THE MONTREAL VILLA;
1830 to 1930

by

Johan K. Jooste, A.A. Dipl.

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Architecture.

School of Architecture
McGill University
Montreal, Québec

November, 1984

TABLE OF CONTENTS

ABSTRACT		iv
RÉSUMÉ		v
ACKNOWLEDGEMENTS		vi
LIST OF ILLUSTRATIONS		vii
1.0	INTRODUCTION	1
	Illustrations	6
	Notes	7
2.0	HISTORICAL DEVELOPMENT OF THE TYPE	8
2.1	The Term "Villa"	8
2.2	The Villa as Retreat	9
2.3	The Villa as Power House	14
2.4	The Plan Form	18
	Illustrations	24
	Notes	35
3.0	THE OWNERS AND THE VILLAS	37
3.1	Victorian Montreal	37
3.2	Ravenscrag	41
3.3	Lord Mount Stephen's Residence	42
3.4	Hugh Graham Residence	43
3.5	Hosmer House	43
3.6	Ross Residence	44

3.7	Molson Residence	44
3.8	Purvis Hall	45
3.9	The Typical Plan	46
	Illustrations	47
	Notes	56
4.0	**LIVING IN THE VILLA**	59
4.1	Introduction	60
4.2	Principles of Planning	61
4.3	The Household	63
4.4	The Family Apartments	66
	The Drawing Room	66
	The Dining Room	67
	Other Day Rooms	68
	Evening Rooms	69
4.5	The Servants' Apartments	71
	Kitchen Offices	71
	Sleeping Quarters	72
	Other Zones	73
4.6	Site Development	73
4.7	The Servant Problem	75
	Illustrations	76
	Notes	83

5.0 TECHNOLOGIES FOR COMFORT AND CONVENIENCE 85

5.1 Introduction 85
5.2 Cleaning the House 87
5.3 Laundry 88
5.4 Ironing 89
5.5 The Kitchen 90
Food Processing 91
Refrigeration 91
Storage 92
5.6 Heating 94
5.7 Air Infiltration 97
5.8 Plumbing 97
5.9 Ablution 99
5.10 Lighting 100
5.11 Communication 102
5.12 General Considerations 103
Illustrations 105
Notes 116

6.0 CONCLUSIONS 119

7.0 BIBLIOGRAPHY 122

ABSTRACT.

This thesis approaches the Montreal villa from the vantage of the historical development of the type, the typical owners, life in the house and technological developments. The study examines the relationship of the Victorian and Edwardian villa as a typology and predecessor of the egalitarian suburban dream house. The villa in Canada has to date not been the subject of systématic study in terms of how the families (and servants) used the house or how domestic technology developed to transform the eighteenth century 'communal' household, which was also a "factory and processing plant", into a segregated "machine to live in". The thesis argues that this is an essential view. The study is not comprehensive. It is offered as a background for further work which the writer hopes to undertake in the future.

RÉSUMÉ

Cette thèse defini la villa de Montréal du point de vue du développement historique du type, des habitants typiques, et de la vie dans l'habitation, de même que des développements technologiques. L'étude examine le rapport entre les villas Victoriennes et Edwardiennes comme typologie et précurseur de la "maison de rêve" des banlieues. La villa du Canada n'a jamais fait l'objet d'un étude systématique visant une compréhension de la facon dont la famille et les domestiques se servaient de la maison, et dont la technologie domestique s'est developpée afin de transformer le ménage "communal" du dix-huitième siècle, qui était en même temps une "usine de production" et une "usine alimentaire", en une "machine habitable" isolée. La thèse propose que celui-ci soit un point de vue essentiel. L'étude n'est pas exhaustive; elle est présentée comme fondement de travaux que l'auteur espère entreprendre par la suite.

ACKNOWLEDGEMENTS

Without the intellectual encouragement and advice of my advisor, Professor Ricardo Castro, this document could never have been written.

I am also very grateful to Professor Norbert Schoenauer, whose commitment to housing, has influenced me immensely.

Furthermore, I would like to thank my mother, Sylvia van der Hoven, for her financial assistance, as well as Catherine Warring and Janice Hamilton for typing and editing the manuscript.

Lastly, I am deeply indebted to Anli Jooste.

LIST OF ILLUSTRATIONS

ILL 1 Early "People's Villa", (1906) from The Canadian Architect and Builder, November 1906

ILL 2 Plan of a Roman Villa, Lofts

ILL 3 Plan of a Roman Villa, Boscoréale, Southern Italy, Percival

ILL 4 Laurentine Villa Restitution, David Bigelman, 1982, Pierre de la Ruffinere du Prey, The Fifth Column.

ILL 5 The Villa Capra (Rotonda) Vicenza by Andrea Palladio (1567-), Rowe

ILL 6 Laurentine Villa Restitution, Karl Friedrich Schinkel, 1841., Pierre de la Ruffinere du Prey, The Fifth Column.

ILL 7 Pangbourne Tower, Ground Floor, Franklin

ILL 8 Harlaxton Manor, Franklin

ILL 9 Holmdale, Franklin

ILL 10 Kelling Hall by Edward Mante, 1912-3. An Arts and Crafts 'butterfly' house. Franklin

ILL 11 Temple Grove, 1836, John Samuel McCord, Notman Photographic Archives, McCord Museum, Montreal.

ILL 12 Terra Nova, 1848, John Molson, 4300 Chemin de la Rene-Marie, Architect George Browne; Notman Photographic Archives, McCord Museum, Montreal.

ILL 13 Maison Aime Geoffrion, 1930, 815 Belmont Avenue, Architects L.A. & P.C. Amos. C.C.A. Collection, Montreal

ILL 14 Braehead, McTavish Street, Board of Trade

ILL 15 Anglo Montreal, 1891 Dominion Illustrated, July 11, 1891

ILL 16 Robert Meighen's Residence, Drummond Street, Board of Trade

ILL 17 Robert Meighen's Residence, Drummond Street. A view of the "garden party" in honour of Lord and Lady Eileen Roberts, July 1908, Board of Trade

ILL 18 Montreal Residence of Lord Strathcona and Mount Royal, Dorchester Street West, Board of Trade

ILL 19 Residence of Sir Hugh Graham, Sherbrooke Street West, Board of Trade

ILL 20 Charles R. Hosmer Residence, Upper Drummond Street, Board of Trade

ILL 21 Ross Residence, Upper Peel Street, Board of Trade

ILL 22 Mortimer B. Davis Residence, Pine Avenue, Board of Trade

ILL 23 Residence for Mr. L.C. Webster, Westmount Boulevard. Ground Floor and Garden Plan, Construction, Vol. 10, No. 5, May 1917.

ILL 24 "Basement Plan" Villa designed by Architect Taylor, 1880's, McGill University Archives, drawing by author

ILL 25 First Floor Plan, Family Apartments; Day Rooms. Villa designed by Architect Taylor, 1880's, McGill University Archives, drawing by author.

ILL 26 Second Floor Plan, Family Apartments; Evening Rooms. Villa designed by Architect Taylor, 1880's McGill University Archives, drawing by author.

ILL 27 Third Floor Plan, Family Apartments; Childrens' Rooms. Villa designed by Architect Taylor, 1880's McGill University Archives, drawing by author.

ILL 28 Attic Plan, Servants' Apartments. Villa designed by Architect Taylor, 1880's, McGill University Archives, drawing by author.

ILL 29 Villa for Mr. Thos. E. Hodson c. 1900, Edward Maxwell Architect, C.C.A. Collection, Montreal

ILL 30 F. Orr Lewis House, Sherbrooke Street West, View of the Drawing Room, Board of Trade

ILL 31 Sears, Roebuck and Co., Catalogue, 1886, Russell

ILL 32 Sears, Roebuck and Co., Catalogue, 1896, Russell

ILL 33 Enterprise coffee grinders from the Enterprise Mfg. Co. catalogue, 1883, Russell.

ILL 34 Hot water heating apparatus and hot air furnace, The Canadian Architect and Builder July 1889.

ILL 35 Domestic Hot Water System, 1907, Canadian Architect and Builder, April 1907.

ILL 36 Sewer pipes, insulation and hot water heaters, The Canadian Architect and Builder, January, 1893.

ILL 37 Plumbing diagram, The Canadian Architect and Builder, March 1889.

ILL 38 Bathtubs and bathing equipment, 1880's, Catalogue of Sidney Sheppard & Co., Bufalo, N.Y. Russell.

ILL 39 "Student Lamp", Kleeman patent, 1863, 1870 Russell.

ILL 40 "Fish tail" gas light, MacKenzie House, Toronto, Russell.

ILL 41 Wall-mounted gas burner with Welsbach incandescent mantle, Russell.

ILL 42 Edison Carbon - filament electric lights ca. 1900, Russell.

1.0 INTRODUCTION

> "Every form of...architecture is in some way an embodiment of the Polity, Life, History and Religious Faith of Nations".[1]
> Ruskin

Like most Canadians, the writer feels that a detached house and garden is the ideal environment for family life. The traditional free-standing dwelling, perhaps energy inefficient, dependent on automobiles, and wasteful in terms of land, best expresses, symbolically, the ideals of frontier individualism, the family and individual freedom. The myth of the suburban dream house of today, within reach of the ordinary man, was until the early twentieth century only attainable by the wealthy elite. A major technological, social and economical revolution brought the dreams of the few within reach of many.

The purpose of this study is to examine the nineteenth century and early twentieth century villa as the predecessor of the egalitarian dream

house. Further, this study attempts to situate the from-villa-to-suburban-dream-house typology within the Canadian milieu, and takes examples of these building types in Montreal as a particular point of reference.

The villa in Montreal has been the subject of exhibitions, dissertations, graduate level seminars, undergraduate investigations, and historical publications.

