Figure 9: University Park, Toronto, 1857, the earliest drawing of the whole park, shows what appears to be a proposed pond two years before the creation of McCaul’s Pond. This site plan for landscaping the campus park is attributed to architect William Storm, who seems to have based his plans on earlier conceptions by William Mundie. Pencilled lines in the northeastern sector are by a later hand. The park landscaping shows Parmentier’s plantings to the south and east of the old King’s College Building. Elsewhere can be seen what is probably a suggestion of the remaining forest cover. The botanic gardens can clearly be seen east of University College. (See detail, back cover.) The experimental farm was located west and northwest of the gardens on land that today includes the University College back campus, Trinity College and Massey College, as well as Philosophers’ Walk and Hoskin Avenue, pushed through only in the late 1880s. Roads around the eastern sector that became the Queen’s Park (1858–60) are close to modern layout with the exception of the major crossing road north of the park, never entirely completed.
Figure 9: Detail of 1857 concept site plan showing proposed botanical gardens east of University College
An Erosion of Imagination: Unfulfilled Plans for a University Botanical Gardens and Taddle Creek, 1850 to 1884

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Abstract: It is difficult to write about an absence. Nevertheless, an idea or plan never actualized can sometimes tell us something about its own time. Although ably launched in 1850–51, the University of Toronto’s proposal for a campus botanic gardens, to be developed along the banks of Taddle Creek, came to naught, and along with it the Creek itself, which gradually became an open sewer before being channelled underground in 1884. Who proposed the gardens? Who and what is responsible for the fact that plans were never realized? While one can regret the demise of good landscape and design ideas, historic errors and failures, if examined sensitively, can teach lessons today.

Résumé: Il est toujours difficile d’écrire sur un projet qui ne s’est jamais réalisé. Un tel projet renseigne néanmoins sur le contexte de l’époque. Proposé au cours des années 1850 et 1851, le jardin botanique de l’université de Toronto, situé près du ruisseau Taddle, n’a jamais vu le jour. Il en est ainsi parce que le ruisseau est devenu un égout à ciel ouvert. Ensuite, les responsables de l’université et de la ville de Toronto ont transformé le ruisseau en un égout souterrain, en 1884. Qui a donc proposé l’idée d’un jardin botanique? Pourquoi n’a-t-elle jamais vu le jour? On peut regretter la mort des bonnes idées, mais un projet qui ne voit pas le jour est encore capable de nous enseigner des leçons utiles.

In January 1851, a year after the creation of the non-denominational University of Toronto, members of its new senate had an inspired idea. To enhance the pastoral setting of the campus, it voted monies for a botanical gardens to be laid out on each side of University Creek, soon renamed “Taddle Creek.” An experimental farm, an important part of the plan, was to be created west and north of the gardens on fifty acres of university land. When McCaul’s Pond was created in 1859 by damming the Taddle, it too was incorporated into plans for the gardens. In subsequent years, the beauty of the creek and pond were captured in song, poetry, folklore, photographs, and in Lucius O’Brien’s 1876 painting, the most illustrious image of the creek and pond.

After three years of discussion, however, the idea lost momentum and the project became dormant. There were many reasons, not least the closure in 1853 of the medical faculty. In the senate, where their opinions dominated discussions, professors of medicine had strongly advocated establishing the gardens. In their absence, no other professors emerged as willing or able to drive the gardens’ initiative. Also lost in 1853 was the medical faculty’s expert advice for sustaining a healthy stewardship of the campus landscape. In addition, the parliamentary
investigations launched in 1860 into the university’s management and curriculum served to discourage creativity. The creek and pond gradually turned into an open sewer. In 1884, when the creek was channeled underground, the senate’s dream of a botanical gardens was laid to rest.

In the middle of the nineteenth century, Toronto was on the cusp of a growth spurt. The young city’s population of about 25,000 began to embrace industrialism through a building boom, the arrival of the railroad era, and a burst of institutional life to sustain the transitions. In the supporting sphere of education, this boom escorted a free public school system and a flowering of post-secondary facilities: a secularized University of Toronto (1849), its established church rival, Trinity College (1852), St. Michael’s College (1856), three medical schools, the Toronto Normal School, a mechanics’ institute and a proliferation of public libraries. In the midst of rapid urbanization, a range of scientifically-based initiatives sought to understand and harness nature’s potential for the public good. Along with astronomy, physics and engineering, botany emerged as a science of popular and academic interest. Not only did it promise to advance agriculture, medicine and later, forestry, but botany also informed the study of horticulture and landscape design. Thus botany formed the basis of new parks and gardens, both public and private, as well as the beautification of the streets. Universities were

Figure 10: Lucius O’Brien’s “University College in 1876,” a view of the “not unsightly” U.C. building, Taddle Creek and McCaul’s Pond in front, as two men, one dressed in academic garb, admire the Autumn splendours of the University of Toronto campus. In the nineteenth century, professors tended to teach in the morning, leaving the afternoons free for walking around the campus, a favourite past time. On the surface, all was bucolic; however, by 1876, the pond and creek were accumulating sewage and other unmentionable detritus. In the early 1880s, sewage seeped in from the Baptist College in McMaster Hall. In 1884, the creek was channelled underground. (See back cover for colour version)
Figure 10: “University College in 1876” by Lucius O’Brien, RCA
Figure 11: Much the same perspective as the O'Brien painting, showing that part of the university grounds today. While University College survived the fire of 1890, this local sector of the pond and creek are now the site of the Stewart Observatory, home for some fifty years to the Student Administrative Council. The photograph was taken in July 2003 from the east wing of Hart House, which sits above part of the now-buried creek and on the site of the proposed but never created botanic gardens.

Figure 12: McCaul’s Pond looking north from the coffer dam, ca. 1880. Although the pond enhanced the university landscape, the dam impeded Taddle Creek’s natural flow. Outdated sanitation practices gradually turned the creek into a waste-disposal biohazard. In 1884 it was channelled underground. Periodically it reappears during wet springs in the lower reaches of Hart House and the Intercontinental Hotel on Bloor Street.

anxious to discover and impart this guiding scientific knowledge. Academic botany, long focused on the arcane taxonomy (ordering and classifying) of plant species, moved out into the field to experiment with practical applications of cultivating plants for humankind. Horticulture and landscape design (or “landscape architecture,” as coined in 1858 by its pioneering practitioner, Frederick Law Olmsted) enjoyed a scientific basis in botany, and were held in high regard
for their contributions to property aesthetics, both public and private. By mid-century, landscape design's practical value was periodically noted. When in 1850 the Provincial Lunatic Asylum on Queen Street opened, a Toronto Globe editorial noted landscape gardening's healthy influence on the mentally ill. In Toronto, architects such as Mundie, Cumberland and Storm incorporated landscape design into their drawings and site plans.

Throughout the period, public interest in horticulture was substantial. Since the nature of that interest focused on the aesthetics of plants and their propagation in household gardens, it is understandable that such collective activity as then existed revolved around creating and laying out non-scientific gardens. Civic settings like parks and streetscapes, as well as private property, were the target of beautifying activities, through a general desire to tame the overwhelming wilderness and roll back the mud. Horticultural societies sprang up as quasi-civic, private member organizations to serve those purposes. For two decades after 1834, the Toronto Horticultural Society attracted generous philanthropy from George Allan, who, beginning in 1856, donated substantial sectors of his Moss Park estate for what was later named Allan Gardens, officially opened by the Prince of Wales in 1860. Although the University of Toronto campus was valued as publicly accessible parkland, its institutional contributions were otherwise largely peripheral to public horticulture, though its academic members often contributed articles to popular periodicals and gave public lectures.

The University of Toronto's Botanical Gardens Proposal

By mid-nineteenth century the U. of T. senate could draw on a long tradition of university botanic gardens, used primarily for scientific research and teaching. The earliest botanical gardens of Western society originated in the mid-sixteenth century as teaching gardens for physicians and apothecaries in the rich Italian city-states of Padua, Pisa, Bologna, Florence and Rome. The first Dutch example was the Hortus botanicus of Leiden University, founded in 1590. Oxford University's was founded in 1621. Their medicinal role was generally overshadowed as New World plants brought home by explorers were propagated for comparative study and economic value in the eighteenth century.

