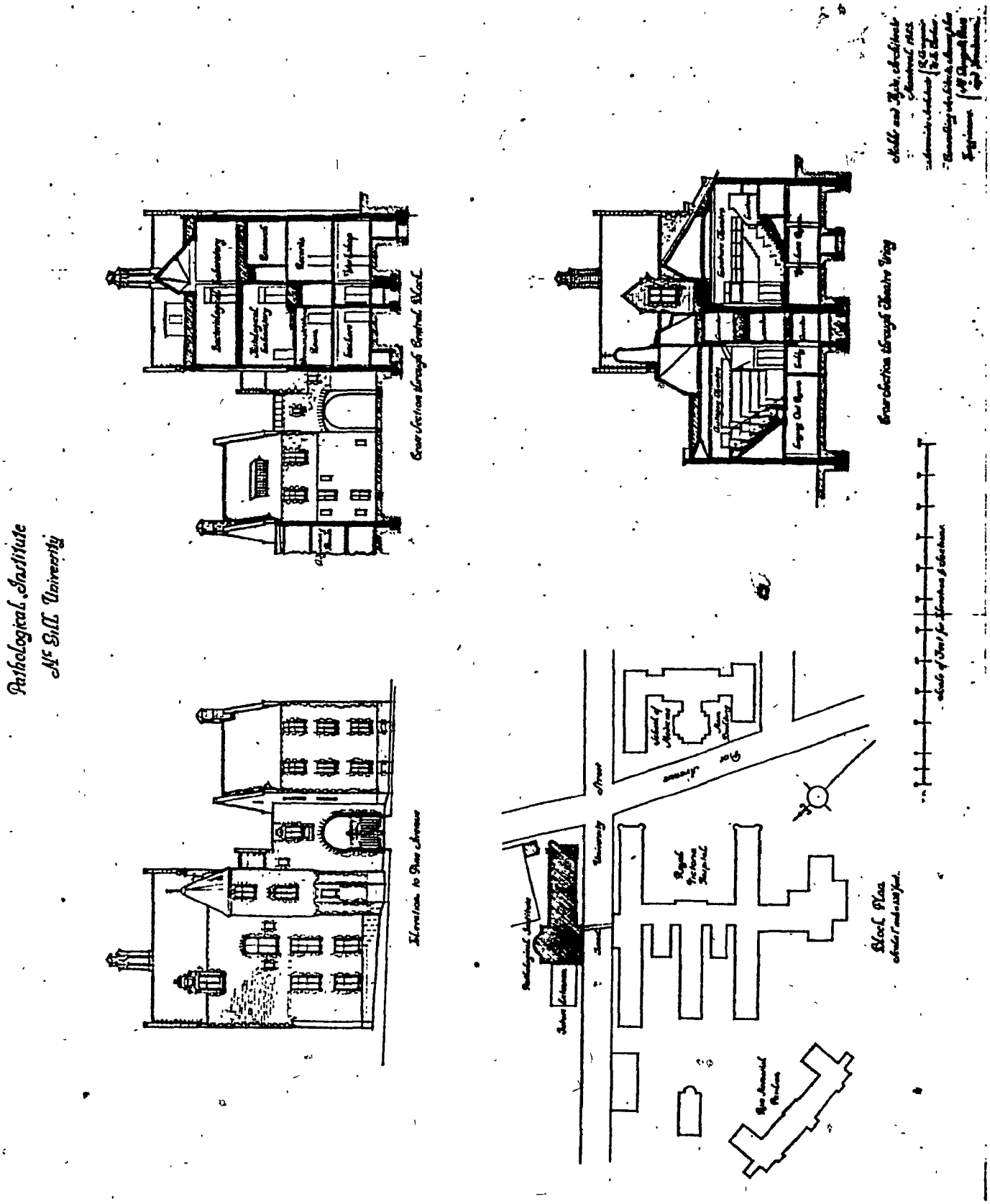


Fig. 54. Pathological Institute. Elevation to Pine Avenue, block plan and cross sections (1923).

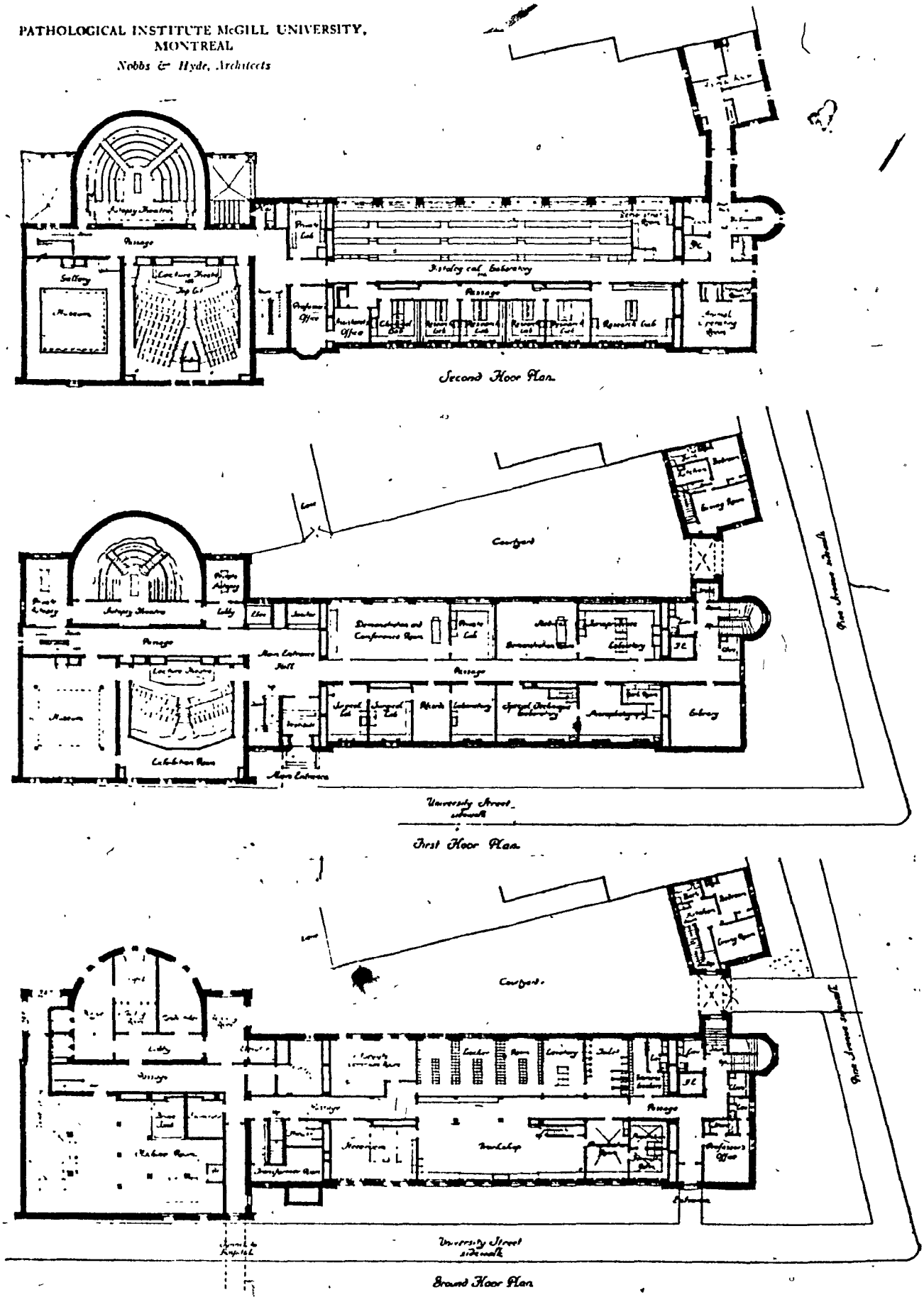


Fig. 55. Pathological Institute. Ground, first and second floor plans (1923).