The most recent exhibition (1983) was organized by the Canadian Center for Architecture (CCA)[2]. The organizers illustrated the classical linkages between eight villas on Mount Royal (Chateau des Messieurs de Saint-Sulpice, 1690c, Monklands, 1803, Temple Grove, 1836, Braemar, 1847, Terra Nova, 1848, Ravenscrag 1861-3, Maison Jeffrey Hale Burland/John Wilson McConnell, 1913-4 and Maison Aime Geoffrion, 1930-1), and their historical models and the sustained tradition of emulation. Pierre de la Ruffiniere du Prey[3] in an accompanying essay wrote about the "idea" of the villa. His four cardinal points include the notion of "Room to Breathe", "To See and be Seen", "Openness and Movement", and finally, "The Villa Garden".

Julia Gersovitz[4] in her M.Arch. thesis (1980) on the Golden Square Mile researched extensively (from the art historian's point of view) the villas, owners and architects. She places Victorian Montreal in its North American context, analyses the influences of new transportation technologies on the growth and development of the city in terms of its wealth and architecture. Her descriptions of Ravenscrag and the Mount

Stephen House are detailed and accurate - in terms of architectural style, material and historial association.

A graduate seminar conducted by Chirstina Cameron[5] at Concordia University in the Master of Fine Arts Programme, examined ten Victorian and Edwardian "residences" in terms of architect-client and architectural expression. The architectural element is expressed in terms of style, material and decorative association.

A number of historical publications by Professor John Bland, Gowans[6] and others have dealt with the villa, in the traditional architectural sense; the facade is seen as a composition of form, planes, textures, color and historical style. The floor plans are viewed as a geometric pattern of abstract mathematical forms, axes and vistas.

The "traditional" view of the Montreal villa, although complete in terms of the art of building beautifully and well, lack the social and user dimensions. These studies all deal with architects, craftsmen, or family history. Surprisingly little is written about how the families used the villas which were designed and built for them.

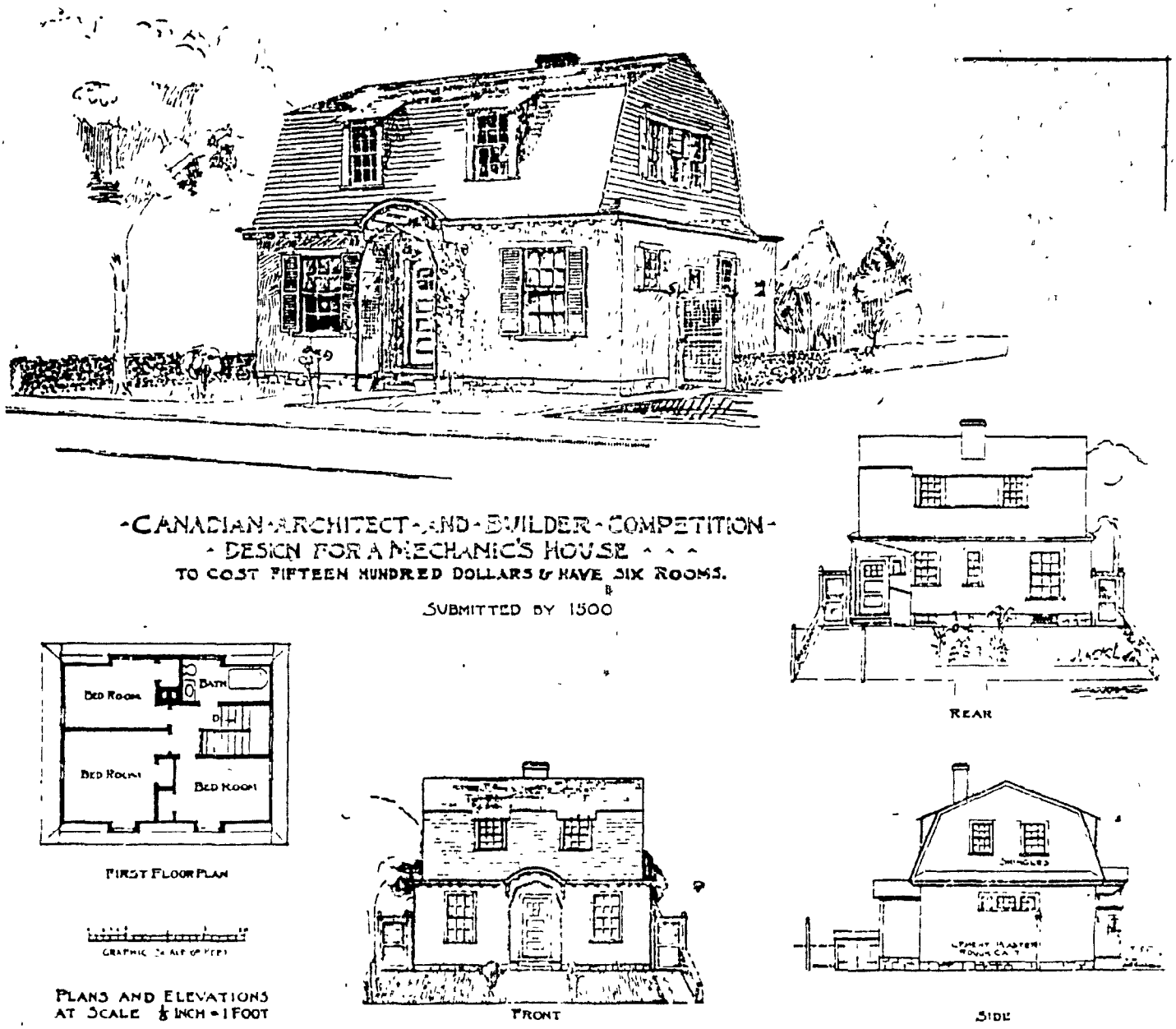
A graduate seminar run by Ricardo Castro and Adrian Sheppard (1984) at McGill University examined housing typologies, amongst them, the urban villa, using Montreal as a laboratory[7]. The students studied the types in terms of historical development, technologies and use patterns, particularly, how the use-patterns gave form to the plan. This thesis research project is an extension of the "urban villa" graduate research

exercise undertaken by the writer. Specifically, this study aims to situate the Montreal villas within the historical development of the type, learn about the owners, architects and their Victorian-Edwardian residences, analyse the plan and its function, determine how the family used the house, examine factors of change and illustrate how nineteenth century domestic teechnology was developed and used to provide for comfort and convenience. The study will also indicate how the "domestic revolution" in the Victorian villa changed the concept of the house from a "factory and processing plant" to a "machine to live in".

A number of sources were consulted, ranging from contemporary publications, architectural plans, and reference works, and visits to the houses. Articles appearing in the nineteenth century editions of the Gazette, Board of Trade Illustrated Edition of Montreal, The Canadian Architect and Building and Architectural Record, provided direct insight into the Victorian world and mind. In addition, access to a wide selection of house and villa design manuals, most notably Kerr's The Gentlemen's House and Calvert Vaux's Villas and Cottages proved very useful. The extensive architectural collections of the C.C.A. and McGill University were invaluable. The Notman Collection provided glimpses into the overstuffed dark interiors of the "residences of prominent self-made men". A selected bibliography is provided.

In this introduction an attempt was made to situate the investigation in a broad context. Part 2 will examine briefly the historical development of the typology from its Roman origins to Montreal in the 1930s. In the third part the social and economical conditions of Victorian Montreal are

summarized, and a resumé of the principle owners and villas, presented. Part 4 addresses, primarily, life in the villa, the major planning problems architects had to resolve, as well as factors of change. Part 5 presents the technological changes in the household which made possible a "domestic revolution" leading ultimately to the notion of the "machine à habiter" in the twentieth century. In the final part the writer raises some questions suggesting further avenues of research.



ILL 1 Early "People's Villa", (1906) from The Canadian Architect and Builder, November 1906

NOTES

1. Ruskin quoted in The World of the Victorians, p. 256.

2. Architecture Quebec, October 1983, "Les Villas de Pline".

3. Pierre de la Ruffiniere du Prey, "Four Cardinal Points of a Villa", from "Les Villas de Pline", Architecture Quebec.

4. Julia Gersovitz, The Square Mile; Montreal 1860-1914, 1980.

5. Christina Cameron, Mansions of the Golden Square Mile, 1976.

6. Alan Gowans, Looking at Architecture in Canada, 1958 and Building Canada, 1966.

7. Ricardo Castro/Adrian Sheppard, Graduate Seminar, 301-616B, McGill University, Montreal.

2.0 HISTORICAL DEVELOPMENT OF THE TYPE

> "Yesterday I came to the villa of Careggi, not to cultivate my fields but my soul. Come to us, Marsilio, as soon as possible. Bring with you our Plato's book De Summo Bono. This, I suppose, you have already translated from the Greek language into Latin as you promised. I desire nothing so much as to know the best road to happiness"[1] Cosimo de Medici, 1462

2.1 The Term "Villa"

The term "villa" in the Victorian and Edwardian context, was commonly associated with a detached house, in an "Italianated manner", set in a garden. Coffin uses the term to refer to all country or non-urban residences which were inhabited by the Renaissance elite whose "political, religious, commercial or social activities" were related to the City of Rome. In both the English and Italian traditions, the term villa was reserved for a rural or suburban residence of a "wealthy person".

2.2 The Villa as Retreat

The villa as an architectural type has a long history - in the writings of both Cicero and Pliny, accounts of life on their country estates fired the imagination of architects from the Renaissance to the present day. The nineteenth century German architect Karl Friedrich Schinkel was inspired to attempt an architectural reconstruction of Pliny's villa based on the evocative images which abound in Pliny's writing. During a 1981-1982 concours d'emulation, David Bingelman recreated another of Pliny's villas. Renaissance architect Michelozzo di Bartolomeo in 1458 designed his Villa Medici at Fiesole as a villa antica. The villa ethos as formulated in the work of Andrea Palladio was exported to England, France and North America. In Montreal, the western slope of Mount Royal became an accepted site for the villas of the rich and successful. Among the earliest perhaps, was Terra Nova, designed by George Browne for the Molson Family in the 1840's.

A re-occuring theme in architectural literature, is that of the villa as a retreat to withdraw to, where one can persue a peaceful and private life. According to Alberti, for example, the villa allows one to

> "...flee those uproars, those tumults, that tempest of the world, of the Piazza, of the palace. You can hide yourself in the villa in order not to see the rascalities, the villanies, and quantity of wicked men which constantly pan before your eyes in the city"[2]

The idea of the villa (and its garden) being a place of escape from the urban and social reality was not only a Renaissance idea but is also a recurring theme from the Enlightenment to the twentieth century; Roger North in his Treatise on Building (1695) describes the villa as a "lodge for the sake of a garden, to retire to enjoy and sleep without pretence to many persons"[3].