In Canada, on the other hand, both public and university botanical gardens have been relatively rare. The Canadian climate, with West Coast exceptions, limits the growing season and the range of species. And the concept itself calls for a large tract of arable land, in or near a population centre with a supporting pool of specialized labour. Hence there are at present only three large public botanical gardens in Canada: the Butchart Gardens near Victoria; the Montreal Botanical Gardens; and Hamilton’s Royal Botanical Gardens. Two Canadian universities, Laval and Toronto, set out to establish gardens at mid-nineteenth century, but neither materialized. A third, launched at Queen’s in 1860, survived not three
years. Today, there are no more than four university botanical gardens in Canada, all of twentieth century origin.¹⁰

Tradition and models are important. So is adequate funding. During the 1850s, the University of Toronto was well endowed, thanks to having fallen heir to the considerable endowment of King’s College, just over a quarter million acres of Clergy Reserves.¹¹ With that endowment it could boldly plan not only a botanical gardens and experimental farm, but also a building programme that included a medical building and the splendid University College, opened in 1859. The endowment also allowed the university to develop its curriculum to include botany, agriculture and medicine. Thus the university was inspired to place the botanical gardens on its agenda. Not only would the gardens enhance the beauty of the campus, but it would also serve as a rare teaching aid for those three disciplines.

Several professors were associated with the gardens, the first being George Buckland, who had begun his academic career as a sessional instructor in Agriculture at King’s during its 1848-49 Hilary term.¹² As Premier Baldwin’s protégé, he was touted for appointment to the impending Chair of Agriculture. Two years later the senate approved the idea for the gardens, anticipating that it would become part of Buckland’s academic bailiwick in conjunction with an experimental farm.¹³ That expectation was reflected in the senate’s approval in principle, in January 1851, of an experimental farm on fifty acres, and, on not less than six acres, a botanical gardens. This statutory authorization for the project, however, was enacted prior to Buckland’s actual appointment as the first chairholder in Agriculture.

In August 1851, the senate struck a committee whose mandate was to “select forthwith from the portion of land ... for an experimental farm not less than six acres for a botanical garden” and to take such other action as they might consider “necessary and expedient with the object of forming a botanic garden ...” Moreover the committee’s membership was to comprise, together with the proposal’s influential academic supporters, the Professor of Agriculture as the ex officio spearhead for action.¹⁴ The required land for the gardens, on the east and west banks of Taddle Creek, was duly set aside, as outlined on two separate 1850s site plans.¹⁵ William Mundie, a Scottish landscape gardener with a short-lived Canadian career, was then commissioned to prepare a garden plan which, when realized, was “highly approved of by the professors.” Mundie undertook preparatory clearing in the Fall of 1851, the last contribution by himself or anyone else to the project.¹⁶ The University Caput’s report of 1851 took note that “the necessary preparations are at present in progress under the supervision of the Professor of Agriculture, and a Committee appointed by the senate to take charge of the Botanical Garden.”¹⁷

Thus the university’s collective memory has associated George Buckland with the gardens’ proposal. Two equally well-documented matters, however, refute this
memory. First, although the Professor of Agriculture was functionally named to the committee in August of 1851 and given the active lead, Buckland was not yet ensconced in the job. The Caput’s recruitment process to fill that position was then still in progress. Only in November of that year did President McCaul, as Chair of Caput, report to the senate that Caput considered Buckland the superior candidate. He was hired shortly thereafter. Secondly, from the time of his late-1851 appointment Buckland himself reported that his energies were exclusively deployed toward agricultural activities, academic and other. While he drained and cleared land for the farm during that Spring, Buckland’s compatriots wrote for The Canadian Family Herald to celebrate his progress on “Our Experimental Farm.” But was he also responsible for the proposed gardens? Not according to this periodical’s information, which surely emanated from Buckland himself. “For the superintendence of this department [the botanical gardens],” the Family Herald noted, “we shall have a Chair of Natural History and Botany which is expected shortly to be filled.”

On the experimental farm property, Buckland occupied a farmhouse, today the site of Trinity College Library and the Munk Centre. Along with the farm, he enjoyed several other agrarian enthusiasms. As the staff secretary for the provincial Board of Agriculture, he helped develop the annual Provincial Agricultural Exhibition. Also he regularly visited local agricultural societies and their fairs as a professional advisor, and with William McDougall, he co-edited the Canadian Agriculturist journal. Reporting at the end of 1854 to the Board of Agriculture’s President and separately in his capacity as “Manager of the Experimental Farm,” Buckland properly assumed no credit for the earlier preparations by William Mundie on behalf of the botanical gardens.

Buckland was over-extended, and his courses at University College were perennially under-subscribed. His farm project soon fell from notice. By 1860 the agricultural programme was “an acknowledged failure” and Buckland was accused by critics of “neglecting his duties at the university.” Buckland lacked both the scientific botanical knowledge and the experience necessary for undertaking the gardens project, for which he consistently displayed no interest throughout his long Toronto career.

While Buckland seems not to played a major role in attempting to move the gardens to fruition, there are three other candidates who could have been expected to play some role, the first being the Reverend William Hincks, appointed Chair of Natural History (then synonymous with academic botany, the logical sponsor of the gardens) in 1853. Nearly sixty years of age, Hincks was more of a traditional taxonomist than a field botanist. Following his installation in the Natural History Chair, Hincks was not apparently briefed on the 1850–52 gardens resolutions and arrangements. The idea lay dormant until 1859 when he wrote to the senate “recommending the formation of a Botanical Garden.” Hincks offered neither background preamble nor other indications that he was even aware of the history of the concept.
Then there was the Reverend John McCaul, first president of the University of Toronto. Before migrating to Toronto, McCaul had spent eighteen years studying and teaching at Trinity College, Dublin, whose splendid botanic gardens may have influenced his thinking.\textsuperscript{27} Hence McCaul, as a scholar of wide interests, was amenable to the merits of founding such an enterprise on the verdant campus. It was he who, in January 1851, moved the senate amendment that land be set aside for the gardens. A few months later, he accepted membership on the senate’s implementation committee. After 1853, however, committee members paid only occasional lip service to the idea. McCaul’s initial support did not lead him to convey the senate’s expectations on the matter to Professor Buckland, nor to persuade Buckland to accept them. Thereafter McCaul’s administration failed to address the lack of progress by Buckland and others. Apparently McCaul had not even advised Professor Hincks of the proposal. Then in 1859, McCaul participated in the senate meeting that received Hincks’s letter, which provoked no move to consider renewal of action. The gardens languished as merely a designation on campus site plans.\textsuperscript{28}

From which quarter, then, came the initial inspiration for 1850 gardens proposal and its 1851 enabling resolutions? With President McCaul initially on side, who brought him there? Available indications point to the medical botany professor, Dr. William Bulmer Nicol. In the absence of a botany professor until 1853, Nicol was the only faculty member (and one who sat on the senate) who was then charged with teaching that subject – as it happened, to medical and agricultural students. Moreover he enjoyed the support of his surgeon father-in-law, Dr. Henry Boys, who served from 1839 to 1851 as bursar and registrar.\textsuperscript{29}

Figure 13: The Rev. Dr. John McCaul in the 1840s, after whom the pond was named. He helped sponsor the botanical gardens proposal 1850–52, but lost interest when the Faculty of Medicine was legislated off the campus in 1853.
Nicol may also have been supported by the small but closely-knit coterie of Medical Faculty colleagues. Linked by similar family backgrounds in Great Britain, most of them inevitably brought knowledge of university botanical gardens there.\(^{30}\)

Physicians with Dr. Nicol’s education and botanical interests would have realized only too well that their repertoire of *materia medica* (remedial substances) was largely ineffective and inadequate. Working diligently but despairingly against typhus and cholera in the 1840s, and at the Toronto Hospital to which in 1844 Nicol and four other King’s medical professors were the first to be cross-appointed,\(^{31}\) they could face no other conclusion. Other remedies and preventatives such as botanical medications were needed as alternatives to the mineral potions concocted from salts, sulfur, mercury and the like.\(^{32}\) A university botanical gardens for educating medical and arts students must have seemed a useful and effective prospect.

By 1850, enjoying high academic and professional esteem, Nicol was elected by his colleagues as the new university’s first Dean of Medicine.\(^{33}\) Soon after, in November 1850, he moved a motion to establish a chair in Agriculture, as well as the experimental farm.\(^{34}\) Dean Nicol and another medical colleague, along with President McCaul and a few other senate members, were named to the 1851 Botanical Gardens Committee, on which the anticipated chair in Agriculture was designated for the lead implementation role.