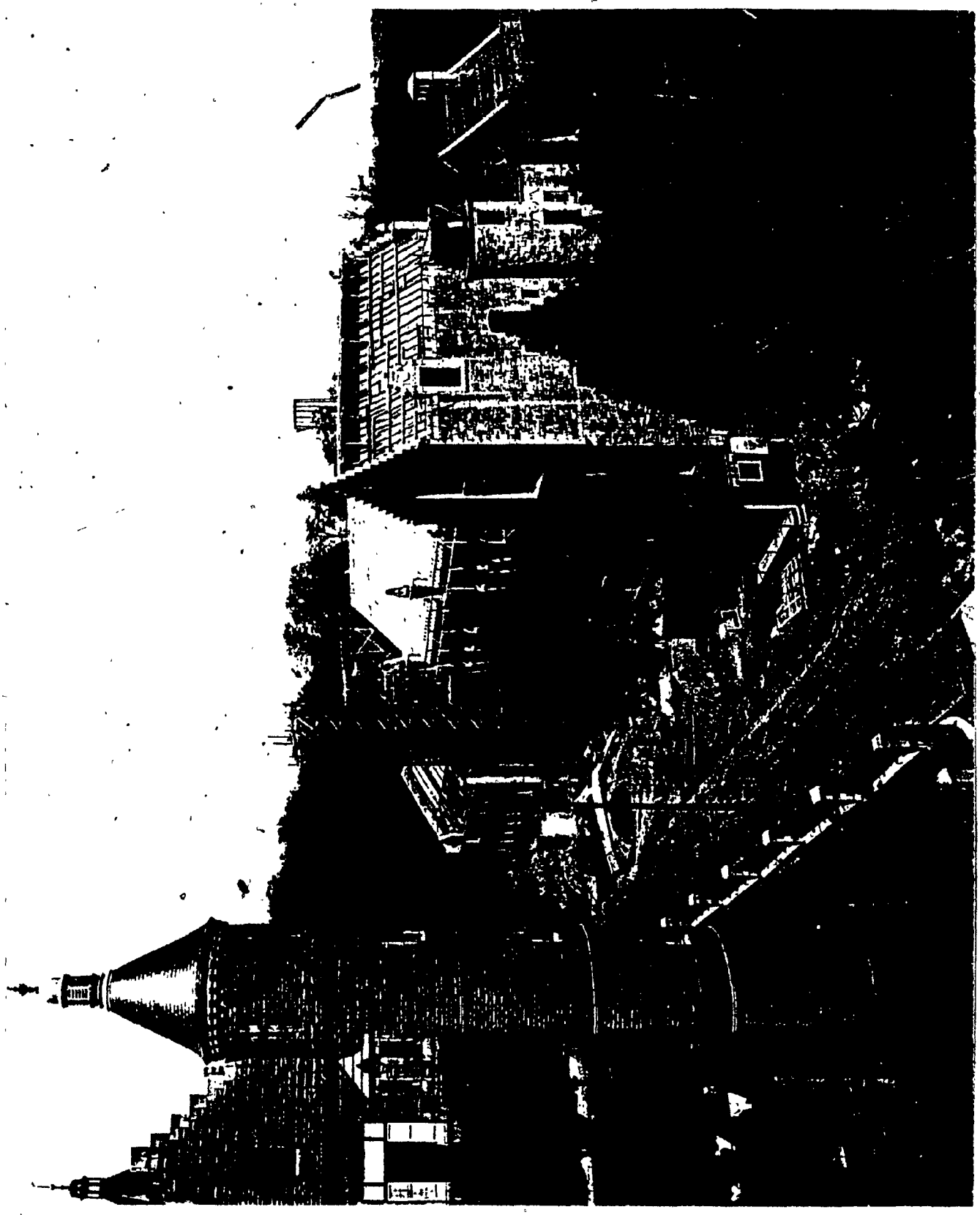


Fig. 56. Pathological Institute. Construction photograph of University Street façade.

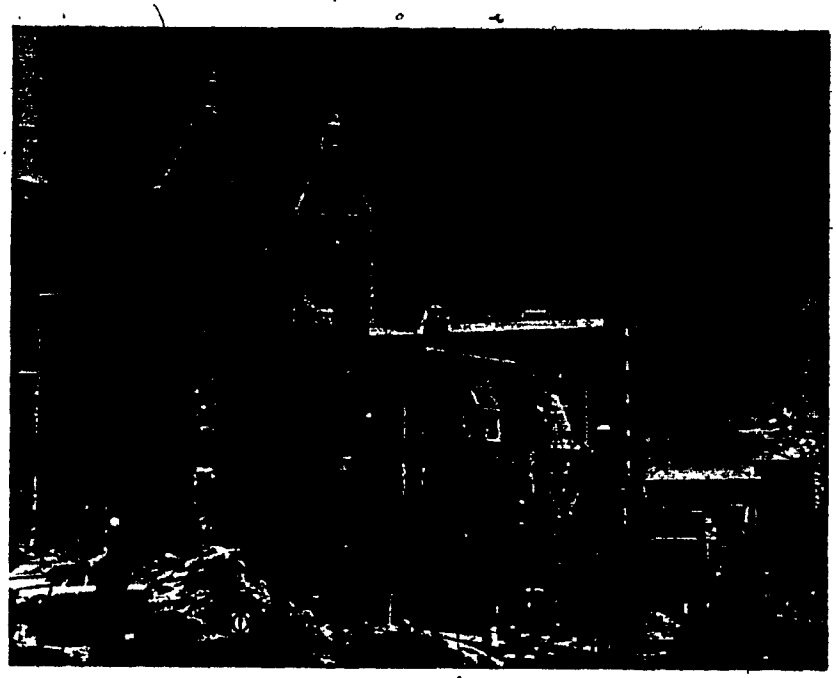


Fig. 57. Pathological Institute. View east along Pine Avenue showing relationship with hospital and neighbouring buildings.

Fig. 58. Pathological Institute and Field House. Watercolour rendering by Nobbs (28 June 1922).