Herbert Gans' book in 1976[4] clearly stated the high level of satisfaction middle class buyers had expressed with the suburban developments built during the 1960's - to them, the suburban house, suburb and way of life was highly desirable and "a good investment" in an expanding economic climate.

The concept of "villeggiatura", the withdrawal of the urban Romans to their country estates, after Coffin, is particularly Italian, a tradition which survived well into the Renaissance although the term "villa" emerged much later, as did the transition from production farm to a "resort".

> "Even in the second half of the sixteenth century those complexes, like the Villa Madama and the Villa Giulia, which never developed great formal gardens, continued to be called "vigne". So the Frenchman, Pierre Belon, who was in Italy between 1546 and 1549, especially noted that what the French might call "fields enclosed by hedges or hunting parks, or gardens" the Romans would denote as "vigna" (vinea)"[5]

Further, according to Coffin, in the later part of the sixteenth century, the work "giardino" or "orti" often replaced "vigna", used

particularly in the context of country houses with formal gardens such as the Orti Du Bellay (1554), Giardino Vitelli (1566), or the Villa d'Este at Tivoli, which was sometimes known as the "giardino e palazzo". Also, the Villa Medici or the Pincian Hill, was originally referred to as "vigna" while inhabied by Cardinal Ricci, yet was known after 1576 as giardino after the extensive landscaping by Cardinal Medici had been completed. Coffin notes that the term villa was seldom used in popular correspondence in favour of giardino, whereas the term is frequently used in the more formal treatise.

Another Roman tradition, that of "villa Dialogue", (perhaps an early prototype of today's think tank?) as described by Cicero, (who called his villa the Academia, after Plato) was revived by the Renaissance; the notion of philosophical and political discourse was associated with the element of retreat from the realities of urban life. Although some of the written references to the fourteenth and early fifteenth century dialogues are fictitious, literary and philosophical groups did meet in the gardens of Florence; groups met in the Paradico of Alberti, the Monastery of S. Spirito and Poggio Bracciolini at Terrannova[6]. After Vespasiano, Branco Saccheti entertained Florentine scholars twice a year at his villa for political and literary discourse;

> "In his house no games of any kind were played, as is done in most villas"[7]

The concept of the villa as a private retreat for the enjoyment of the contemplative life with family and friends, isolated from the pressures of the city, would appear to become increasingly popular during the fifteenth century. An account by Coffin [8] of the correspondence between Bruni and Rossi of the former's visit to the villa of the Archbishop of Pisa (1408) indicates that the villa facilitated an escape, not only from urban society, but also from convention:

> "...like boys they frolicked nude in the river to the amusement of the Archbishop ... then they dined before mounting horses for jaunts through the cornfields and meadows or watched the nude farmers wrestle in the sand"[8]

The idyllic life, as alluded to by Rossi and Bruni, a lifestyle of freedom, innocence, youth, escape, is made possible by location - whether suburban or ex-urban. "Villegiatura", is facilitated by the symbiotic relationship of villa and garden, so much so, that the Renaissance relationship of villa and garden is turned inside out during the Seventeenth century; the usual Renaissance relationship of building to garden, (although civil engineering works may be extensive) is that of a dominant building set in a landscape adapted to architectural intent, for example, the Villa Medici, Villa d'Este at Rome or Villa d'Este at Tivoli. Conversely, the Seventeenth century saw the garden increase in size and importance to the point where the villa building was reduced to "a piece of decoration within the garden, not unlike some of the great fountains and waterworks, as at the Villa Lante at Bagnaia or the gardens of Cardinal Du Bellay in Rome"[9].

The desire of a "lodge for the sake of a garden" re-occurs regularly in written history from the Renaissance to the villas in Montreal. Building the villa and laying out the garden against a mountain, or a hill, reflects an ancient tradition of countryhouse building, whether in Italy, England, or North America. Consistently a preference for high ground is indicated, for reasons of health, clean air, breezes, better drainage, view (to see and be seen) and dominance/power. Pliny described his "Tuscan villa" in a letter as being:

> "at the very foot of the Apennines, which are considered the healthiest of mountains...the summer is wonderfully temperate, for there is always some movement of the air..."[10]

Pliny's evocations are also reflected in the attitudes of the Renaissance, the Enlightenment and the Victorians; not only should the environment facilitate physical well-being, but also strengthen the "soul", a theme which also often occurs in Renaissance writing. For example, the Medicis returned to the family villa to prepare for the advance of death[11]; Cosimo died at Careggi in 1464, Lorenzo in 1440, and Lorenzo the Magnificent 1492. Benedetto Cotrugli, writing in Naples in (1458)[12] suggested that the merchant should retire to his villa with the chaplain in old age to prepare for death and to read the Scriptures.

2.3 The Villa as Power House

By contrast, the reason for building the English manor house on high ground was for the protection of life during the Middle Ages, and to symbolize power until late into the nineteenth century. Not only were the considerations of health important, but also that of a defensive system and a power symbol. The country house was the seat of the ruling class, a "powerhouse". Here lived the squire, and later the member of Parliament. According to Girouard the ownership of land in pre-industrial England formed the basis of power because landowners, as opposed to merchants, formed the dominating class;

> "...people did not live in country houses unless they either possessed power, or by setting up in a country house were making a bid to possess it"[13]

The English mannor house became symbolic of not only the individual's power and wealth, but of the neat and ordered social system with god and sovereign at the pinacle and well-defined role and place for everyone else. The relation of the owner of the manor house to the surrounding villagers is perhaps best expressed by the following excerpt from a popular Victorian prayer

> "God bless the Squire and His Relations and Keep Us in our Proper Stations."

The ownership of land secured power, whether the owner actively engaged in agriculture or sublet to others. Land generated revenue

(through rents, produce or sub-surface rights) and formed the basis for conscription and voter registration. Obviously, more land translated into more power, and this goal was pursued avidly by marriage. Property endures to this day as the best basis for the founding of dynasties.

The English and continental countryhouse was the headquarters for land administration and government. It also was a show case to impress visitors, supporters, allies or enemies alike. Each house was in essence a monument to the successes of its owners. According to Girouard;

> "The size and pretensions of such houses were an accurate index of the ambitions...of their owners. When a new man bought an estate and built on it, the kind of house which he built showed exactly what level of power he was aiming at. If the head of an established family was ambitious to raise its status - or simply to keep up with new arrivals - one of the most obvious means towards doing so was to rebuild or improve his house. New houses could be a cause of much local stress and excitement - as was the case with Sir Robert Walpole's Houghton in Norfolk, and Lord Verney's Claydon in Buckinghamshire."[14]

Another element in country house design in the English and continental tradition, was the idea of pleasure. The houses were designed to whittle away long hours of leisure and boredom. Some, like the Italian examples, were no longer working farms but built for pleasure only; Marie Antoinette's Petit Trianon is perhaps the best-known example but the popularity of hunting lodges or the

famous eighteenth century pleasure villas in the Thames valley also come to mind.

Centralization of power and government, whether with the formation of city states in Italy, or large centralized administration such as those centering around Paris and London had the effect that landowners often had to leave their estates for long periods to live near the capital. Many acquired townhouses or suburban villas while the poorer relations "took up lodgings". Rural retreats sprang up around the outskirts of London, in the countryside, yet conveniently located to reach Westminster by horse or carriage in areas such as Chiswick or Hampstead. Girouard notes a trend to separate the "life on the land" and "urban life" by 1800. He indicates that by the middle of the nineteenth century this difference became almost a rule expressed in architectural style and form. For example, he quotes the actions of the Earl of Ellesmere as being typical. The Earl built himself an Italian palazzo in Mayfair and a Tudor-style countryhouse in Lancashire. Girouard attributes this split to symbolically reflect a change in the power structure; the monopoly of the upper class was being eroded, caused primarily by the emergence of the nouveaux riche and ultimately the reorganization of society on the basis of class. Wealth and power was no longer secured by land. The reorganization of society caused by the Industrial Revolution forced the upper classes to rule in partnership with an urban middleclass, and finally with the largest group, the Proletariat;

> "The centre of power began to move down the social scale. First the gentry, then the middle classes, and ultimately the working classes grew in power and independence...The most successful (upper class) families were those who accepted it, and, as the basis of their inherited status and expertise, set out to lead the classes below theirs...But leadership of this kind involved associations; as a result, first the gentry and then the middle classes disappeared from great households as employees or subordinates, and reappeared as guests."[15]

These guests acquired, of course, in England or in the Imperial colonies, countryhouses of their own to secure their own worth, to impress their friends and enemies, and to marry into "more established" families.

This pattern is evident in India, Australia, South Africa and Canada. In nineteenth century Montreal the "princes" of the fur trade, the industrial "barons" or merchant "kings", acquired villas; powerful English families such as the Molsons, Redpaths, Ogilvies, Sir William MacDonald or Hugh Allan amassed vast fortunes which were translated in an architectural form. The resulting villas were startling reflections of the ancient regime of Europe and England: different and yet familiar. The lifestyle which this wealth facilitated, which Stephen Leacock refers to as "the arcadian adventures of the idle rich", allowed for free time, entertainment and cultural pursuits, in a pastoral milieu away from the pressures of the commercial and industrial life of Victorian Montreal. Here one could be safe from the villains, lower classes, poor sanitation, and disease-infested slums, yet be within travelling distance for work in the city.