Senate minutes make clear that medical faculty members were consistently supportive of the gardens proposal, in the senate as a whole and as members of its special implementation committee. They enjoyed a well-earned prestige through positions of leadership in the provincial medical profession, which maintained high entrance standards. Moreover when the university was reorganized in 1849, the “Medical Faculty ... quickly became the most energetic department of the University, and it had the largest number of students.”\(^{35}\) With the leadership of their medical botanist dean, these academic physicians and surgeons had professional reasons for promoting a facility to teach practical botany.\(^{36}\)

In 1850–51, Dean Nicol showed leadership skills as the senate’s Building Committee chair when the committee built a medical building, the new university’s first structure.\(^{37}\) Although proposed almost simultaneously, the gardens project proved more difficult for the medical faculty members to promote, since the senate had assigned the lead responsibility to the Chair of Agriculture. The medical faculty’s influence for bringing the gardens concept into being was restricted by two additional factors. First, although they appear to have supported scientific investigation, they were not assigned nor remunerated to engage in it. Medical professors of that era were appointed, as many still are, as part-time clinical teachers who maintained their practices in the community and its hospitals.\(^{38}\) The second factor was more devastating, namely the Legislature’s 1853 bill, sponsored by Premier Hincks, to divest the university of its medical and law faculties. The university’s public funding, the government argued, was neither
needed nor appropriate for occupational training, which could be left to privately-owned medical schools, one of which was owned by Dr. John Rolph, a powerful member of Hincks’ cabinet.\textsuperscript{19} The senate thus lost a contingent of members who, from 1851 to 1853, had spearheaded four resolutions through the senate to advance the gardens proposal.\textsuperscript{20} (While it is true that subsequently representatives of those private schools of medicine sat on the senate,\textsuperscript{21} their voices were fewer, and their interest in developing a botanic gardens on a site within the university that no longer had a faculty of medicine was limited. After the departure of the medical faculty, there were only two more gardens’ measures in the senate.\textsuperscript{22})

Worse was to come. In 1859 the senate leased to the city for 999 years “at a nominal rent” a prime parcel of about forty-nine acres east of Taddle Creek.\textsuperscript{23} Almost a third of the campus creatively acquired with endowment funds in 1828 was divested to the city, forming the familiar oval of Queen’s Park. Included in the forty-nine acres were three of the six acres that had been set aside for the botanical gardens. Even though the university retained the right to reclaim the land for purposes of the gardens, the lease in effect put an end to the project.\textsuperscript{24}

Then in 1860, on behalf of the denominational colleges, Egerton Ryerson, senate member and superintendent of education for Canada West, engineered the formation of a parliamentary commission to investigate the university’s managerial effectiveness, including the question of overspending the endowment on the “needlessly elaborate” University College building. Even though the commission exonerated the university, those particular criticisms, and others, made the university more financially conservative, and inevitably had the effect of dissuading President McCaul and his embattled colleagues from any lingering notion to revive the proposal for a botanical gardens.\textsuperscript{25}

**The Taddle Creek and McCaul’s Pond Environmental Debacle**

In the nineteenth century, most institutions did not concern themselves with the subsurface quality of running water that passed by or through their properties – the water being, for them, transitory in nature. In 1859, when the university created McCaul’s Pond by intervening and making practical use of the watercourse, it reasonably incurred at least an ethical obligation to take some responsibility. Problems causing the pond-stream degradation were allowed to fester over many years before any concerted remedial action was launched. As the Town of Yorkville’s population expanded, beginning in the 1860s, the pond “rapidly became a holding tank for all sewage discharged into the Taddle Creek” by its upstream residents. The university’s response, however, was confined to tackling effects rather than cause: it spent money “removing nuisance”\textsuperscript{26} from the creek and pond.

Significantly, there was one other source of pollution that the university should have been able to prevent. On 31 March 1880, its Board of Management\textsuperscript{28} approved the sale of land\textsuperscript{29} for the construction of the Toronto Baptist College.
known as McMaster Hall, named for its major benefactor, William McMaster.\textsuperscript{50} The site chosen lay a short distance upstream from the heart of the campus and overlapped into the Taddle’s ravine.\textsuperscript{51} The Board might rather have steered McMaster toward ample holdings of tableland away from the creek. McMaster was a man of influence. He and William Mulock moved in the same business and political circles, and in the 1870s, they were fellow members of the university senate.\textsuperscript{52} A lawyer and Liberal Member of Parliament, Mulock frequently filled in as the Board’s chair until appointed to that position in 1881, when he was also appointed Vice Chancellor. Mulock was also the “primary force” during the 1880s to woo the denominational and professional colleges, including McMaster College, to federate with the University of Toronto.\textsuperscript{53}

A few months after acquiring the Bloor-Taddle property, McMaster turned to the well-known architectural firm of Langley, Langley & Burke,\textsuperscript{54} which prepared drawings that were approved under “our Contracts with the Hon. William McMaster dated July 14\textsuperscript{th}, 1880.”\textsuperscript{55} The site plan (with signoff signatures) specified a lone combined drain to carry both sewage and storm water runoff. A glazed pipe, nine inches in diameter, would run from the rear of the main building, directly behind the chapel, a later addition, for forty feet southeastward to a “cesspit,” five by two feet in size, and thence by an identical pipe in the same direction for the last twenty feet into Taddle Creek.\textsuperscript{56} This was a curious approach, not just for its manifest failure to sustain the college’s own and neighbouring environments but also in light of the evolved state of sewage technology.\textsuperscript{57}

By discharging sewage into the Taddle, McMaster College “overwhelmed” the already polluted waterway.\textsuperscript{58} In September of 1881, complaints gave cause to the university’s bursar to place the matter on the Board of Management agenda. Their
sole response was to write to the reeve of Yorkville. A month later they met with city representatives seeking to open public roads through the campus.\(^{59}\) The board members decided to negotiate for a *quid pro quo*, informing the city that any discussion of roads must await resolving the matter of “a sewer along University Creek in order to remove the nuisance created by the drainage from Yorkville.” “It would be a dreadful thing,” President Daniel Wilson lectured city representatives, “if typhoid fever perhaps should break out in the University or Baptist College on account of the filthy condition of the creek.” The city engineer had come prepared. He estimated that 200 yards of the creek, at $6. per yard, would need to be buried. City officials pointed out that since the creek was on private university property, it was not the city’s responsibility. Moreover they felt that the university’s costs should be shared by negotiating with lessees of building lots around the campus and with the village of Yorkville.\(^{60}\) And so the matter was left unresolved.

The next monthly board meeting had been preceded by at least one student’s complaint concerning the initiation rite of dunking, and a critical note in the student newspaper: “The stench arising from the Taddle is very pronounced. The prevalence of so much fever in the city is surely a good reason for the prompt abatement of this long-standing nuisance.”\(^{61}\) Three weeks later, a news item
outlined findings by the city engineer. Yorkville was indeed the main source, but not the only one: the Baptist College’s sewage was also draining into the creek. “The stream was in a much fouler condition ... than it has been during the past nine years. The health of all parties living in the neighbourhood of the creek being endangered, the city commissioner was of the opinion that a sewer was most imperatively needed, and if one could not be put in at once, the Yorkville sewerage should be cut off without delay.” But delay they did. The stalemate continued off and on for another two and one half years.

More significant pressure was brought by the newly appointed Provincial Board of Health. In June of 1882, Chairman Dr. William Oldright in later years a professor of hygiene and associate professor of clinical surgery on the university’s resuscitated medical faculty – made a special report entitled “Regarding Sewerage, Disposal of Sewage, and Water Supply in Toronto.” After brief preliminaries, he observed that “Several localities in the city have become very offensive by reason of sewage discharging into channels which were originally natural watercourses, but which have now become open sewers. The chief of these are the University Creek ...”

In 1884, three years after the sewage discharged by McMaster Hall began to exacerbate an already untenable environmental hazard, Dr. William Canniff, the city’s first full-time Medical Officer of Health, ordered that the creek be channelled underground. At its meeting on 1 May 1884, the university board considered a letter from the city solicitor on the matter of the “University Creek Sewer.” It was “referred to the Vice Chancellor to give the necessary assent on behalf of the University.” Construction work began soon after, and the watercourse disappeared underground.