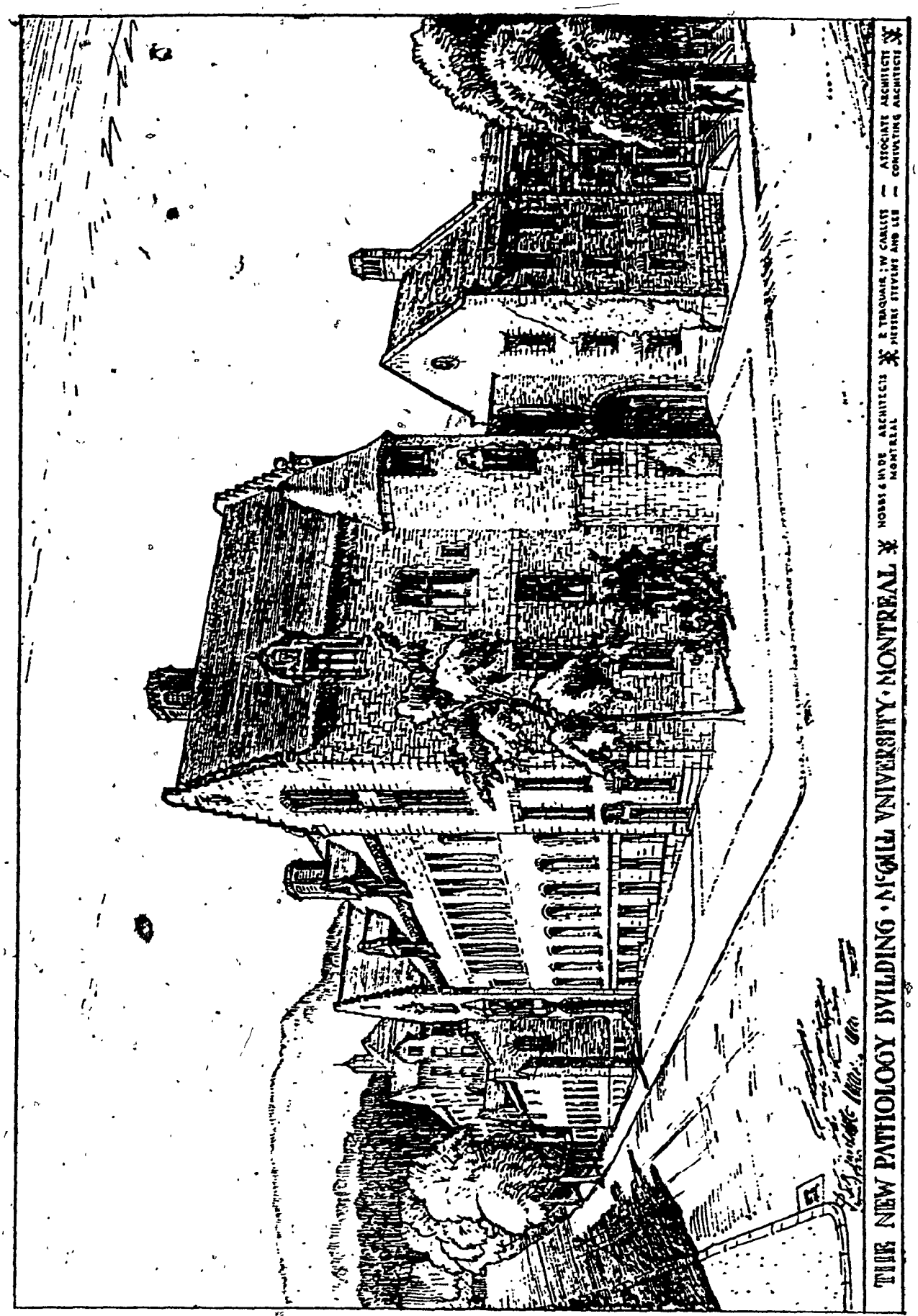


Fig. 59. Pathological Institute. Perspective drawing by Nobbs (1922).

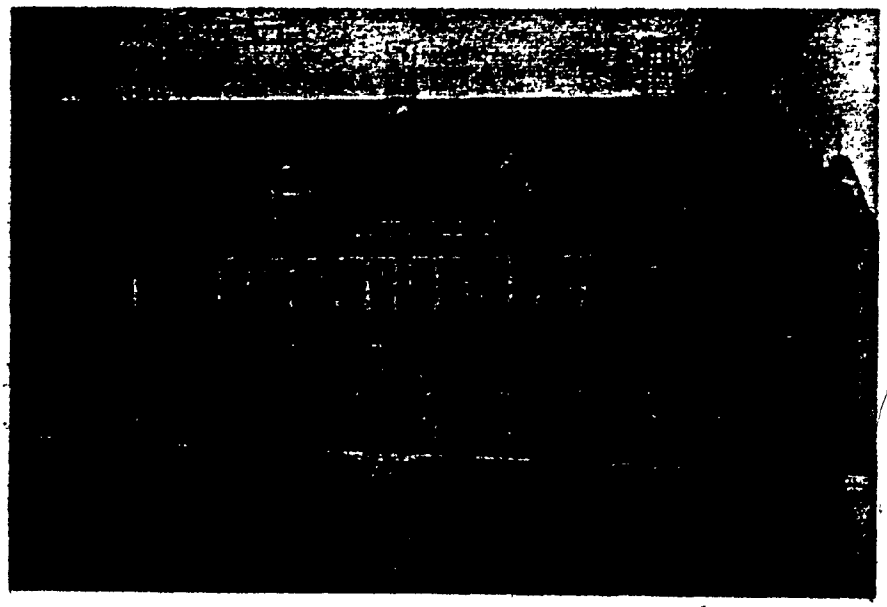


Fig. 60. Pathological Institute. Preliminary study for University Street façade by Nobbs.

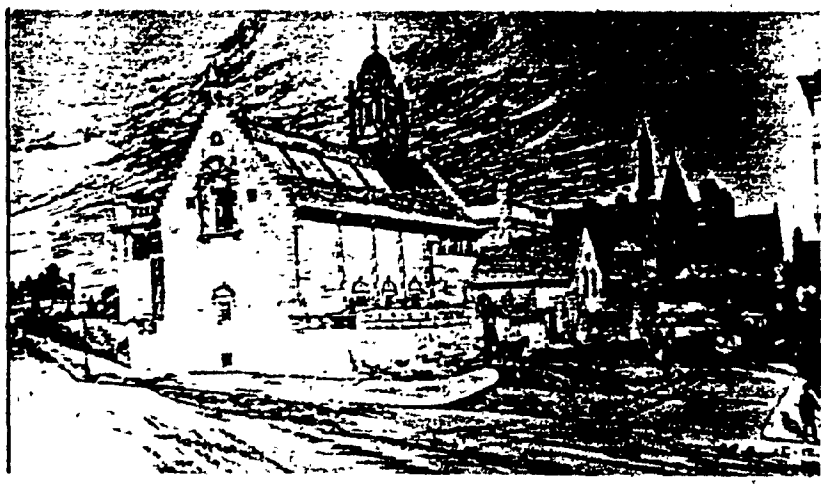


Fig. 61. Sir John Burnet. Western Infirmary Pathological Building, Glasgow (1894).