The villa in the New World is similar , and yet, perhaps, somewhat different from its Renaissance and English predecessor; in the Renaissance tradition the villas are inhabited by wealthy merchants and a leisure class, yet unlike Renaissance man, the Victorian "master of the household" is not the one who actively pursues the ideal of "villa dialogue" - the world of the arts and such like entertainment is a feminine pursuit. Like the English country house, the Montreal villa is a seat of power, the lord no longer controls the land but rather in North America, its resources, whether raw, industrial or labour. In a way, the New World villa, combines some elements from the two traditions and also creates a tradition of its own. That this tradition is strong even yet is surprising but, as will be argued later, the idyll of the villa has become today's suburban ideal. The concept of "villeggiatura" survives as an arcadian state in the detached single family house in a garden;

> "...the suburb is perhaps most importantly a state of mind based on imagery and symbolism. Suburbia's curving roads and tended lawns, its houses with pitched roofs, shuttered windoes and colonial, or otherwise elaborated doorways, all speak of communities which value the tradition of family, pride and ownership, and rural life."[16]

2.4 The Plan Form

Whereas the concept of the villa as a private retreat for the privileged classes may have remained essentially unchanged from Pliny's Rome to the present day, the plan form has evolved

dramatically; excavated examples of Roman villas differ dramatically from those built in the Renaissance, the Age of Reason, or the nineteenth century, although some architectural elements, such as columns or architraves may suggest closer linkages.

The Roman villa was typically a traditional courtyard house with rooms arranged around an atrium or peristyle. For example, the remains of a Roman villa excavated in the Cotswolds near Winchcombe, Gloucestershire[17] is in plan a peristyle courtyard house type, with each wing zoned for a specific function. The "public zone", triclinium, kitchen and reception rooms were in the south wing, with the bedrooms and bathroom located in the western leg of the u-shaped plan. The slave quarters were in the eastern block, entirely separate from the rest of the house. As in most villas the (tablinum) reception room (2) was located on the entrance axis. The kitchen (culiva) was located at 8 with adjacent ancillary storage roms (9). The bathroom was provided in the form of a separate suite of rooms (12 and 13) with an entrance directly off the courtyard. The frigidarium was at 12 while the rooms marked 13 on the plan were heated from stoke hole 14 and may have been used as tepidarium and coldarium. A colonade (16) wrapped around the atrium and provided a protected access.

The Cotswolds villa is essentially similar in plan to those excavated in Pompeii, Rome, Spain or North Africa, following an atrium/peristyle configuration with the tablinum on the entrance

axis and rooms for guests, the family, slaves and receptions wrapped around the courtyard.

By contrast, the villa constructed during the Renaissance, the "villa classica", based on Pliny's or Cicero's writing, can be looked at in plan form as a geometric pattern enclosing space and creating vistas along axes which extend into the garden. Perhaps the most architectural villa is Andrea Palladio's Villa La Rotonda (1570). The plan is a perfect symmetrical pattern enclosed in a square with two main axes intersecting under the dome. Space extends from the rotonda in the four cardinal directions into the garden along the axes to eternity;

> "...the four identical temple fronts do more than act as a classicizing symbol...Externally they create shady belevederes from which to admire vistas off to the hills, the river, or the corn fields. Internally, the porticoes connect up with wide corridors that penetrate back to a large round room, rising the full height and once open to the sky. Here the crisscrossing axes give the visitor the sensation of looking out from the centre of the universe"[18]

The Renaissance garden also laid a geometric pattern on the landscape, extending the axes and creating new unlimited vistas, and long alleys with dense trees or hedges, for example at the Villa Farnesina and Vigna Farnese, the Vila Carafa-Este, or the Villa Medici, all near Rome[19].

The "reconstructed" Renaissance villa based on the interpretation of literature and "archeology" was emulated in the rest of Europe and England as the ideas of the Renaissance spread across Western Europe.

The rediscovery of Vitruvius and an interest in the letters of Pliny, coupled with social and economic conditions, spawned an architecture of villas. According to Charney[20] a "vita rustica" led to a "villa rustica" which in architectural terms was advanced by Alberti, Scamozzi and Palladio, based on the "interpretation of antique models"[21]. These models were based on Roman ruins and literary references. An architectural language was created, established on affinity to the literary text and selected ruins. As Charney indicated, one "exercise proceeded from another, each reinterpreted the other,"[21] with the result that after three centuries of "emulation" a style existed which had a life and form of its own. By the nineteenth century with the institutionalization of architecture the villa represented a type, as Charney states[22] not archeologically "correct", but a "sustained tradition of interpretive drawings which served to internalize the figura of what we understand to be architecture"[22]. Montreal examples are Monklands, an English-neo-Palladian villa, Temple Grove (1830's) and Terra Nova.

According to Girouard[23] up until the seventeenth century the need for privacy was not a force in the shaping of the plan of the English Countryhouses. The desire for privacy is attributed to the

fragmentation of what was an interdependent closely woven community living "under the same roof" for mutual protection. The need for privacy arose as society was re-arranged based on a class structure. Whereas the term "family" referred to all the individuals living under the same roof in the Middle Ages, it meant only the wife and children by the nineteenth century. The architectural plan became increasingly an exercise to separate family and servants and to create separate worlds for each. Coupled with ideas of scientific method and functional planning, which by the end of the Victorian era meant "a room for each use", planning the country house evolved into a complex exercise of separating the servants' circulation routes from the rest of the household and to create intricate combinations of specialized rooms which were convenient and comfortable.

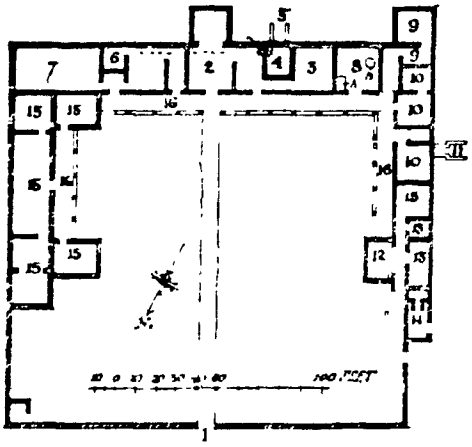
Franklin identified a number of typical plan types[24] some of which are also to be found in Montreal. Firstly, the classical prototype, belonging to the tradition of emulation, has its roots in the Renaissance. The plan is usually a square or rectangular block, which is divided into rectangular compartments, arranged symmetrically along the axes, which form the circulation routes. The typical example is the nine square grid employed by Palladio. British Examples are Bylaugh Hall (1849-52) by Charles Barry, or Clouds (1881-6) by Phillip Webb.The Mortimer B. Davis residence Temple Grove, F. Orr Lewis House, Terra Nova, and Maison Aime Geoffrion are typical examples in Montreal of Classical planning.

Franklin's second prototype is modelled on historical revival; the Elizabethan "H" or "E" plan, where the masters' wing, the servants' wing and the stables are arranged around a kitchen courtyard, such as Harlaxton Manor (1832-1837).

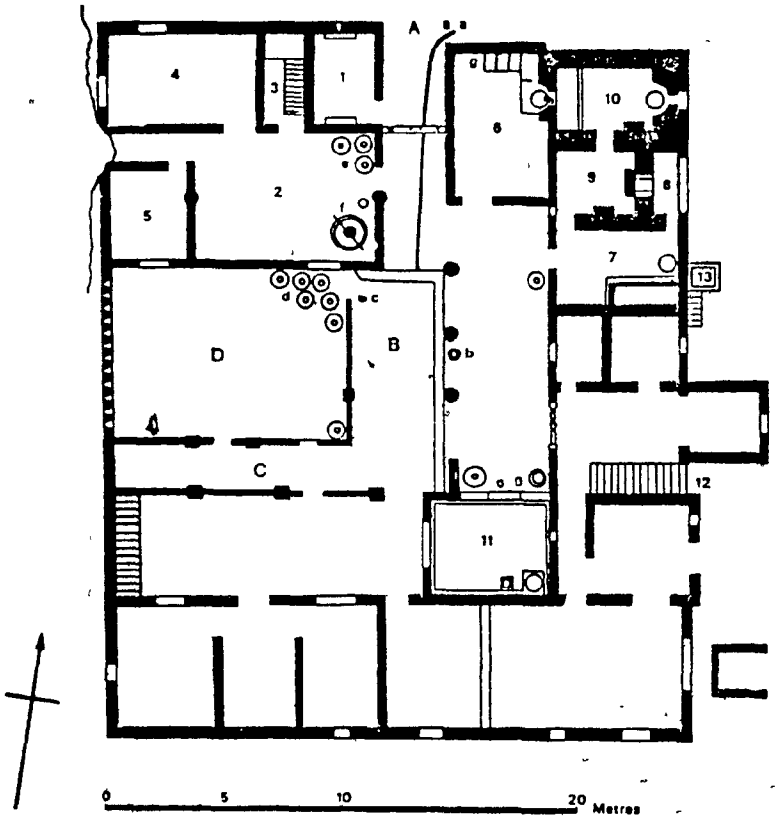
The third typical plan form, according to Franklin, is what she terms "free-planning". Here an assembly of related rooms are clustered around a central element, usually a Great Hall, in a "free-style" manner. The top-lit-hall was the popular focus in Norman Shaw's country house designs; examples are Pierreport, Adcote (1870's) and the Hallams (1894-5).

Towards the end of the nineteenth century the "Butterfly Plan" was developed, primarily to "trap the sun"; Norman Shaw at Chesters (1891), Lutyens at Papillan Hall (1902-1904) or Edward Mante's Kelling Hall. The notion of designing houses to allow for maximum sun penetration spawned another type of form which Franklin calls the north corridor plan. This type became particularly popular amongst the Arts and Crafts architects who designed smaller country houses.