Dénouement

Although the momentum for establishing a botanical gardens all but evaporated following the 1853 medical school closure, the university’s self-destructive action in 1859 to alienate half the gardens’ land reserve to the city was the decisive blow. That was followed by a failure to protect their most striking landscape feature, the physical environment of the Taddle-McCaul’s Pond campus watercourse. Certain political events served to conspire more indirectly against the concept, notably the medical faculty’s banishment in 1853, and, to a much lesser extent, the damper imposed on academic creativity by charges of fiscal mismanagement. Those political and administrative blows added to the impact of a manifest failure from the outset to articulate a clear rationale for the gardens concept within the context of the mid-century curriculum. Medical faculty members were the idea’s foremost champions. They may well have envisaged establishing the gardens as a route to improving their profession’s arsenal of materia medica, but they did not make that case sufficiently forcefully to sustain the rationale during their absence from 1853 to 1887.
The agricultural professor George Buckland, for his part, took pains to distance himself from any responsibility for the proposed gardens portion of his experimental farm. Moreover his own experimentation on that valuable reserve of land was decidedly limited in scope, and ultimately short-lived. The professors of arts and science located the gardens’ concept within the prevailing educational philosophy of demonstrating the glory of Creation, while instilling in their young charges a mental disciplinary toughness and a detailed vocabulary for understanding and celebrating the array of natural wonders. Yet when push came to shove, these remaining faculty members let the educational idea of a gardens fall fallow. Although great gardens had been realized in many of the Old World academies, they fell back instead on the herbarium model of collecting and arranging dried specimens. In the face of opposition and a muddle of purposes, the university deferred to public horticulture’s sustained enthusiasm for creating living plantations, through the leadership of benefactors such as the Allan family. The collective memory of the Taddle Creek reserve’s earlier unspoiled beauty nevertheless lived on. A recommendation by the university’s 1905–06 Flavelle Commission to execute the gardens concept on that site was never taken up, though the idea enjoyed a short-lived flowering at Glendon Hall during the 1950s. The stream’s corridor was destined instead for a mix of recreational uses and a spillover area for the rear portions of buildings. For five years beginning in 1898, the university installed an eleven-hole golf course on what remained of its open space north of Hoskin Avenue. Six holes were laid out along or intersecting with the ravine. In 1906, President James Loudon bid farewell to the earlier scenes of physical disgrace and official hickering by launching the first of many waves of bucolic nostalgia. “The grounds are, roughly speaking, bisected from north to south by a shallow ravine through which there once ran a stream, the Taddle. The latter has disappeared in the drainage system of a great city, but the ravine, though filled in at intervals for roadways or for buildings, still serves pleasingly to diversify the University grounds.”

Hence the university’s botanical gardens idea sank from view along with the stream beside which it was meant to rise, its original land base pleasingly diversified to a hodgepodge of other uses. There are perhaps five reasons that help to understand this half-century sequence of events, in addition to the natural climatic difficulties that limit the Ontario growing season. By extension these factors also shed light on why the concept did not endure after nineteenth century beginnings at any other Canadian university; and subsequently, why only a handful of twentieth century gardens have endured.

First and foremost, the concept is generally too land-intensive. Most Canadian universities were located in the midst of, or closely adjacent to, urban areas. As the host city and the campus gradually expanded, the university was typically obliged to re-allocate and rationalize its property holdings. Secondly, the pedagogical need for the gardens concept seems not to have been compelling enough, especially in the face of other pressures and priorities. At Toronto there
is no indication that a buttressing academic rationale was articulated by its pre-1853 sponsors; thereafter it was simply considered an expendable adjunct to the purely aesthetic matter of landscaping the campus. As a third explanation, the emerging disciplines of applied botany continued to diverge independently from pure botany, as some of them had already begun to do by 1850. In lieu of campus botanical gardens, there developed alternative models with specialized approaches, such as experimental farms for agriculture; arboreta for forestry; parks and gardens for horticulture; and medicinal herb gardens for medicine. The divergence in physical models gave rise to a fourth force—a blurring of distinctions, both within the academy and among the general public, between on the one hand a university botanical gardens, and, on the other, the variations emerging in the allied botanical fields. Taking this continent’s best-endowed institution as a benchmark case, by the late-nineteenth century Harvard University enjoyed a (pre-1854) Botanical Gardens as well as the Gray Herbarium, the Arnold Arboretum, the Botanical Museum and the Farlow Herbarium. As the ambiguity of purpose persisted at Toronto, the botanical gardens concept became marginalised, no longer a compelling academic need. Fifth and finally, as land pressures steadily advanced, the university’s academic and administrative leaders lost focus and commitment, and their attention was diverted to various competing uses for the land, even as the university’s budgetary resources became steadily more constrained during the last third of the nineteenth century. Those five overlapping and mutually reinforcing factors combined to extinguish the University of Toronto’s nineteenth-century gardens initiative.

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1 An Act to amend the Charter of the University established at Toronto by His late Majesty King George the Fourth, to provide for the more satisfactory government of the said University... Provincial Parliament of Canada, III 1st Session: 11–12 Vict., Cap. 82, 1849 (The Baldwin Act). I am indebted for this citation to the Honourable Mr. Justice Douglas Rutherford. Through the Baldwin Act, the government of Premier Robert Baldwin reconstituted King’s College, “banishing from it every semblance of religion” in the hyperbole of one observer, while transforming it into the University of Toronto. After two decades of bitter wrangling in Upper Canada over the Anglican affiliation for King’s, in the Oxford-Cambridge tradition, the agitation for a non-sectarian institution ultimately prevailed. The new university drew on the more current model of London University. Established in 1826 as a secular alternative to Oxford and Cambridge, London rose as a reform counterpoint to the traditional Tory-Anglican alliance with a commitment to applied science and training professionals for the modern world. Upper Canada’s hard-core Tories, outraged at the Reform Party’s coup that rudely deprived them of the university they had founded in 1827 and slowly nurtured into being, wanted none of it. Hard on the heels of the Baldwin Act the doughty founder of King’s, Bishop John Strachan, moved immediately to establish a new Anglican university. The University of Trinity College was formalized through an act of the Legislature by August of 1851 and a Royal Charter the following year. See William S. Darling, Sketches of Canadian Life, Lay and Ecclesiastical:

2 Martin L. Friedland, The University of Toronto, A History (Toronto: Buffalo: London: University of Toronto Press), 34.

3 Toronto’s universities evolved through a checkered history of environmental stewardship. More than any other type of institution, except perhaps government bodies, universities enjoy access to scientific and applied knowledge that should enable them to act as exemplary stewards of the environment. For various reasons, they have often lagged behind in the practical application of that knowledge.

4 Shteir, Cultivating Women Cultivating Science. 11, 149–69.


8 These gardens flourished into the present era at relatively few Western European universities in the temperate and northern climatic zones. A remarkable exception is the case of the Netherlands, where botany, agriculture and horticulture have long enjoyed a prominence within Dutch national traditions. Despite that nation’s modest land base, there are twenty botanical gardens in Holland, linked through a shared administrative system and the National Plant Collection. The oldest, at Leiden University, is one of five of the twenty that are affiliated with a major university, along with those of Amsterdam, Delft, Utrecht and Wageningen. The Hortus botanicus Leiden, starting as a teaching garden with medicinal plants, may have been the first true botanic garden anywhere when it was planted with copious plants from all over Europe by its first Prefect, Carolus Clusius. (Personal communication, Dr. Gerda van Uffelen, Hortus botanicus, University of Leiden, 23 March 2000.)

9 Henry Y. Hind noted Laval University’s intention to establish a botanical gardens in The Dominion of Canada: containing a historical sketch (Toronto: L. Stebbins, 1869), 509. James M. LeMoine recorded their subsequent decision to divert the property for other purposes (likely after the death in 1876 of l’Abbé Brunet), in Picturesque Quebec: a Sequel to Quebec Past and Present (Montreal: Dawson, 1882), 260. Both citations courtesy of ECO.

10 R.V. Piacentini, Plant Collections Directory (American Assoc. of Botanical Gardens and Arboreta, 1998). See also Directory of Arboreta and Botanical Gardens (Scarborough, Ont.: Horticultural Management Services, 4th ed., 1988). The four Canadian university botanical gardens found flourishing in 1998 were as follows: University of British Columbia Botanical Gardens, Vancouver; Devonian Botanical Gardens, University of Alberta, Edmonton; Memorial University of Newfoundland Botanical Gardens (originally “Oxen Pond”), St. John’s; and le Jardin botanique Roger-Van-den-Hende, Laval University, Québec.
While land sales by the old King’s College, pre-1849, had returned substantial revenue, expenses such as building construction, alterations and landscaping were also great. Between 1855 and 1906, the university’s income averaged ca. $6,000 per year, which paid for salaries, administrative expenses, construction, library and museum acquisitions and so on. Thus it was only during the 1850s that the University of Toronto could be said to be financially well endowed. See F.A. Mavre, “Outline of the Financial History of the University” in The University Librarian (H.H. Langton) ed., The University of Toronto and its Colleges, 1827–1906 (Toronto: official university history published by the Librarian, 1906), Chapter IV. Undoubtedly the most prudent and far-sighted investment that King’s College made from the partial proceeds of its endowment, “earning the gratitude of all U. of T. generations to follow,” was their prompt acquisition of property for the “University Park.” Secured while still in a pastoral and natural splendour, these 168 acres comprise most of today’s downtown campus along with Queen’s Park. See Langton, The University of Toronto, 73, 13.