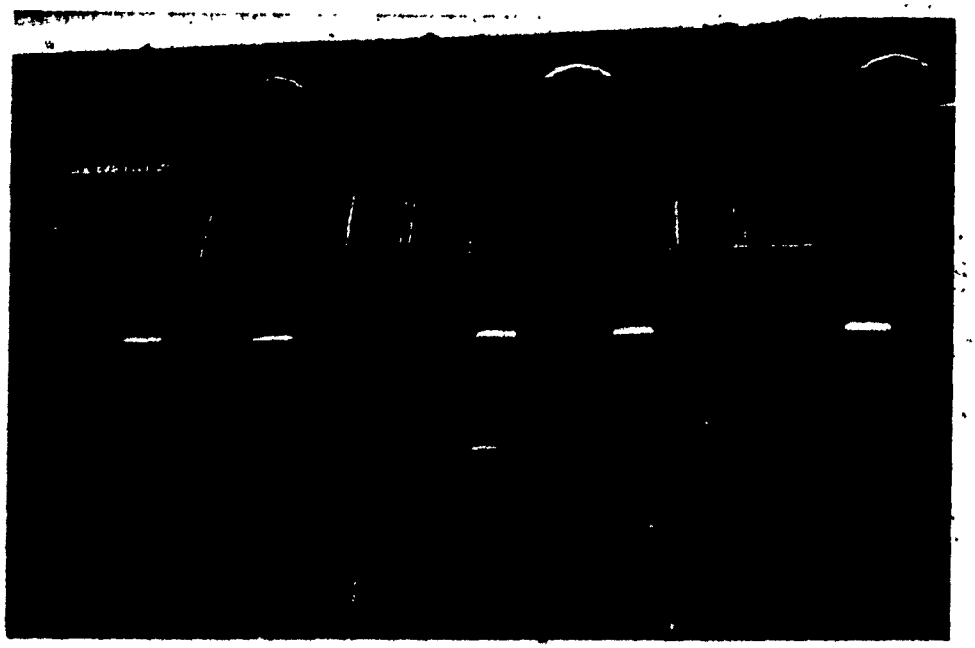
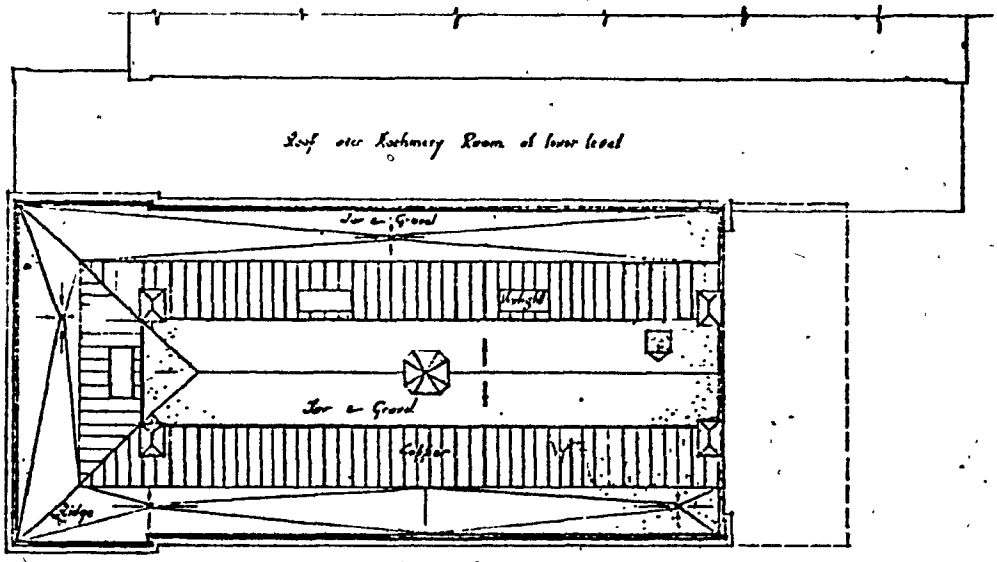


Fig. 62. Pathological Institute. Courtyard façade, detail of laboratory windows.

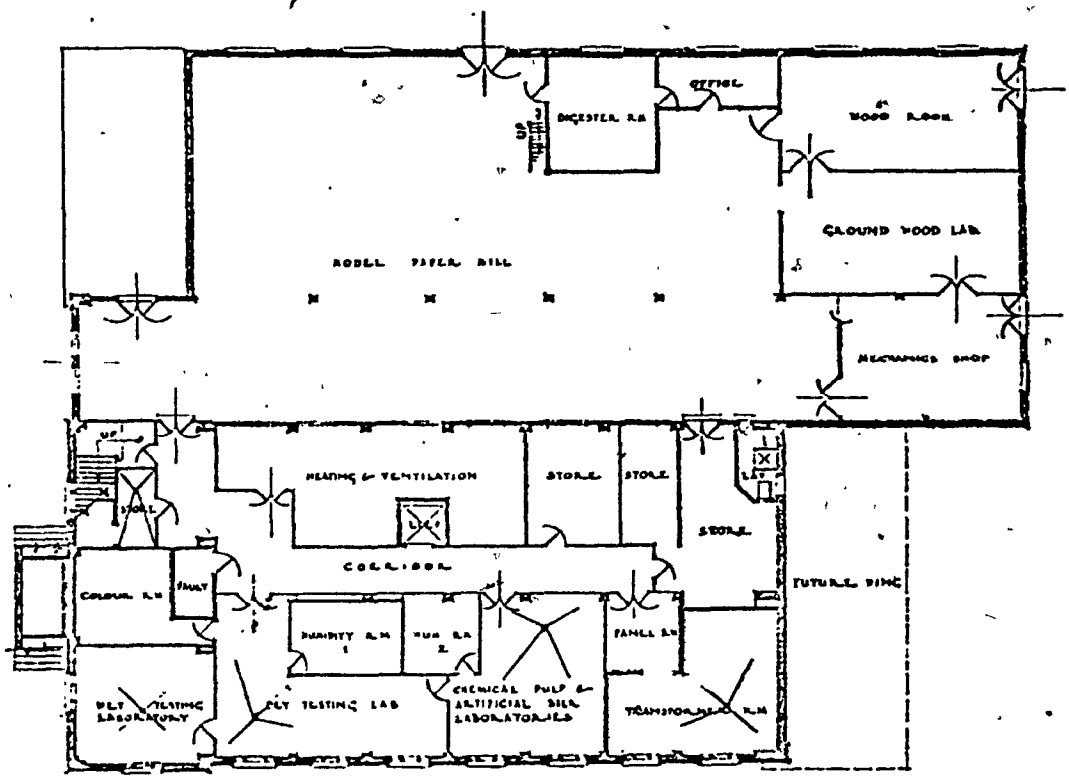
Fig. 63 (p. 244). Nobbs and Hyde. Pulp and Paper Research Institute of Canada, McGill University, Montreal. Roof and basement floor plans.

Fig. 64 (p. 245). Pulp and Paper Research Institute. First, second, and third floor plans.