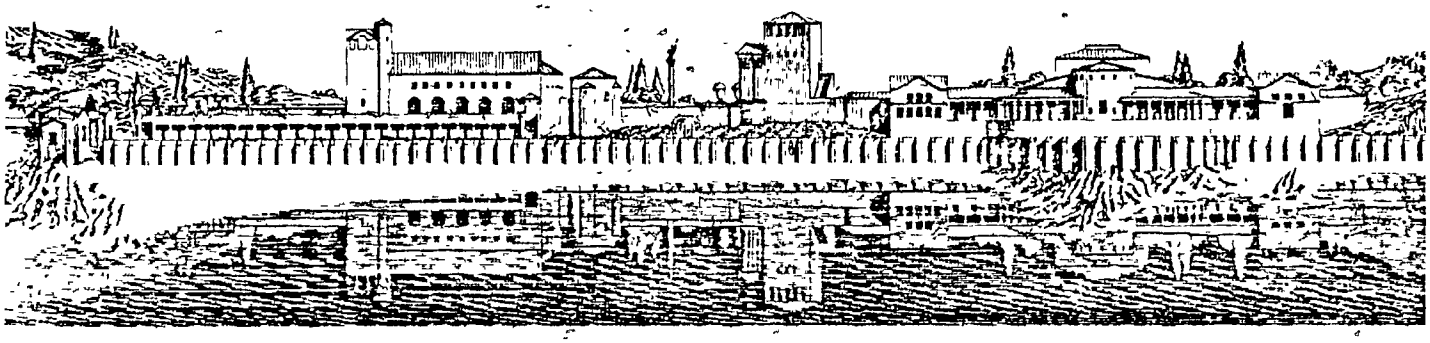
The nineteenth century villa, whether designed in the Italianated style or as an assymetrical fantasy (i.e. Braehead) had a functional plan, laid down primarily by convention. Towards the turn of the century, the houses were increasingly appointed with mechanical devices in order to enhance convenience and comfort for its inhabitants.



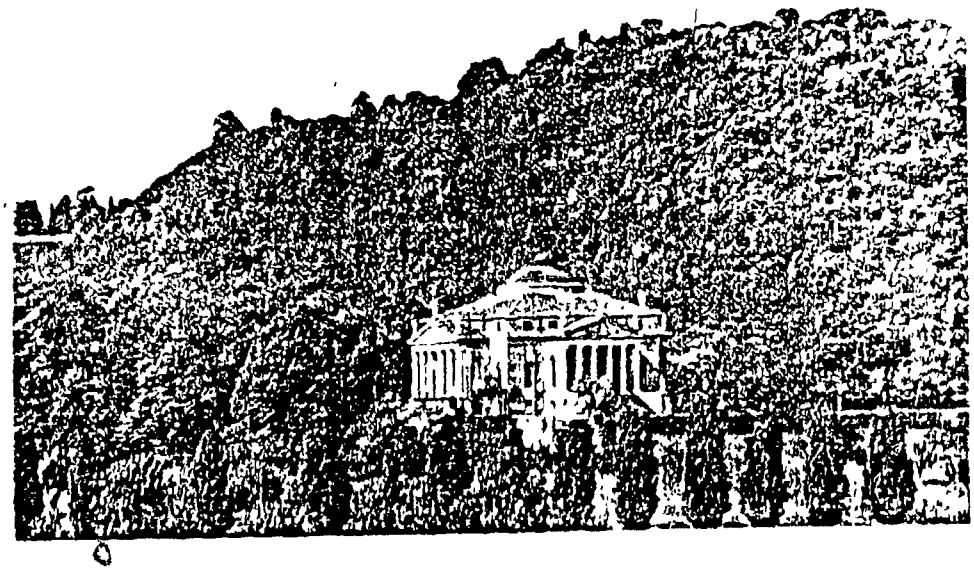
ILL 2 Plan of a Roman Villa, Lofts



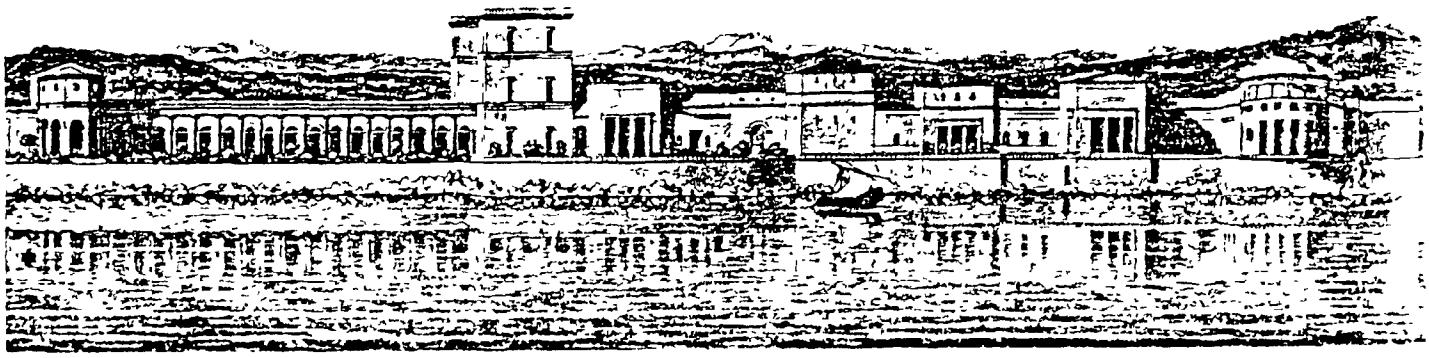
ILL 3 Plan of a Roman Villa, Boscoreale, Southern Italy, Percival



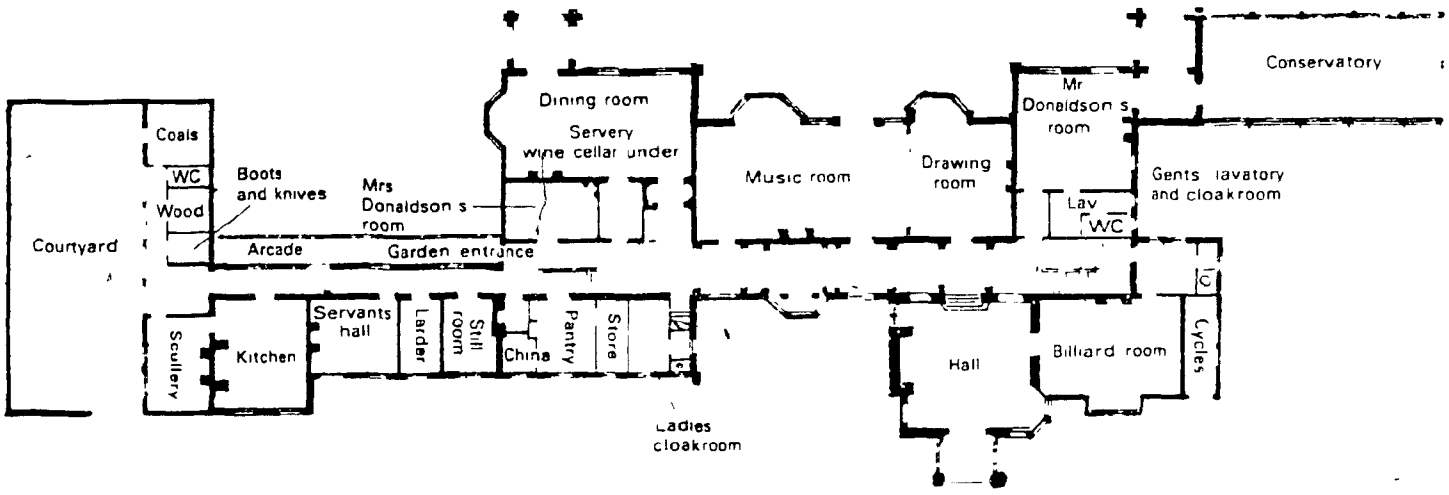
ILL 4 Laurentine Villa-Restitution, David Bingelman, 1982, Pierre de la Ruffinere du Prey, The Fifth Column.



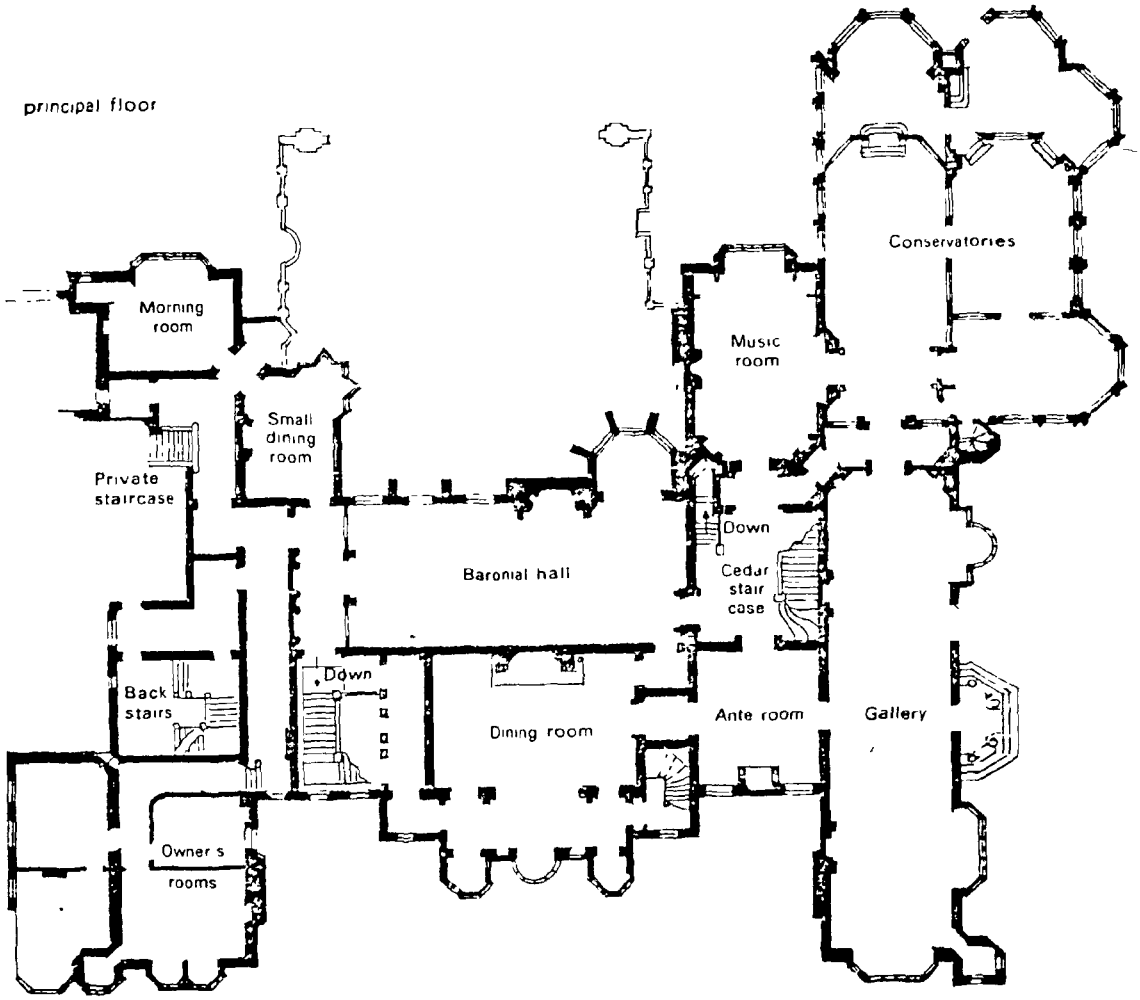
ILL 5 The Villa Capra (Rotonda) Vicenza by Andrea Palladio (1567-), Rowe