The winter term, in use at Dublin and Oxford from the sixteenth until near the end of the nineteenth century. In England, the feast day of St. Hilary, named after Hilarius, the fourth-century Bishop of Poitiers, is 13 January. Since Dr. John McCaul was educated at Trinity College, Dublin, he had no doubt was familiar with the term, and perhaps used it at Toronto at mid-nineteenth century. At Oxford, it has long been replaced by “Lent term.” At Toronto, it may not have outlived McCaul.

See eg the first-hand professional chronicle of the Botany Department by Dorothy F. Forward, The History of Botany in the University of Toronto (Toronto: University of Toronto Press, 1977), 4, 59. UTA records reflect that Buckland was “an English farmer of scientific mind invited to Canada in 1847 by the Hon. Robert Baldwin to carry out a survey of agricultural conditions in Canada.” Buckland decided to stay on and nurture its agrarian development. One likely incentive came from his influential patron, who dangled the prospect of an appointment to King’s College as its inaugural chair in agriculture. UTA: unpublished biographical sketch of George Buckland by T. A. Reed, typescript, A73-0026/044/06; and Ann MacKenzie, “George Buckland” in Dictionary of Canadian Biography (DCB), XI, 132.

Darling, Sketches of Canadian Life. 292: UTA, A 70-0005, U. of T. Senate Minutes. Adoption of a statute proposed by Prof. W.B. Nicol (Medicine) for appointing a Chair of Agriculture and “the establishment of an experimental Farm.” 2 Nov. and 23 Nov. 1850, 61, 70. Senate Minutes of 11 Jan. 1851, 85, also reproduced in J. George Hodgins (ed.), Documentary History of Education in Upper Canada, X. (Toronto: 1846, and reprinted Toronto: King’s Printer and L.K. Cameron, 1903), 78–9; see also Senate Minutes, 1 Aug. 1851, 123; the committee members appointed were the President (McCaul) and Professors of Chemistry (Croft), Medicine (King), Materia Medica (Nicol), “and of Agriculture, ex officio.”

Archives of Ontario (AO), Horwood fonds (626), 1. Plan of the University grounds attributed to W.G. Storm, ca. 1857 and Richardson. A Not Unsightly Building. 54; and UTA, A65-0001/(020), University of Toronto Plan of Grounds No. 735 of 1859.

According to David Bain, “despite this promising start, no further progress was apparently ever made although the garden continued to be mentioned at intervals thereafter.” (“William Mundie, Landscape Gardener.” 300, citing an article by William Mundie that appeared in Egerton Ryerson’s Journal of Education for Upper Canada., VI, (1853), 170; see also Hugh Scobie, a Member of the Council of Public Instruction and Publisher of the politically moderate British Colonist newspaper, “Miscellaneous Papers Relating to the Normal School. 1853” that appeared in the
British Colonist, reproduced in Hodgins, Documentary History of Education in Upper Canada, IX (Toronto: King’s Printer, 1902), 21.

17 “Report of the Caput of the University of Toronto for the Year 1851,” reproduced in Hodgins, Documentary History of Education in Upper Canada, X (Toronto: King’s Printer, 1903), 78–9.


19 By Buckland’s own account, it was during the following growing season of 1852 that he set about clearing thirty acres of the experimental farm, planting sixteen acres of wheat in the Fall and making “some small improvements ... on a portion of the remaining twenty acres.” (The Canadian Agriculturist, (William McDougall, Prop.), VII, (1855), 11).

20 “Our Experimental Farm,” in The Canadian Family Herald, Toronto, 15 May 1852. A follow-up piece on the Farm (not mentioning the gardens proposal) appeared 19 June 1852.

21 Also he cultivated high-grade seeds, imported pure-bred livestock and improved agricultural implements. He is credited in the 1860s with co-founding the Veterinary College and the Ontario Agricultural College, relocated to Guelph in 1874. UTA: T.A. Reed, “George Buckland”; Ann MacKenzie, “George Buckland,” DCB, XI, 132–3; and Langton, The University of Toronto, 201, 204.

22 Buckland, “Report to the President of the Board of Agriculture,” 11–12, and “The Experimental Farm, on the University Grounds at Toronto,” 20–1, in The Canadian Agriculturist, VII (1855). In fact he twice referred to the proposed gardens as one of the “public purposes” that he desired the Provincial Government, to see through to fruition on the land it had expropriated from U. of T., east of the Taddle Creek. Buckland “hoped that a Botanic Garden, in connection with suitable University Buildings, [would] soon be seen in juxtaposition with the Experimental Farm;—an ornament to Toronto, and an honour to Canada!”

23 Langton, The University of Toronto, Table G, 260; and MacKenzie, “George Buckland,” DCB, XI, 133. After the agricultural and veterinary programs were moved to Guelph in 1874, he remained on the Toronto faculty until his death in 1885, with few academic duties.

24 As a brother of Premier Francis Hincks, he was resented by those who suspected patronage. William Hincks had been chosen in preference to the young and later famous Thomas Henry Huxley, who is said to have groused that the Hincks family political connection was “a qualification better than all the testimonials in the world.” J.D. Wilson, “William Hincks,” DCB, X, 349–50. McKillop argues that, to the contrary, Hincks was well suited for teaching university botany in that pre-Darwinian era when “the science student was taught in his classes that all aspects of science were ultimately linked to God’s purposes, initiated in the act of creation”: McKillop, Matters of Mind, 111–19, 187. The greatest scientific mind that Canada produced in the nineteenth century, (Sir) William Osler, profited from a close mentoring relationship with Hincks. During his teenaged pre-medical years at Trinity College, Osler drew scientific inspiration directly from Professor Hincks while regularly ranging afield to examine and gather specimens in their natural habitat—primarily microscopic creatures and plant life (much of it such as cypripediums—lady’s slippers—no longer native to the Toronto area). Young Osler elected to sit in on one of the professor’s Natural History courses over at U.C., and presented Hincks with some of his choice specimens gathered at the mouth of the Humber River. As his medical
career later took shape, Osler published a scientific paper on the same specimens that they had studied together, while staying in touch with the Hincks family. ([Sir] William Osler, “On Canadian Fresh-water Polyzoa,” in Canadian Naturalist, X (new series), 1883, 399–406, as presented to the Natural History Society in 1878; see also Harvey Cushing, The Life of Sir William Osler (Oxford: Clarendon Press, 1925), Vol. I, 53, 151, 186.) Cushing mistakenly assumed that Hincks taught Natural History to Osler at Trinity College, Toronto, whereas Michael Bliss correctly notes that Osler audited a Hincks course at U.C. (Bliss, William Osler: A Life in Medicine (Toronto: University of Toronto Press, 1999), 55). The unproved suspicion that a political bias accounted for the appointment of William Hincks became rapidly and permanently ingrained into the university’s oral and written history, as a rueful morality tale. A half century later, for example, the young Clarence Hincks (1885–1964, no relation) was accosted as an undergraduate medical student by the Head of the Department of Surgery, who declared that he was “sorry to hear” that that was his name, specifically because of the choice that had long ago been made for Prof. William Hincks over “the great Thomas Huxley.” (Centre for Addiction and Mental Health (CAMH) Archives: Clarence Meredith Hincks, MD, “Prospecting for Mental Health: An Autobiography,” unpublished ms, 1962, 7. Charles G. Roland, Clarence Hincks: Mental Health Crusader. Toronto: AMS/ Hannah Institute for the History of Medicine, 1989, 15). For the latest versions, both sympathetic to Hincks’ critics, see Harold Averill and Gerald Keith, “Wilson and the University of Toronto,” in Elizabeth Hulse, Thinking with Both Hands: Sir Daniel Wilson in the Old World and the New (Toronto: University of Toronto Press, 1999), 144; and Friedland, The University of Toronto, 49–50.