Pulp & Paper Research Institute
McGill University Montreal PQ



Roof Plan

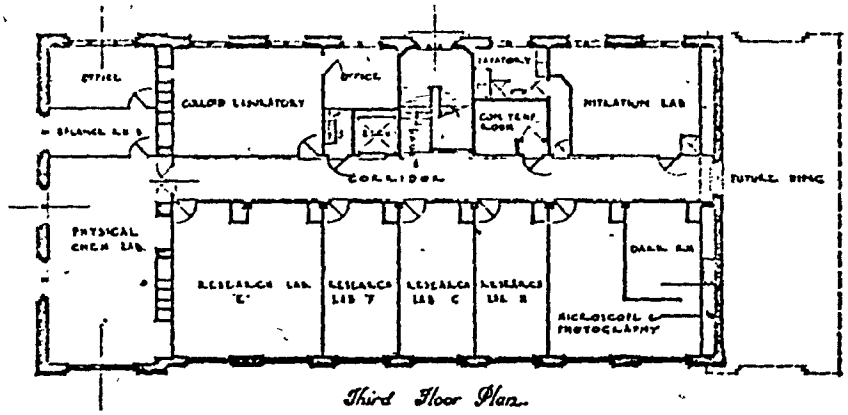


Basement Floor Plan

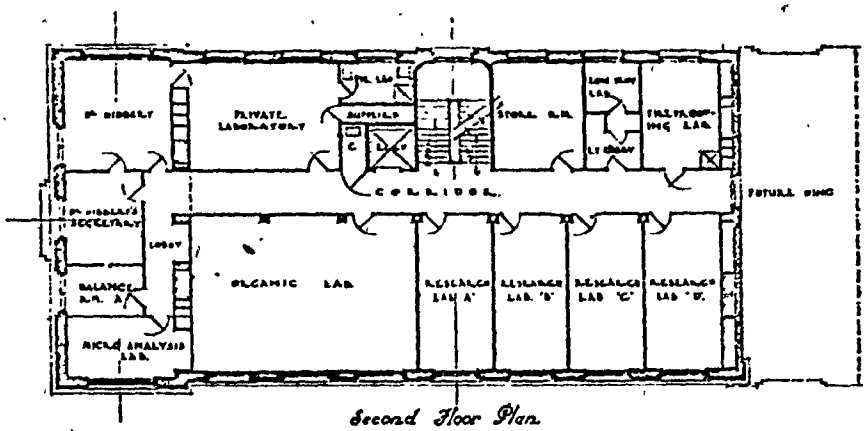
Scale of Feet

Nobbs & Hyde Architects
4 Phillips Square Montreal

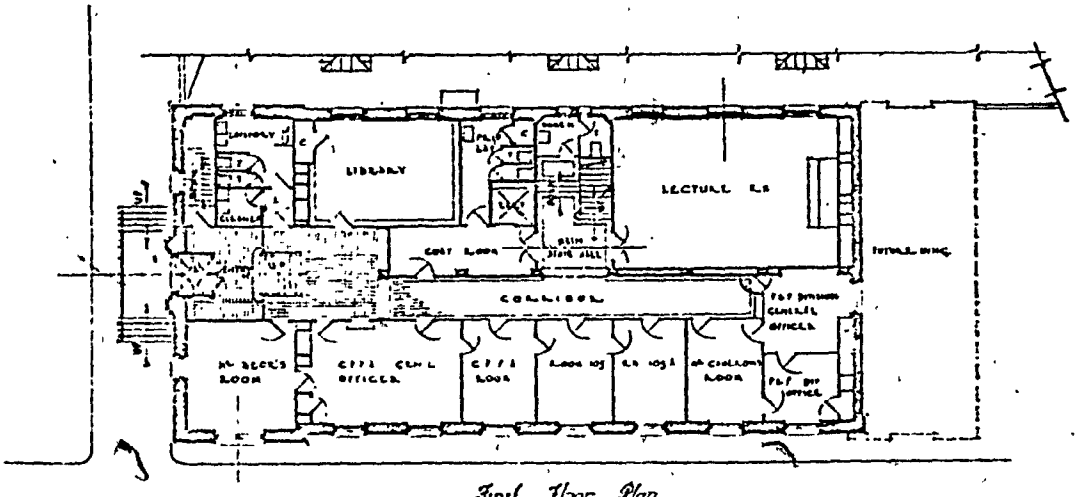
Pulp & Paper Research Institute
McGill University Montreal P.Q.



Third Floor Plan.



Second Floor Plan.



First Floor Plan.

Scale of Feet

Robb & Ayde Architects
14 Phillips Square Montreal.

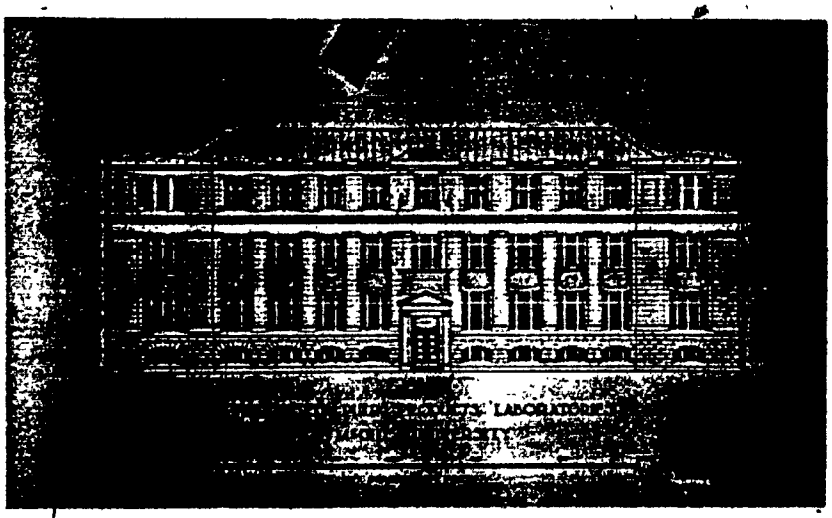
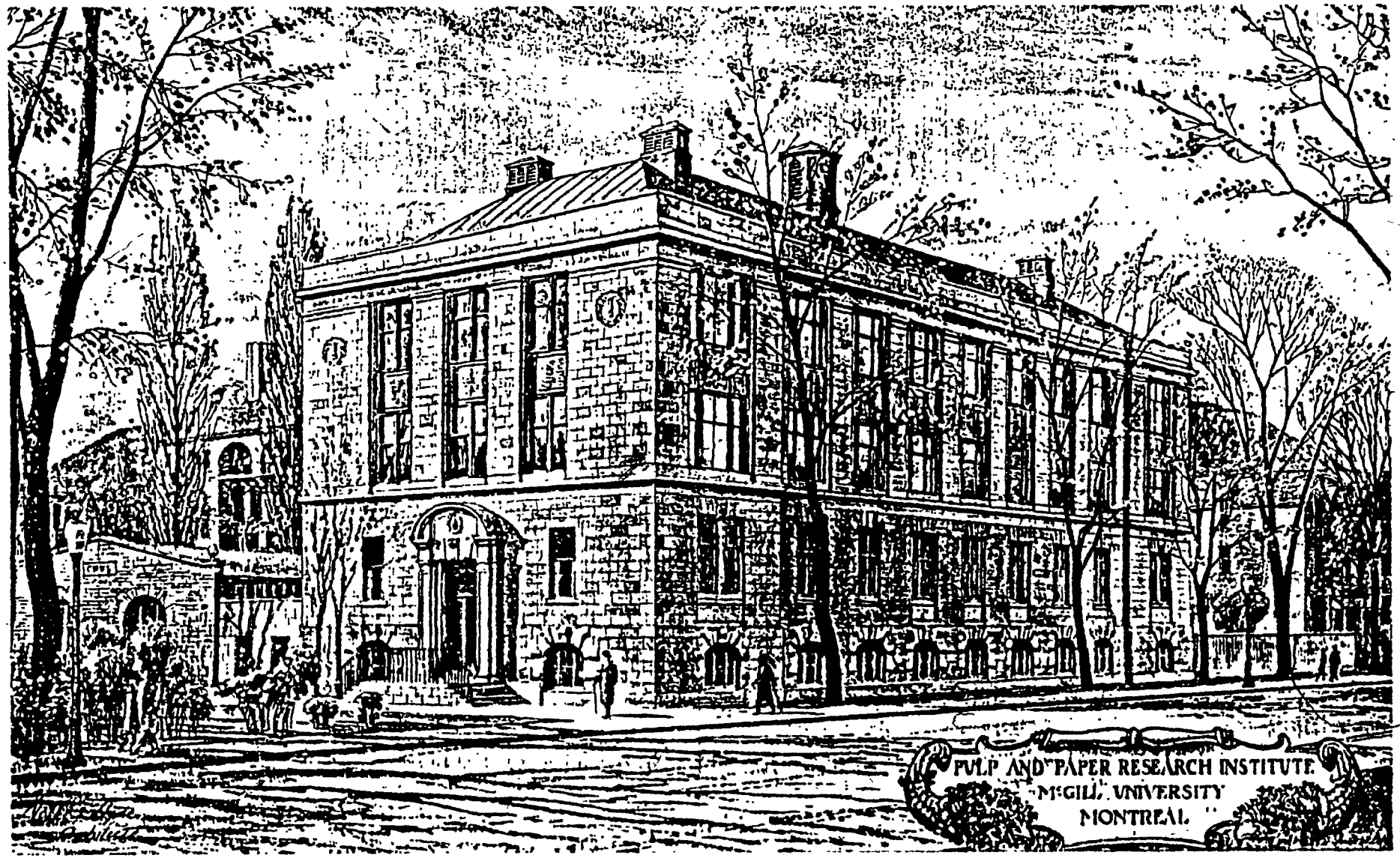


Fig. 65. Pulp and Paper Research Institute. First proposal - University Street elevation (25 May 1926).