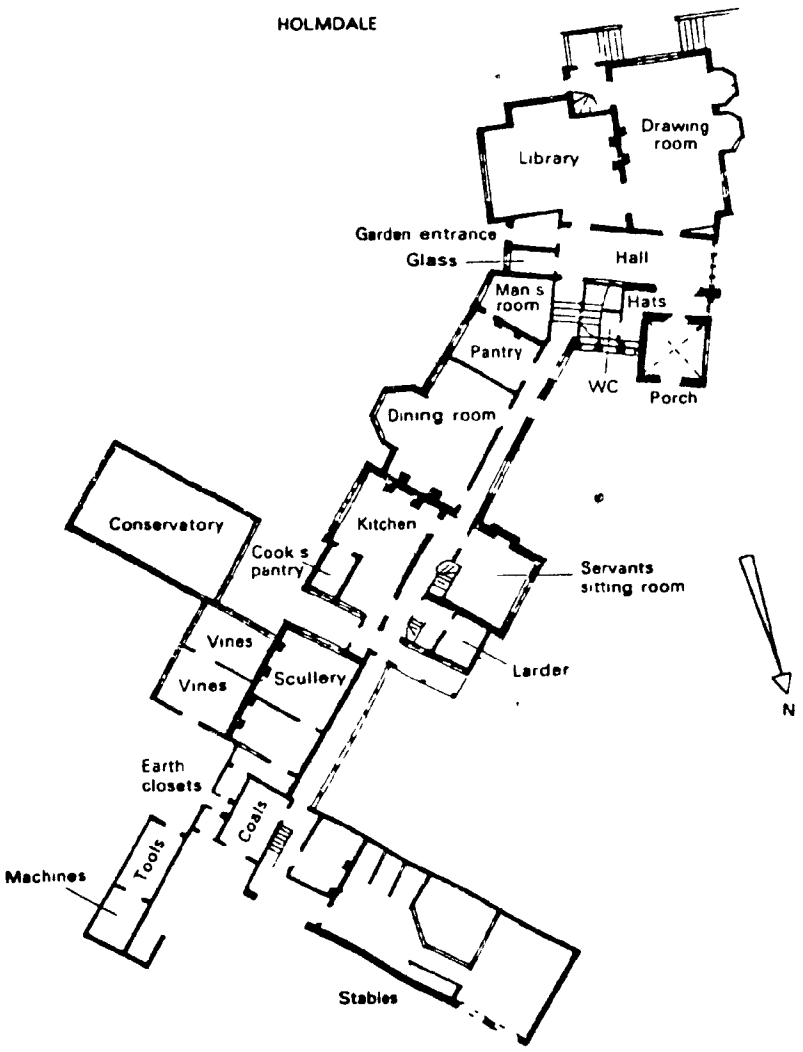
ILL 6 Laurentine Villa Restitution, Karl Friedrich Schinkel, 1841., Pierre de la Ruffinere du Prey, The Fifth Column.



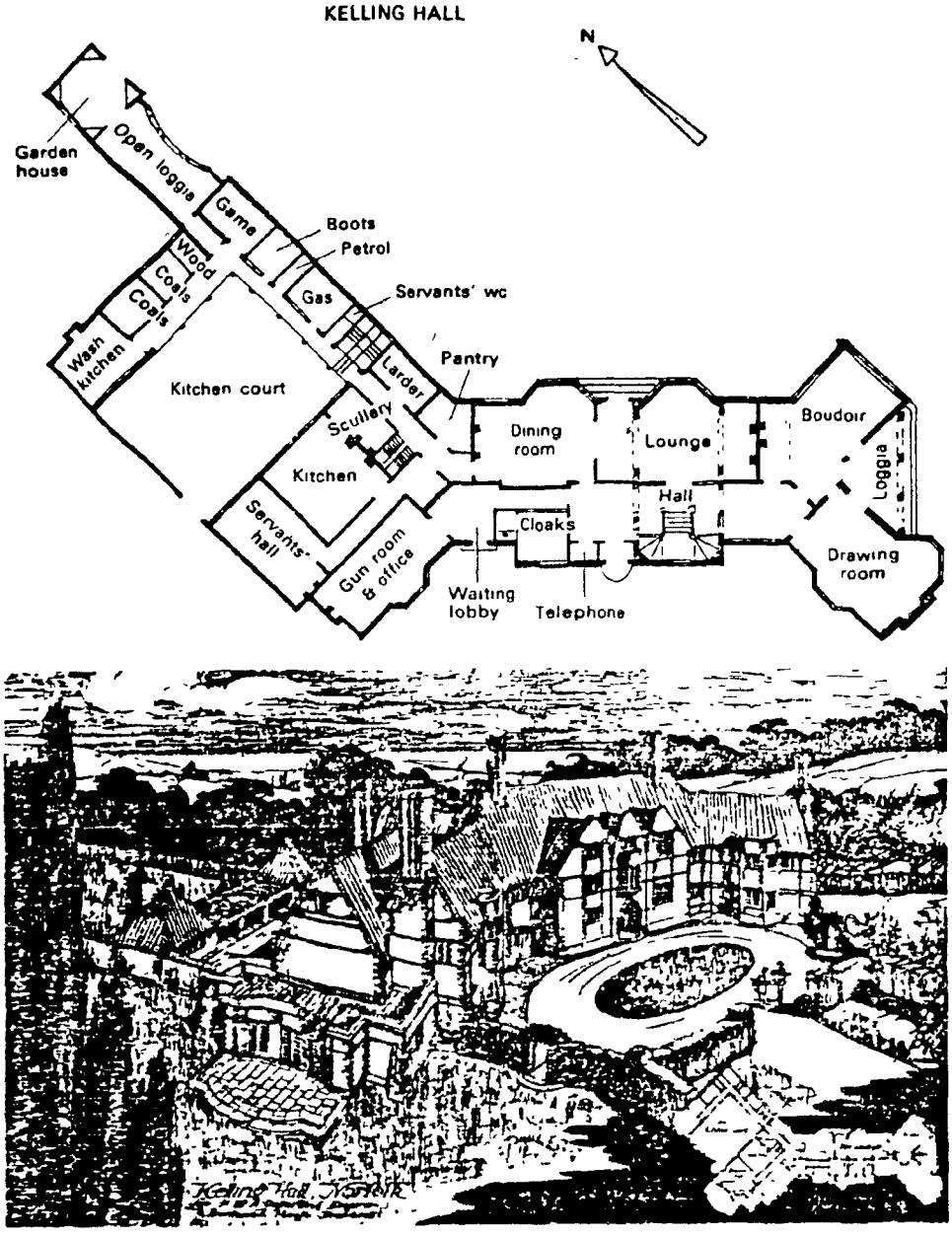
ILL 7 Pangbourne Tower, Ground Floor, Franklin