25 See Averill and Keith, “Wilson and the University of Toronto,” 144, n. 31. The two historians cite Vice Chancellor John Langton’s letters in concluding that “Besides stonewalling on issues in which he did not see a clear advantage to himself, McCaul kept professors in the dark on policy matters and maintained personal control of discretionary funds.”

26 U. of T. Senate Minutes, 3 Oct. 1859, 507. As Botany’s departmental historian Professor Dorothy Forward later observed, nothing much changed in that field at U. of T. during Hincks’ tenure until 1871, nor during that of his successor over the next three years, H.A. Nicholson. In fact little change occurred in the teaching or approach to botany throughout the latter half of the nineteenth century. After 1874 it was subsumed, until 1912, under Ramsay Wright, a zoologist who was nominally the Chair of Biology but “with little real interest in botany.” (Forward, The History of Botany in the University of Toronto, 45.)

27 Having emigrated from Ireland in 1838 to become Principal of Upper Canada College, upon the recommendation of the Archbishop of Canterbury himself, President McCaul continued to build renown as a classics scholar and cleric with a range of other interests. He was well fitted for promotion to Vice President (and working head) of King’s College, Toronto, when classes began in 1843, also serving as the Professor of Classics, Logic, Rhetoric and Belles Lettres. In 1848, McCaul succeeded the overextended Bishop Strachan as President of King’s, staying on in that capacity after 1849 despite his initial opposition to the secularization bill. McCaul is also remembered for some colourful eccentricities. One of the Bursar’s sons recalled from his days in their family living quarters within King’s that: “Dr. McCaul was an inveterate snuff-taker, and the floor of his stall [in the college chapel] was a ‘sight to be seen.’ Fortunately for the caretaker, it had a false bottom which could be taken out and replaced after each service.” UTA, P78-0325(02): Wm. F.A. Boys, 1.L.B., “Early Days of the University,” in University of Toronto Monthly, Dec. 1901, Supplement, 30; and Trinity College, Dublin Botanic Garden, A Brief History, online at:
www.tcd.ie/Botany/garden.html. McCaul’s inaction may also be attributed, especially from 1873 until his retirement in 1880, to increasing health problems, including gout.

Richardson, *A Not Unsightly Building*, makes the case conclusively that the botanical gardens “never materialized”: caption 4.7, supported by photographic evidence that the project remained absent from its designated nineteenth century locations – see especially photos 4.1, 4.9a, 6.2 and 6.5.

Born into England’s landed gentry, young William Bulmer Nicol (1812–1886) studied classics at Cambridge and then medicine at King’s, London. Arriving in 1836 to practise at Bowmanville, east of Toronto, he shortly became a Surgeon for the Northumberland militia battalion and also Staff Surgeon to its commandant, Colonel Cox, in the 1837–38 Rebellion. As with several other members of King’s, Nicol owed his faculty appointment to his British Imperial connections, rather than to Bishop- President Strachan or others of influence in the province. While Dr. Nicol later “enjoyed a very extensive practice among the oldest and best families of Toronto,” he had paid his dues during the city’s 1849 cholera epidemic as “one of the most active in attending on the immigrants afflicted with the scourge, visiting the sheds daily.” Canniff remembered Professor Nicol’s “kindly face” among his medical Board examiners in 1854, along with “his high ability ... In the diagnosis and prognosis of disease he was almost unequalled, certainly not excelled. In his bearing towards his confreres he was a model: as a professional friend he was the soul of honour.” From 1828 in Toronto, several proposals came forward for teaching botany to medical as well as arts students in a university setting, usually in conjunction with the specialized applications of pharmacy and *materia medica*. Those subjects were formally endorsed by the Upper Canada Medical Board under Dr. Christopher Widmer in 1832 and again in 1837, and established at King’s from its opening in 1843. From that year, Dr. Nicol was assigned to teach all three subjects, staying on to do so following the 1849 reorganization. See William Canniff, MD (1830–1910), *The Medical Profession in Upper Canada, 1753–1850* (Toronto: W. Briggs, 1894, reprinted by the Hannah Institute for the History of Medicine, 1980), 61–2, 100–1, 534–6; and Langton, *The University of Toronto*, Chap.10.

For example, medical faculty members Gwynne, King and Sullivan had (like McCaul) attended Trinity College, Dublin.


Botanical medications to deploy as antidotes, inhibitors, stabilizers (salves, painkillers) and restorative were an under-developed part of their armament until late in that century, even as herbalists struggled for recognition as a separate occupational group. Dr. Widmer and his licensing board colleagues, among whom Dr. Nicol and other academics at various junctures predominated, initially excluded herbalists from licensure (until absorbed into the general profession, post-Confederation) based on their deficiency in the Classical languages and non-botanical aspects of medical practice. At the same time the medical establishment consistently strove from 1828 to incorporate academic and/or practical botany into the medical curriculum, which would have been nicely complemented by a university botanical gardens. See Ronald C. McGarry, MD and Pamela McGarry, RN, “Please Pass the Strychnine: the Art of Victorian Pharmacy,” *Canadian Medical Association Journal* 161, 12 (Dec. 1999): 156–8; Charles M. Godfrey, *The Cholera Epidemics in Upper Canada, 1832–1866* (Toronto and Montreal: Secombe House, 1968), 49–59; and Canniff, *The Medical Profession in Upper Canada*, 71–5, 101.

Hodgins, *Documentary History of Education in Upper Canada, IX*, 118; X ,79; and Friedland, *The University of Toronto*, 34. Anatomy instructor, Dr. J.H. Richardson,
a colleague of Dean Nicol, recalled years later that “Prof. Nicol, under a retiring, almost diffident exterior concealed a mind stored with knowledge almost universal, and especially of that of Materia Medica.” (James Henry Richardson, M.D., “Reminiscences of the Medical Profession in Toronto, 1829–1905.” Toronto Reference Library, Baldwin Room, unpub. typescript, 1905, 6).

34 UTA, U. of T. Senate Minutes A70-0005: adoption of a statute proposed by Prof. W.B. Nicol (Medicine) for appointing a Chair of Agriculture and “the establishment of an experimental Farm,” 2 and 23 Nov. 1850, 61, 70. Senate Minutes, 11 Jan. 1851, 85. also reproduced in Hodgins, Documentary History of Education in Upper Canada, IX, 168.

35 Dean [Richard A. J.] Reeve, “Historical Sketch of the Medical Faculty” in Torontonensis (the University of Toronto yearbook), 1902, 109; see also Langton, The University of Toronto, 175, Table II, 261. Langton was not always as supportive of the Faculty of Medicine. See W.A. Langton, ed., Early Days in Upper Canada: From the backwoods of Upper Canada and the Audit office of the province of Canada (Toronto: Macmillan Co. of Canada, Ltd., 1926). 278.

36 Along with the Reverends McCaul, Beaven (Dean of Arts) and other faculty members, they were raised and lived prominently in British and colonial societies holding the pervasive belief that Natural History afforded one crucial aspect for revealing the Divine wonders of nature, while developing the powers of the mind and reason through discipline-based learning.

37 Hodgins, Documentary History of Education in Upper Canada, IX, 126; Friedland, The University of Toronto, 34; and Richardson, A Not Unsightly Building, 41 and caption 3.23. This first structure, in the Greek Revival style, was built more than half a decade before the first sod was turned for University College. It was set in a pine grove on the east bank of Taddle Creek near today’s College Street.

38 Not until after the First World War were certain leading medical faculty physicians appointed at Toronto on a full-time basis as teachers and researchers. Their status in mid-century as part-timers was reflected in their stipends: while each of the four Arts professors earned a full-time salary in 1851 of £450. Dean Nicol and most of his Medical faculty colleagues earned £250. (Langton, The University of Toronto, 1011, 168; and Hodgins, Documentary History of Education in Upper Canada, IX, 294.) As inherited from King’s, Toronto, “the teaching staff at University College commanded by far the highest academic salaries in British North America.” (Janet C. Searle, “Letters and Affection: The Recruitment and Responsibilities of Academics in British North American Universities in the Mid-19th Century” (University of Toronto doctoral dissertation, 1982), 438–9.)

39 Langton, The University of Toronto, 13, 111. Legislature of the Province of Canada, 16th Victoria, Cap. 161, passed June 1853, 16th Victoria, Cap. 89, effective from 1 Jan. 1854. See also Friedland, The University of Toronto, 40–1.