Fig. 66 (p. 247). Pulp and Paper Research Institute. Perspective drawing by Nobbs.


PULP AND PAPER RESEARCH INSTITUTE
McGILL UNIVERSITY
MONTREAL

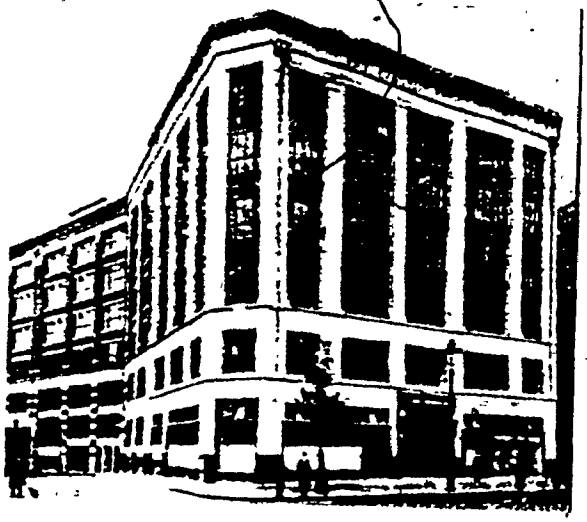


Fig. 67. Sir John Burnet. Kodak Building, London (1910-11).

Fig. 68. Smith and Brewer. Heal's Furniture Store, London (1916).

Fig. 69. Darling and Pearson. Sun Life Building, Montreal. Initial stage (begun 1914).

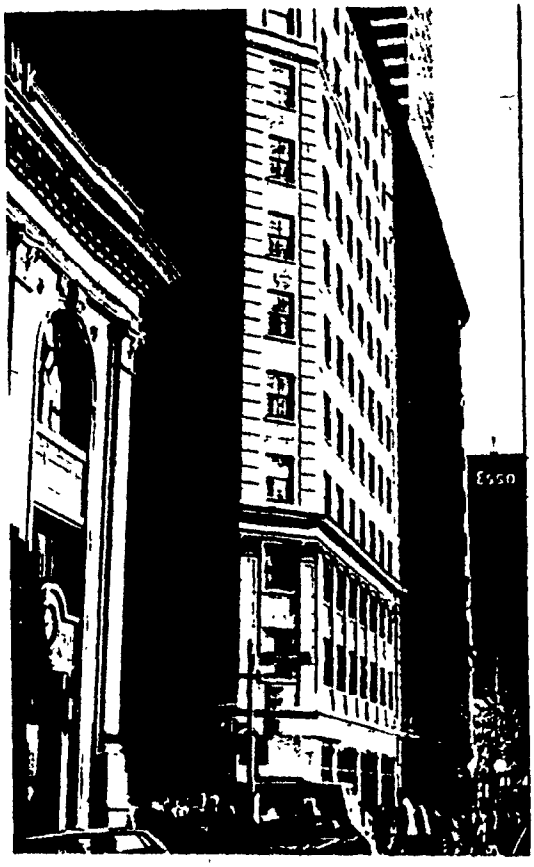


Fig. 70. Ross and Macdonald. Confederation Building, Montreal (1927-28).

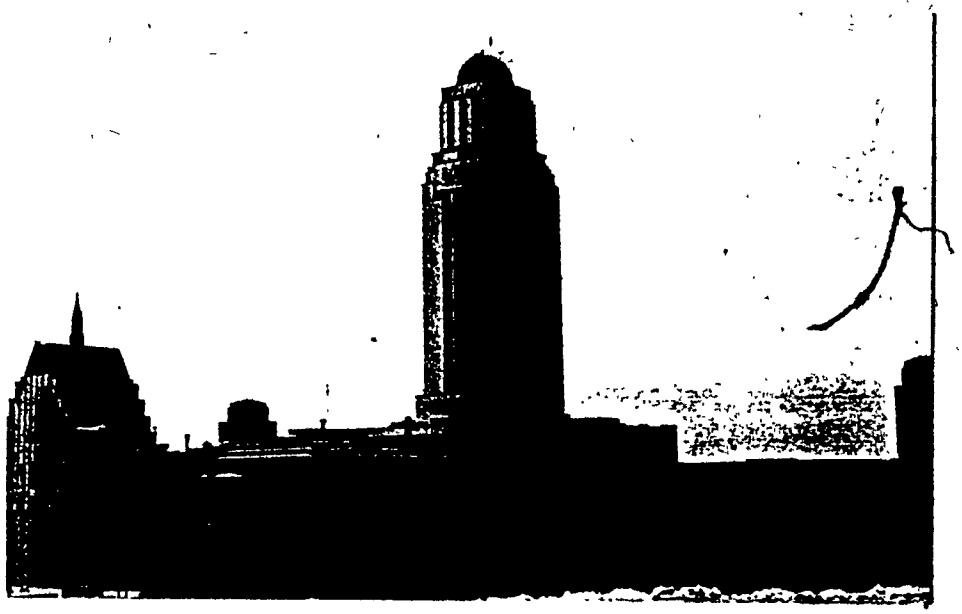


Fig. 71. Ernest Cormier. Administration Block, Université de Montreal, Montreal (designed 1925).

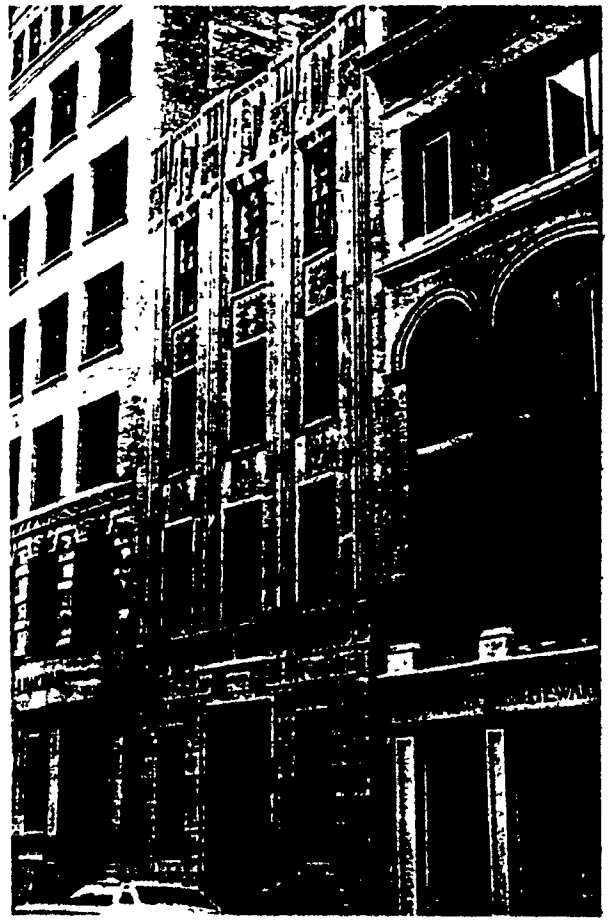


Fig. 72. H.L. Fetherstonhaugh. Hanson Brothers office Building (now Lincoln Manson Building), Montreal (1928).