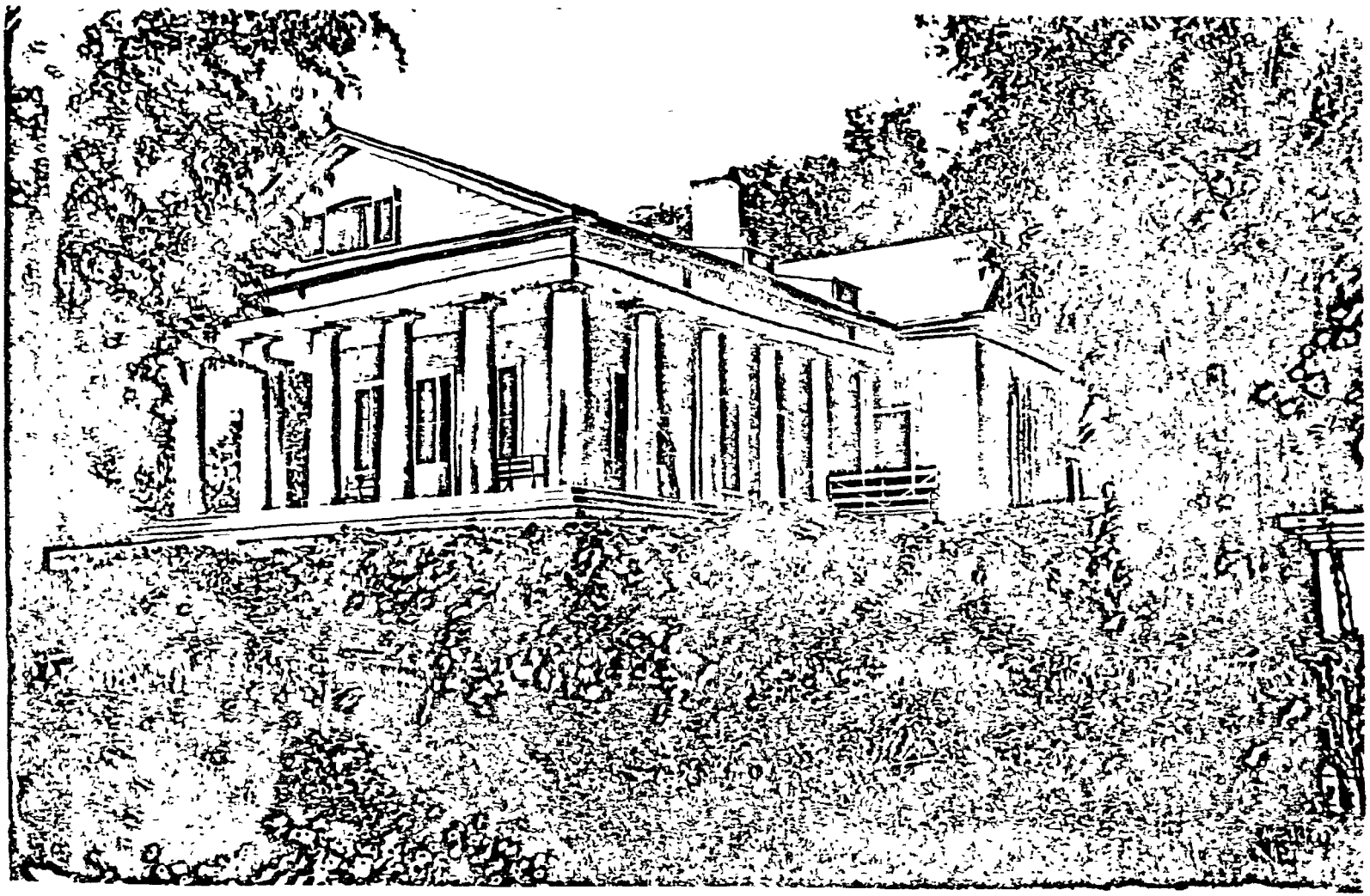
ILL 8 Harlaxton Manor, Franklin



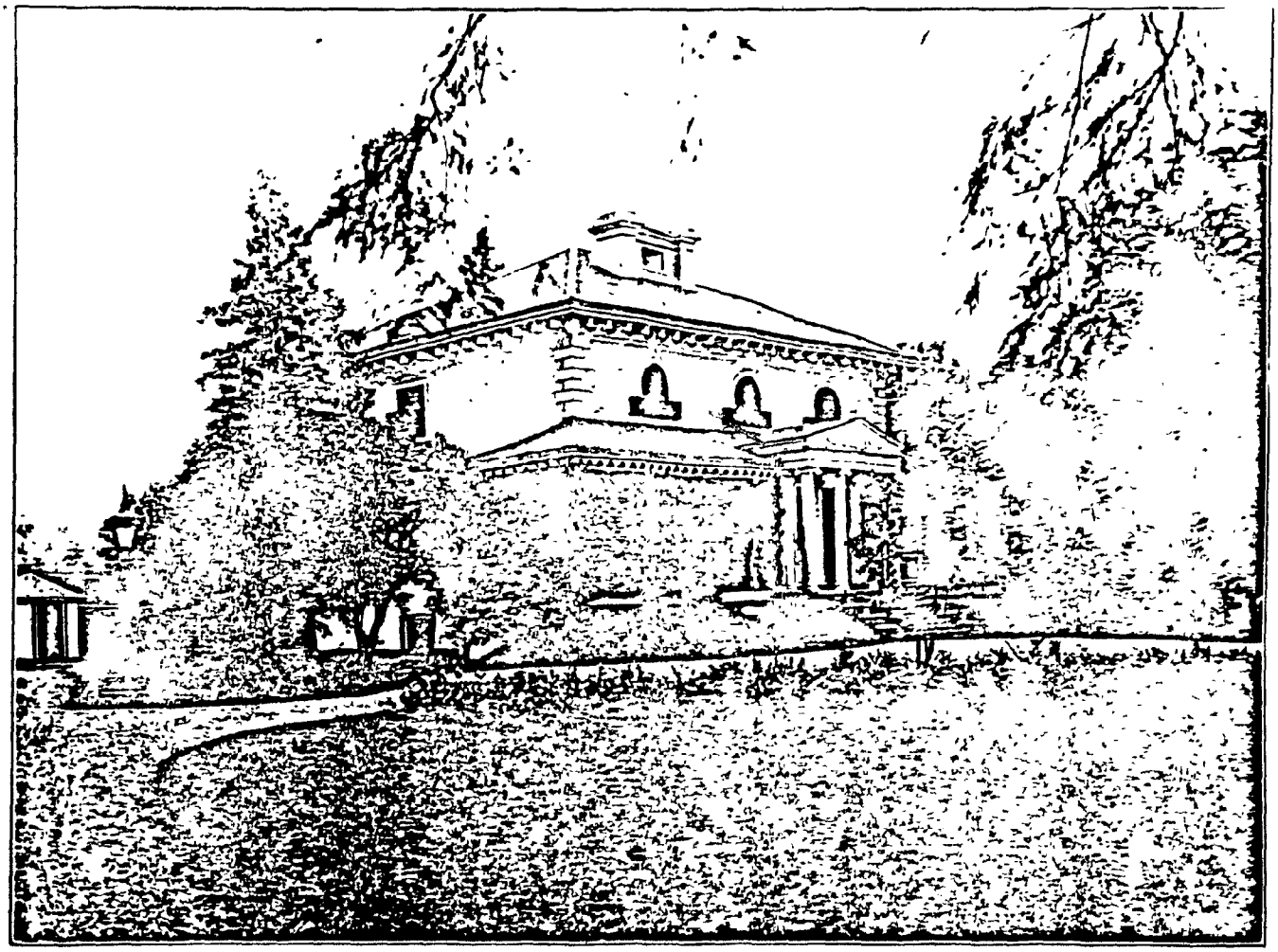
ILL 9 Holmdale, Franklin



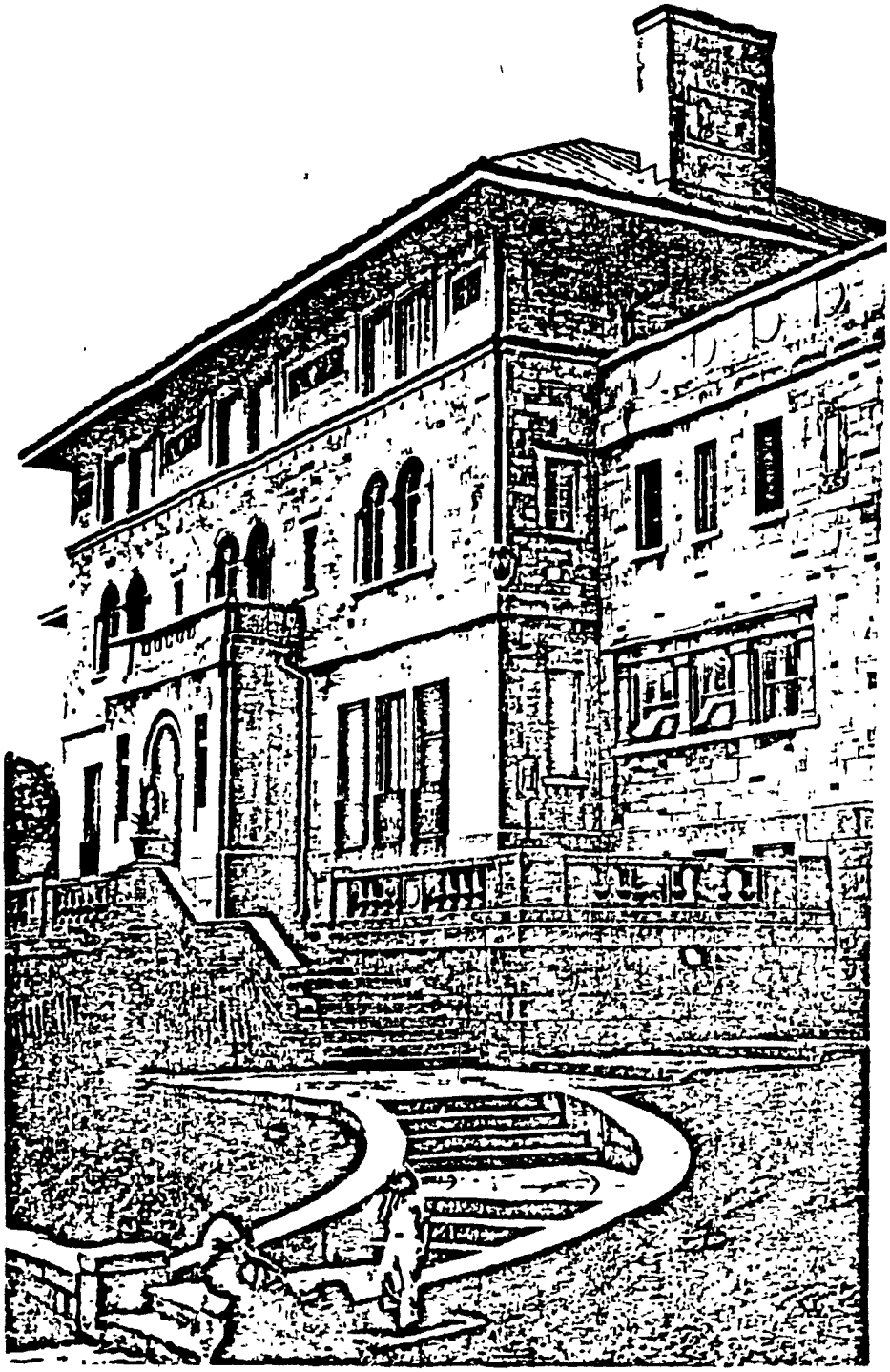
ILL 10 Kelling Hall by Edward Mante, 1912-3. An Arts and Crafts 'butterfly' house. Franklin



ILL II Temple Grove, 1836, John Samuel McCord, C.C.A. Collection, Montreal



ILL 12 Terra Nova, 1848, John Molson, 4300 Chemin de la Rene-Marie, Architect George Browne, C.C.A. Collection, Montreal



ILL 13 Maison Aime Geoffrion, 1930, 815 Belmont Avenue, Architects L.A. & P.C. Amos. C.C.A. Collection, Montreal

ILL 14 Braehead, McTavish Street, Board of Trade

NOTES

1. Coffin (p. 9) quoting Cosimo de Medici from J. Ross' Lives of the Early Medici as Told in their Correspondence, Boston 1911 p. 73.