40 Those motions entailed appropriating the necessary funds to pay for William Mendum’s preparatory work, and adding influential new members to the Botanical Gardens’ Committee, such as the Mayor of Toronto, John G. Bowes, an external member.

41 Averill and Keith, “Wilson and the University of Toronto,” 143.

42 In 1854, by the Reverends John Taylor and McCaul (but not Hincks); and the William Hincks motion of 1859 reflecting his isolation from all of the earlier proposals. So a lengthy absence of medical students and instructors from the campus and senate followed until 1887, removing that particular perspective, or lens, from the university’s proceedings.

43 Richardson, A Not Unsightly Building, 12, 41–5. caption 3.23. Richardson called this and other losses a “sorry early record of repeated dispossession.” Was the university
currying favour with the city? Did the university lose long-term interest in the eastern section of its campus after the province, in search of parliament buildings, expropriated the eastern section of sixty-eight acres, removing the university from the old King’s College building in 1853? Did it see the lease as a way to raise money? If so, they would be disappointed, for the rent was pegged so low as to be below nominal, and thus in reality gratis. For every year during the 999-year lease, the city would pay “the yearly rent of five shillings lawful money of Canada, if demanded, upon the first day of January in each and every year, free from all rates, taxes...” Nominal? Clearly not. One pound sterling per acre, for a total of about £50, would be nominal. However, at 5 shillings total annually, the rent was one-tenth of one shilling per acre annually for 999 years. And unless the university demanded the rent, the city was not required to pay. See Langton, *The University of Toronto*, 111; and AO, A65-0001/(020), 1859 Campus Map; see also Minutes of Toronto City Council, 1 Jan. 1859, Appendix no. 90, 149, 154.

44 Langton, *The University of Toronto*, 111; and AO, A65-0001/(020), 1859 Campus Map. Although Dorothy Forward noted that the University reserved through the lease a right to reclaim the botanic garden sector for its own use, Sir William Mulock later admitted that they would never do so. See Forward, *The History of Botany in the University of Toronto*, 59, n.4. The boundary line, between the Queen’s Park and the campus, was drawn along Taddle Creek’s eastern top-of-bank, closely aligned to today’s western stretch of Queen’s Park Crescent.


46 Richardson, *A Not Unsightly Building*, 14, 119. A 1870-era student at the secondary school in the former King’s College building near the Creek and Pond recalled vividly, a half century later, that “there was always lots of mud and a terrible stench was always hanging around. I think it was of it [i.e. the Pond] that the saying started about a real smell being one that you could hang your hat on.” (*The Globe*, 6 Sept. 1924, Courtesy David Bain and the North York Reference Library, Gladys Allison Room Clippings).

47 An 1868 graduate recalled many decades later that “Dr. McCaul was fond of wandering around the park, surveying the pond named after him and the Taddle

48 A forerunner of the Board of Trustees, 1884–1906, subsequently the Board of Governors.


50 In 1880, TBC was established as the theological branch of the Canadian Literary Institute in Woodstock. TBC was the creation and beneficiary of Toronto’s William McMaster who capped his business success as the founding president of the Canadian Bank of Commerce. McMaster had also been active and well connected for over three decades in Ontario public and political life, notably on the national scene as a Liberal Party senator and locally as the celebrated force and grand patron of his denomination’s leading temple, Jarvis Street Baptist Church. As well he had occupied since 1873 a seat allocated for external, non-academic volunteers on the U. of T. senate. In 1880 an authorized biographical publication recorded his previous donations to the Woodstock institution which “is now to be moved to Toronto where a building is to be erected for its accommodation, to which Mr. McMaster contributes the further large sum of sixty thousand dollars.” By 1886 a similar squib boasted that he was “chairman of the board of trustees of the Baptist College, which was erected and furnished by him at an expense of over $100,000.” When the senator died the following year, his will provided a bequest from the residue of his estate, amounting to almost $1 million. See The Canadian Biographical Dictionary and Portrait Gallery of Eminent and Self-made Men, Ontario Volume (Chicago and Toronto: American Biographical Pub. Co., 1880), 166–71. Courtesy ECO; George Maclean Rose, A Cyclopedia of Canadian Biography (Toronto: Rose Pub. Co., 1886), 464. Courtesy ECO; and CAMH Archives: unsigned, “A History of McMaster to 1928: Dr. C.M. Johnston’s Book is in Manuscript,” in McMaster News, 44, 1 (Winter 1974): 2–6. See also G. Mercer Adam, Toronto, Old and New: A Memorial Volume (Toronto: Mail Printing Company, 1891), 120.

51 McMaster Hall is now the Royal Conservatory of Music, on Bloor Street, south side, west of the Royal Ontario Museum.


53 R.E. Babe, “Sir William Mulock” in The Canadian Encyclopedia, Second Edition, Volume III, 1401. Also ref. Nathaniel Burwash in Langton, The University of Toronto, Chap. 2. The Board of Management’s land sale in 1880 was, however, its last occasion to make any official reference to either Senator McMaster himself or his college, notwithstanding numerous minute book entries (and pasted-in press clippings) over the next four years concerning the creek’s pollution problems and eventual channeling underground. The Baptist College represented the thin edge of the wedge as the first among other structures in the twentieth century whose boundaries were permitted to overlap into the university stretch of the Taddle Creek ravine.

54 Eric Arthur, revised by S.A. Otto, Toronto: No Mean City (Toronto: University of Toronto Press, 1986), 254. Langley, Langley & Burke had designed and overseen the construction, for McMaster and his wife, Susan Moultou McMaster, of Jarvis Street Baptist Church in 1874, and in 1877, the McMasters’ home on Bloor Street East.

55 AO, Horwood fonds; Langley, Langley & Burke sous-fonds: Original contract drawings, Baptist Theological College, C11-632-0-1 (6111), Site Plan [K-90].

56 The fact that the drainpipe to the cesspit and its overflow pipe into the Creek were actually constructed (supported by accounts of deteriorating water quality commencing in 1881) is verifiable from a subsequent “Plan Showing Drain and Steam Pipes” among the as-built drawings of “McMaster University, Present Buildings” (AO: Burke, Horwood & White sous-fonds: C11-1032 dated ca.1908–09). The “Old D.P.”
[drain pipe] is marked in its original 1880 location, with an arrow from it indicating a subsequent move to the “Present Drain to Ravine” installed after the buried Taddle Creek sewer replaced the “cesspit” and the “creek.”

57 Heather MacDougall has noted that cesspools along with privies were by then considered “rudimentary,” accompanied as they were by “disease and discomfort.” By 1882–83 they were targeted as the foremost problems facing both the Provincial and the local Boards of Health, whose chief official in Toronto was Dr. Canniff. For major buildings, connections to street and trunk sewers, with lengthy conduits where necessary, were steadily replacing privies and cesspools. In 1855, England’s Dr. James Snow had proved that the Broad Street water pump in London was spreading cholera. Hence by 1880 the professional standard, not disproved until the end of that decade (and all too common today in the absence of treatment plants), had evolved such that the only satisfactory alternative to a sewer connection was a direct conduit to a large body of rapidly moving water. See Heather A. MacDougall, Health is Wealth: The Development of Public Health Activity in Toronto, 1834–1890. University of Toronto doctoral dissertation, 1982, 363, 367, 378, 379, 391–2. (Reference was not found in this excellent thesis to the university’s environmental problems during that era within Taddle Creek and its surrounding watersheds.) See also MacDougall, “William Caniff,” DCE, XIII, 156–9: “Appointed Toronto’s first permanent medical health officer on 12 March 1883, Canniff spent the next seven years slowly educating his fellow citizens in basic principles of sanitation and disease control. His efforts to modernize the city’s sewer system and waterworks, regulate its food supplies, and promote vaccination and isolation of the sick threatened many vested interests, including those of medical colleagues. Disillusioned and frustrated, he resigned on 17 Sept. 1890, but not before he had made preventative work an integral part of urban life.” And Michael Piva, The Condition of the Working Class in Toronto, 1900–1921 (Ottawa: University of Ottawa Press, 1979); and Charles Godfrey, John Rolph: Rebel with Causes (Madoc, Ont.: Codam Publishing, 1993), 121. The City of Toronto dumped untreated sewage directly into the bay, and into Lake Ontario west of Toronto Island, until 1911.

58 Richardson, A Not Unsightly Building, 52, 120.

59 This meeting was reported in a detailed newspaper account—one of several that was pasted into the U. of T. board’s minute book without comments or notations, hence presumably accurate from their standpoint.