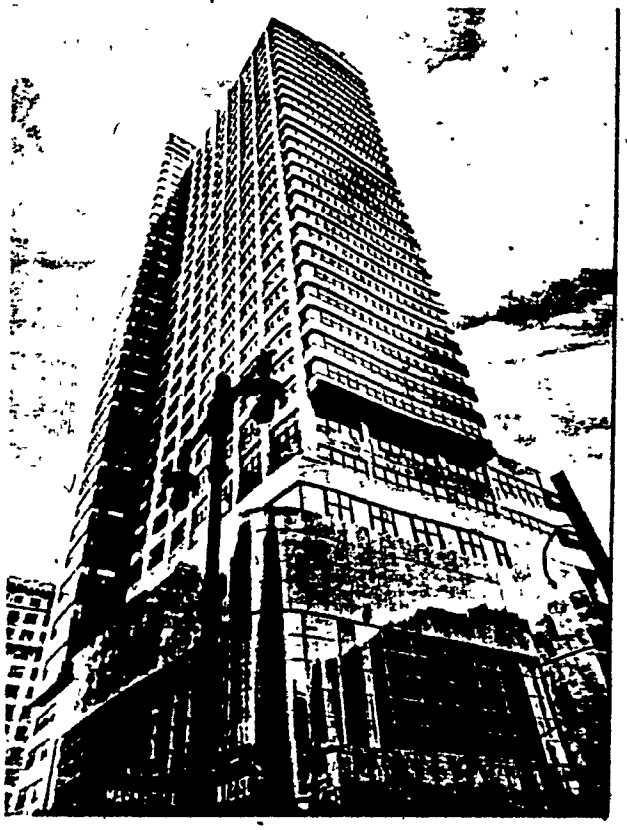


Fig. 73. Howe and Lescaze. Philadelphia Saving Fund Society Building, Philadelphia (1929-32).

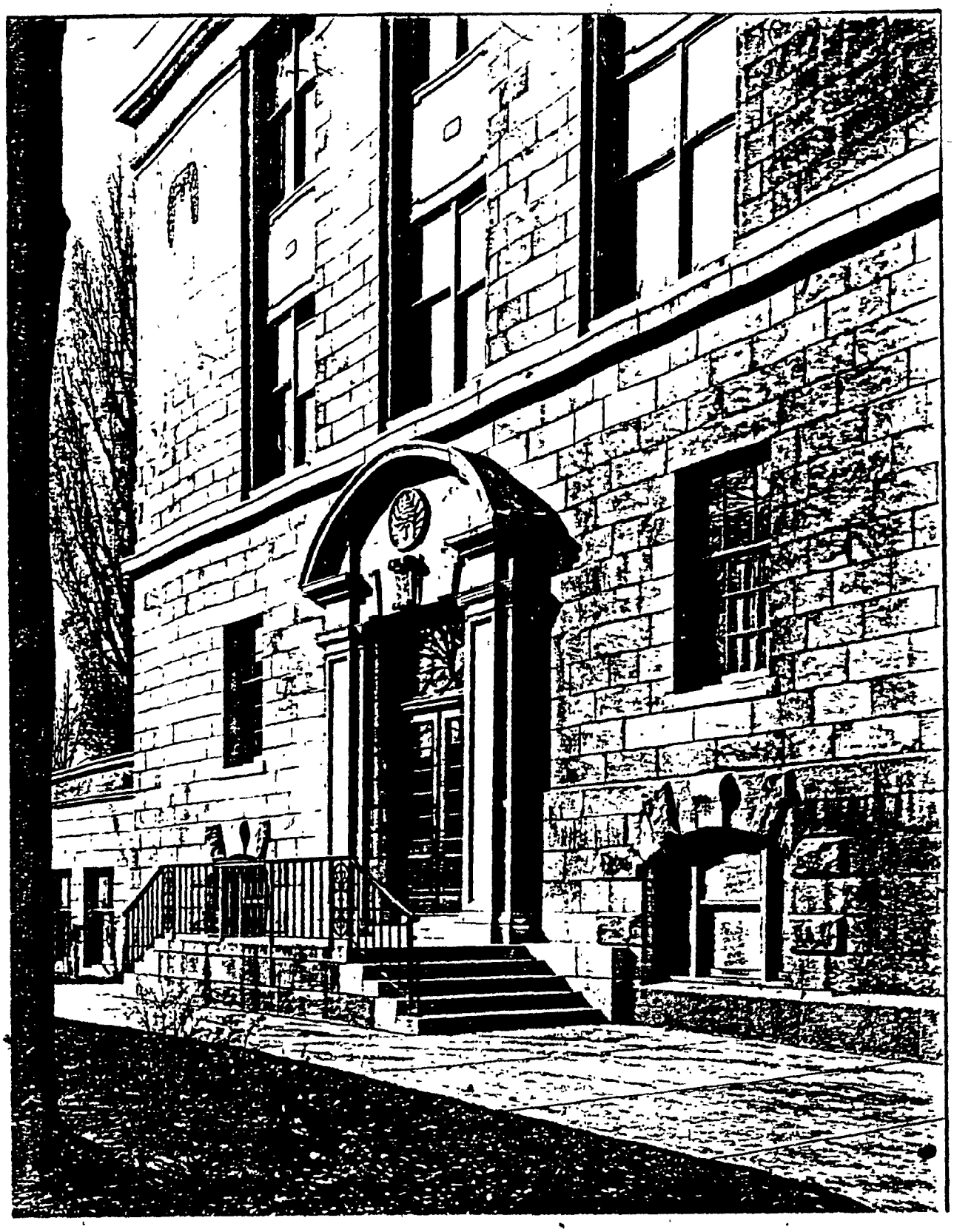


Fig. 74. Pulp and Paper Research Institute. Main doorway.

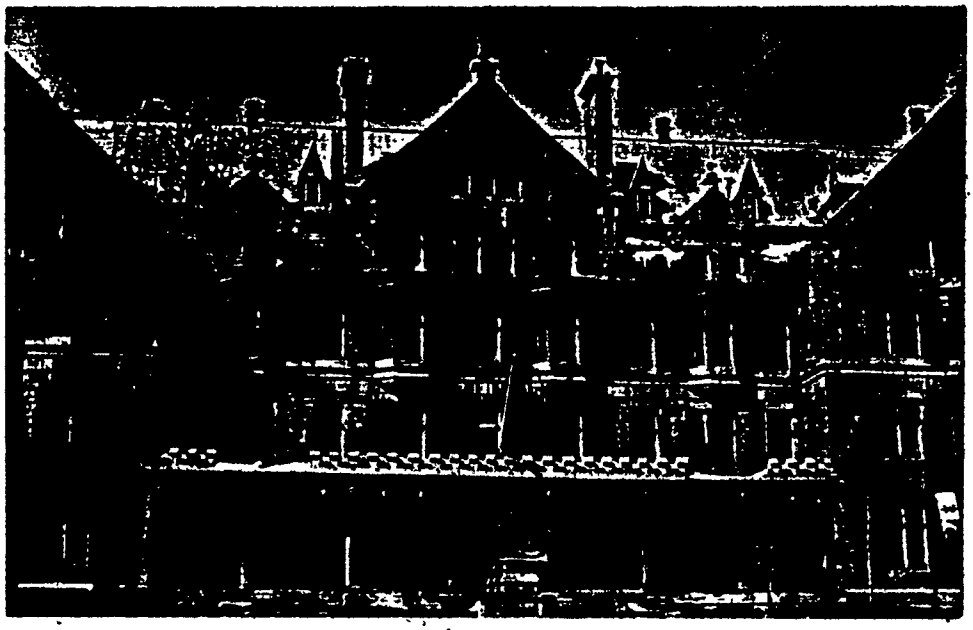


Fig. 75. Bruce Price. Royal Victoria College, McGill University, Montreal (1895).

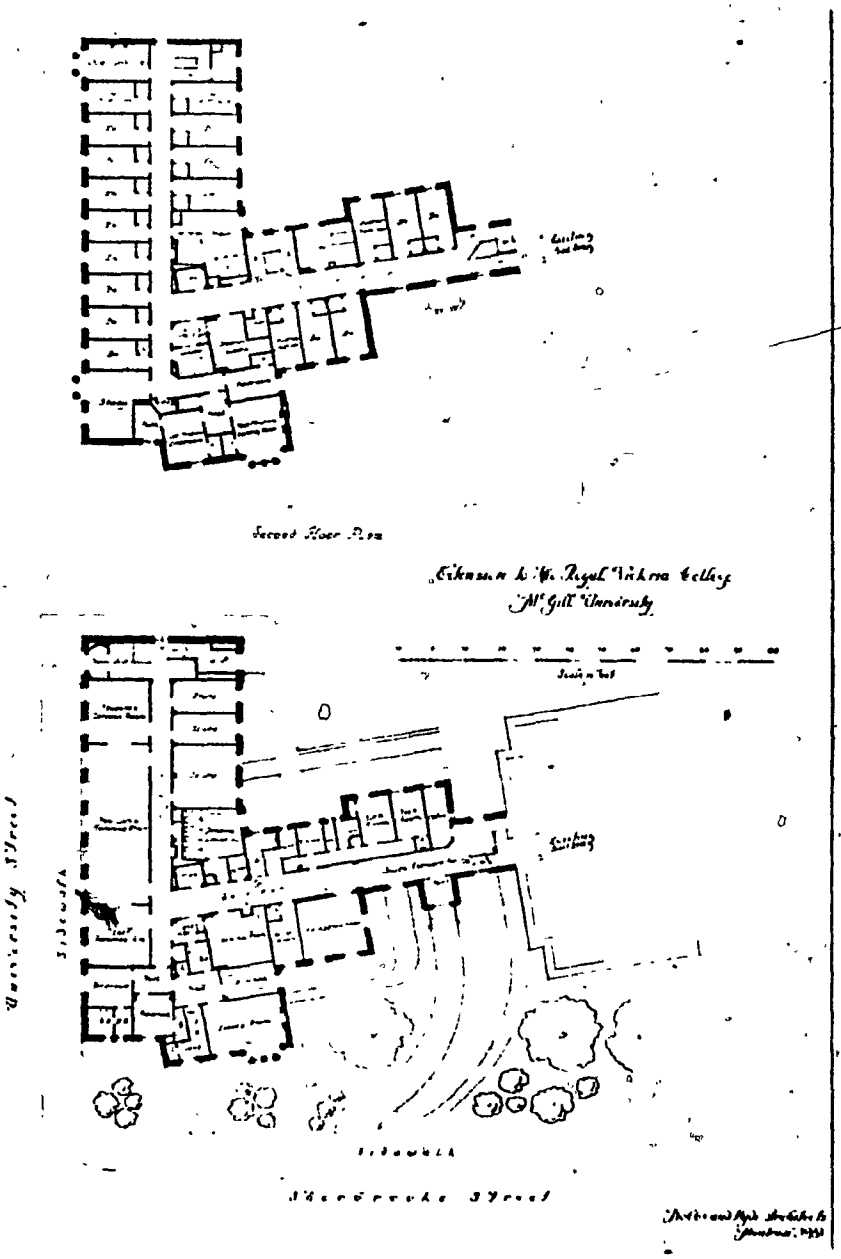


Fig. 76. Nobbs and Hyde. Extension to Royal Victoria College. Ground and second floor plans (1930).

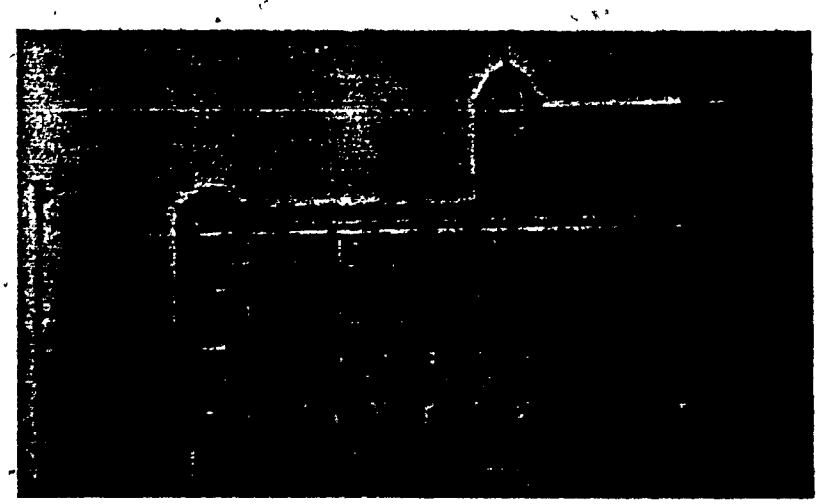


Fig. 77. Extension to Royal Victoria College. Proposed University Street elevation (1930).

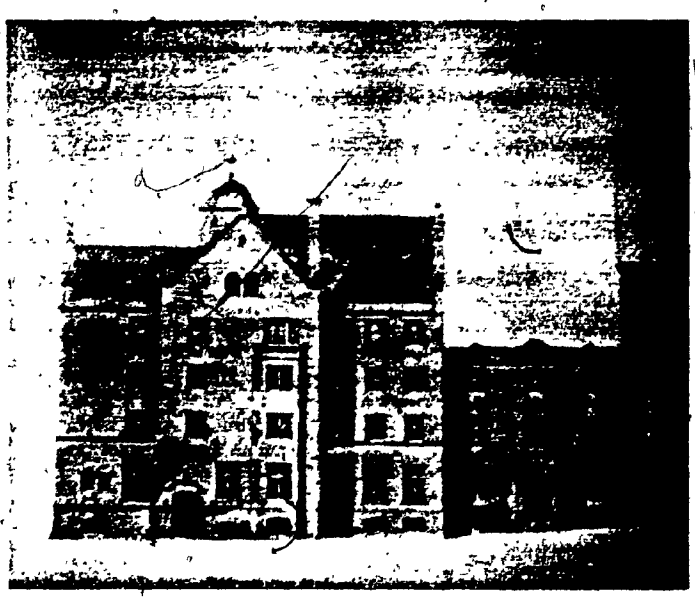


Fig. 78. Extension to Royal Victoria College. Proposed Sherbrooke Street elevation (1930).

Fig. 79. Extension to Royal Victoria College. Presentation drawing by Nobbs (1930).

Fig. 80. Extension to Royal Victoria College. Detail of Queen Victoria's device on west façade.

Fig. 81. Extension to Royal Victoria College. View east along Sherbrooke Street showing relationship with original building.

Fig. 82. Frank Lloyd Wright. Fallingwater, Bear Run, Pennsylvania (1937-38).