60 UTA, Board of Management Minutes, Vol. 2, 23 Sept. and 28 Oct. 1881; Mouré, “Outline of the Financial History of the University,” in Langton, The University of Toronto, Chapter 4. President Wilson’s remark about the dangers of typhoid fever might strike his critics as breathtaking hypocrisy, following two decades of the university responding ineffectually to the worsening condition of Taddle Creek while allowing students to continue plunging into it, though admittedly much of it carried out after Wilson and other university officials were at home in bed. Historians more sympathetic to Wilson point out that Wilson was constrained by William Mulock and the Board of Management, which controlled money matters. Wilson had good reason to fear typhoid for he was an occasional visitor at Edward Blake’s summer home at La Malbaie, on the north shore of the St. Lawrence, where he must have been aware of typhoid at Bishop’s College Grammar School in Lennoxville. During the summer and autumn of 1880, two children/youths had died, and at least sixteen were seriously ill with typhoid. No less an authority than Professor William Osler, then of McGill University, was one of three expert commissioners asked to investigate and report on it. Moreover, they engaged President Wilson’s longstanding colleague, Henry Croft, Professor of Chemistry, to undertake a chemical analysis of the sources
of Bishop’s water supplies. Collectively they had no doubt that contamination of the water supply, in addition to poor drainage, ventilation and sewage, caused these tragic epidemics. Moreover, Professor Croft noted, “I think the waters [at Bishop’s] are all bad, as containing too much organic matter. I have had several cases of similar waters to examine in Yorkville and Toronto, in houses where sickness prevailed — in one case, bad typhoid. They all exhibited the same properties... [including] organic matter.” See T. Simpson, William Osler and J.C. Cameron, “Official Report of Investigation into the Origin and Spread of an Outbreak of Typhoid,” in Canadian Medical and Surgical Journal, IX (1880–81): 440–5. Also see in the same volume, Editorial, “Typhoid at Lennoxville” (Dec. 1880: 315–16); and E.D. Worthington, M.D., “Typhoid Fever at Lennoxville” (Jan. 1881: 321–9). The intransigence displayed subsequent to these actual tragic parallel circumstances by university and municipal officials between 1880 and 1884 is difficult to fathom.

61 UTA: The Varsity, U of T. student newspaper, Vol. 2, 4 Nov. 1881, 36. Dunking, however, was allowed to continue for another year, until November, 1882.


63 CAMH Archives: Ontario, Legislative Assembly, First Annual Report of the Provincial Board of Health of Ontario being for the Year 1882 (Toronto: printed by C. Blackett Robinson, 1883), Appendix D, Article V.

64 UTA, Board of Management Minutes, Vol. 2, 1 May 1884.

65 Even though the 1860 Parliamentary Commission found those charges false; and even though Egerton Ryerson’s attempt to derail the university in 1863, through his influence over the chancellor, James Paton, was defeated.

66 Certain medical members of the senate between 1857 and 1887, notably Dr. William Aikins, Dean of the Toronto School of Medicine, located in the city’s east end, expended their energies not on the gardens but on bringing about the re-affiliation with the university. See Langton, The University of Toronto, 176; McKillop, Matters of Mind, 70–9; and Friedland, The University of Toronto, 127–8.


68 T.A. Reed, The Blue and White: A Record of Fifty Years of Athletic Endeavour at the University of Toronto (Toronto: University of Toronto Press, 1944), 183 4: “By 1903, there were complaints of the encroachment of buildings affecting the course and before long the Varsity Golf Club ceased to be.”


70 At Queen’s, Kingston, by contrast, they were clear that the botanical gardens would serve a demonstration teaching function, albeit one that was held lower in priority than both “a good botanical library and a good herbarium.” See Lawson, “Remarks on the Present State of Botany.”

71 Notably at Guelph and Ottawa in the 1870s and ’80s.

72 Together with biochemical laboratories.

73 UTA, A73-0026/177(24): The Harvard University Gazette, 1 Nov. 1952, 50 1. In 1854 the British traveler and writer, Amelia Murray (1795–1884), visited Dr. Gray at Harvard’s Botanical Garden in Cambridge, Mass. and at his private home garden, where she “felt as if transported to the Fairyland of Flowers.” Letters from the United States, Cuba and Canada (New York: G.P. Putnam, 1856), 18–19. Courtesy ECO.

74 What is surprising is that the idea did later take root, during the first half of the twentieth century, at four other Canadian universities. Moreover at the University of Toronto there were two subsequent series of attempts to establish a botanical gardens:
in the four decades preceding 1947, under Botany Professor Robert Thomson’s aegis; and a third sequence of events on the Glendon Hall campus, initially bequeathed to U. of T. for that very purpose in 1950, that nearly succeeded. The rationale for botanical gardens grew steadily more compelling to Canadian universities during the twentieth century, yet the identified drawbacks persisted with sufficient force to restrain the numbers that actually emerged. See John P.M. Court, “Out of the Wood Work: The Wood Family’s Benefactions to Victoria University,” Papers of the Canadian Methodist Historical Society, 11, (1997): 26–51.
Figure 16: University of Toronto Plan of Grounds, 1859, an unattributed map that probably accompanied the lease agreement by which the university leased land for the Queen's Park to the city of Toronto. It is possible that the map might have been a prototype, as pencilled lot numbers and captions show under the ink. Road locations remain close to those shown on Storm's 1857 map (see page 168). The lease of 1859 allowed the university to develop the "Proposed Botanic Gardens," marked on the map, even though it was now inside the borders of the new park. Taddle Creek itself remained part of the university campus. On two acres of land, more or less, sits the old King's College building, converted in 1856 to an asylum. The university's Medical School building, not included within the park's boundaries, is noted at the southwestern corner of the park, though by 1859, the Faculty of Medicine had been removed from the university. Added since the 1857 Storm map are residential lots east of the proposed Queen's Park (as well as to the south and southeast, not shown on this detail).
Picture Credits

Figure 1, front cover: Marmaduke Matthews (Cdn, 1837–1913), Barbara and Alice, Queen’s Park, 1886, oil on canvas, 63.5 x 76.2 cm. Art Gallery of Ontario, Toronto, gift of Trinity College, University of Toronto, 1967.

Figure 2, back cover, lower: Lucius O’Brien’s University College in 1876, watercolour, 26 x 36.7 cm. University of Toronto Archives (UTA), Toronto, B11965-0025/001P, gift of Prof. Maurice Hutton.

Figure 3, back cover, upper: Archives of Ontario (AO), Horwood fonds (626).1, Plan of the University grounds attributed to W.G. Storm, 1857; and courtesy Douglas S. Richardson.

Figure 4: Hamilton Spectator, 28 June 1878, page 4.

Figure 5: Trent University Archives (TUA), Peterborough; and for the date of the plans: Archives of Ontario, RG 22-7, Minutes of the Gaol and Courthouse Committee.

Figures 6 and 7: TUA.

Figure 8: Courtesy Heather Viscount, Cobourg Public Library, Cobourg.

Figure 9: AO, Horwood fonds (626).1, Plan of the University grounds attributed to W.G. Storm, 1857.

Figure 10: UTA, B1965-0025.

Figure 11: Courtesy John P.M. Court.

Figure 12: UTA, B1966-005/003 (09) from the private records of Dr. A.B. Macallum, attributed to photographer Robert W. Anderson, first published in W. Stewart Wallace, A History of the University of Toronto, 1827–1927 (Toronto: University of Toronto Press, 1927, 110).

Figure 13: UTA, A73-0003/002(75), from an engraving by W. Warner.

Figure 14: H.H. Langton, ed., The University of Toronto and its Colleges, 206–07.

Figure 15: AO, Horwood fonds [K-90], C11-632-0-1 (611).1.

Figure 16: UTA, A65-0001/(020), University of Toronto Plan of Grounds No. 735 of 1859.

Figure 17: UTA, A65-0004/0.192.

Figure 18: UTA, 2001-77-6MS (digital image), File 1B001, A 1965-004 [0.196] (original image).

Figure 19: UTA, 2001-15-1MS (digital image), File 1B001, A1965-0004 [0.64] (original image).

Figure 20: Courtesy David Bain.

Figure 21: From a sketch by W. Armstrong, first published in Canadian Illustrated News, 16 July 1870.

Figure 22: Courtesy David Bain.

Figure 23: Illustration by P.W. Canning, first published in Canadian Illustrated News, 22 August 1874.