2. Coffin (p. 11) quoting from L.B. Alberti's I primi tre Libre della Famiglia, Florence, 1946 pp. 309 and 313-14.

3. Roger North, Treatise on Building, 1695, quoted by Pierre de la Ruffiniére du Prey, p. 17.

4. Herbert Gans, The Levittowners, from W.H. Ltd's "40 ans de transformation", p. 64.

5. Coffin, preface, p. iv

6. Coffin, p. 10

7. Coffin (p. 11) quoting Vespasiano da Bisticci

8. Coffin (p. 10) quoting L. Bruni from Leonardi Bruni Arretini epistolarum libri VIII, Florence 1741, BK II, Ep. XX, pp. 57-59

9. Coffin, p. 369.

10. Pierre de la Ruffinière Pierre de la Ruffinière du Prey, p. 17

11. Coffin, p. 9

12. Coffin (p. 11) quoting Benedetto Cotrugli, Della mercatura et del mercante perfetto libri quattro, Venice 1573, fol 86r.

13. Girouard, p. 2.

14. Girouard, p. 3.

15. Girouard, p. 11.

16. Scott Brown, p. 41-7

17. Norah Lofts, p. 56

18. Pierre de la Ruffinière du Prey, p. 19

19. Illustrations taken from David R. Coffin's The Villa in the Life of Renaissance Rome.

20. Richard Bentmann and Michael Muller, La Villa architecture de domination, Brussels, 1975, referred by by Charney, p. 11.

21. Charney, Of Temples and Sheds, p. 11.

22. Charney, p. 14

23. Mark Girouard, Life in the English Country House, Chapter 10, "The Moral House: 1830-1900", pp 267-99.

24. Jill Franklin, The Gentleman's Country House and Its Plan 1835-1914

3.0 THE OWNERS AND THE VILLAS

> "There never was, I suppose in the history of the world a time when the sheer vulgar fatness of wealth, without any kind of aristocratic elegance to redeem it, was so obstrusive as in those years before 1914...the extraordinary thing was the way in which everyone took it for granted that this oozing, bulging wealth of the English upper and upper-middle classes would last forever, and was part of the order of things...Before the war the worship of money was entirely unreflecting and untroubled by any pang of conscience. The goodness of money was as unmistakable as the goodness of health or beauty, and a glittering car, a title or a horde of servants was mixed up in people's minds with the idea of actual moral virtue"[1]

3.1 Victorian Montreal

Orwell's bitter description of the years before 1914, summarizes, (perhaps), the socio-economic expectations and idealized lifestyle of at least two generations of the Montreal elite. This elite, by and large English speaking and of imperialist sentiment (One Flag,

One Fleet!, One Throne!), established their claim to privilege, not by birth, but through wealth.

The nineteenth century in Canada was marked by rapid change, of which the most prominent, was perhaps, the "replacement of wilderness by civilization"[2]; Canada was transformed from an agricultural to an industrial society; a transformation which was extremely profitable for a few. And Montreal, because of its location as a transportation nucleus, was at the centre of this wealth. The men who built their fortunes on commerce, the "princes" of the fur trade, banking, shipping or the railway, like their Renaissance merchant predecessors, sought to express success and power in their residences. What better choice, in terms of architectural symbolism and lifestyle, than the villa? Did the villa not imply as "the best style" for a country house, elegance, comfort, refinement and a pastoral existence? And was the concept of "villageatura" not more appropriate in the nineteenth century?

By choice, the wealthy abandoned the overcrowded city and "withdrew" to pastoral estates against Mount Royal. The location offered isolation, rusticity and an environment suitable for family living, in a society where kinship and the family was central to individual reality.

Montreal developed as a major economic centre from the 1850's onward. Until then, the city suffered an economic depression,

brought about, according to Gersovitz[3] by economic and demographic factors, such as the repeal of the English corn laws, a drop in trade with the United States, the cholera epidemic of 1832 and the "ship fever plague" of 1842. A contemporary traveller noted the following:

> "Montreal wears a dismal aspect: the population within the last few years has decreased some thousands...the streets look deserted...Buildings burned a year ago are still in ruins. Every third store seems to want an occupant, and empty houses groan for tenants..."[4]

Over the next two decades, the fortunes of the city changed with the development of new transportation technologies. In 1853, the Grand Trunk Railway line was opened to Portland Maine and by 1856 the city was linked by rail to New York. Improvements to the harbour were undertaken during the 1850's to provide docking facilities for steam ships. The Prince of Wales opened the Victoria Bridge in 1860. Gersovitz[5] notes that in 1880, Montreal was connected by rail to most Canadian and U.S. urban centres. Furthermore, industrial development was encouraged by the 1854 Reciprocity Treaty with the United States and Canada's neutral position in the American Civil War - the British could trade through Montreal with the North and the South. The city developed as a banking, manufacturing and processing centre, with sugar and flour mills, engineering and machine shops, sawmills and breweries.

The population also increased rapidly with industrialization, from 57,715 in 1851 to 118,000 in 1871 and to about 250,000 in 1911[6]. By 1874 a settlement pattern along class structure was firmly established. The rich lived against the hill and commuted into the city for business; "...villas and pleasure grounds...covered the hillside"[7]. The poor (working class) lived below in Griffintown, Pointe St. Charles and in the east end. Gabrielle Roy described this geographical polarity as follows:

> "Here wealth and poverty stare each other in the face, Westmount from above, Saint Henri at its feet. Between them rise the belfries"[8]

By the 1860's, the largely fur based economy of Montreal was being replaced by a more diversified economic base, largely due to the transportation networks built in the 1850's. More and more opportunities were created for locals or immigrants who could develop and control new enterprises. According to Cooper;

> "...the beneficiaries were those who could control some new enterprise, take advantage of the new lines of transportation or manipulate money. Returns from industry were high, wages and costs of raw materials being correspondingly low..."[9]

The beneficiaries of the new enterprises were predominantly English speaking and this affluent elite dominated the commercial, social, politial and philanthropic order of the city for nearly a century.

The English society, to which belonged families such as the Molsons 'beer', Redpath 'construction, sugar refining', Ogilvie 'flour mills', Sir William MacDonald 'tobacco' and Hugh Allan 'shipping', was often described as being "dull, reserved, oppressive" and "plutocratic"[11]. Morton[12] noted that many of these "colonial families who made it" often cultivated the British connection - it was considered a "step-up" in society when a Canadian girl married a British officer stationed in Montreal.

3.2 Ravenscrag

Gersovitz[13] singles Sir Hugh Allan out as a typical embodiment of this class. He emigrated to Canada from Scotland in 1826 at the age of sixteen to work for a local shipping firm. At the age of 26 he was a partner in a ship building undertaking, and ten years later, he and his younger brother established a sailing ship company. Allan soon built iron-hulled ships which were supplied to the British Navy during the Crimean War. His H and A Allan Steamship Company by 1861 owned more than twenty ships. Sir Hugh started construction on his 'Ravenscrag' (1025 Pine Avenue West in 1861, which was perhaps the most luxurious villa in Monteal. According to Gersovitz;

> "The house was the physical expression of Allan's fortune and power. In choosing to name it after the residence of the Earls of Lorne, he was no doubt asserting that he too was rich, and influential, that he too had 'arrived'. It was a gesture designed to lend prestige to his nouveau-riche origins"[14]

Sir Hugh became the president of many companies over his lifetime, including the Montreal Telegraph Company, the Canadian Navigation Company, the Merchant's Bank of Canada, the Mulgrave Gold Mining Company and the Canada Marble Company. Allan was knighted in 1871. The house remained in family hands until the 1940's when it became a mental institution.

3.3 Lord Mount Stephen's Residence

One of the most elaborate houses of the 1800's was Lord Mount Stephen's house on Drummond Street. George Stevens was also a Scotsman, born in 1829. He arrived in Montreal in 1850 and built a fortune manufacturing textiles. His business interests were quite diversified by 1880 when he became president of the Canadian Pacific Railway. He also acted as President of the Bank of Montreal.

In 1880 Stephens commissioned Architect William T. Thomas to design a residence suitable to his new status. The building cost $600,000 according to The Story of the Mount Stephen Club[15]. Stephens was knighted in 1886 for his philanthropic works. (He and his cousin Donald Smith (Lord Strathcona) donated huge sums of money towards the Victoria Hospital.

In England Stephens was voted "a Peer of the Realm" with the title Baron Mount Stephen. The house was purchased by Robert

Meighen, Esq., to become one of the residences which became famous for its garden parties and guests before it became the Mount Stephen Club in 1926.

3.4 Hugh Graham Residence

Hugh Graham, another prominent capitalist, was born in Lower Canada in 1848 from Scottish parents. He became editor of the Daily and the Weekly Star at the turn of the century. Graham's patriotic and social columns earned him a knighthood in 1908 and a peerage in 1917 with the title Lord Atholstan of Huntingdon, Quebec and of Edinburgh[16].

Graham commissioned Dunlop and Heriot, a local firm of architects to design his house at 1172 Sherbrooke Street West (c.1896). The house was designed in a classic idiom, perhaps reminiscent of the Pulitzer and Whitney mansions on Fifth Avenue by McKim, Mead and White, 1903.

3.5 Hosmer House

The Hosmer House at 3630 Drummond Street was designed by Edward Maxwell for Charles Hosmer. Hosmer was born in Coteau Landing, Quebec, in 1851. He left the local school to work for the Grand Trunk Railway. Hosmer founded the Canadian Mutual Telegraph Company, acquired the management of the Canadian Pacific Railway telegraph system, and became the president of the

Ogilvie Flour Company as well as a director of twenty-six other companies[17]. The Hosmer residence, described in a Board of Trade Publication (1907) as "one of the newest and most imposing residences...built in the modern style of palatial architecture..."[18] was designed as a statement to symbolize Hosmer's status and wealth in a French baroque idiom, reflecting some of Maxwell's Bostonian Ecole des Beaux-Arts training. The interior was decorated in sixteenth century Italian Renaissance (library), Louis XV (reception room), Louis XVI (drawing room), and French Gothic (dining room)[19]. The building is now owned by McGill University.

3.6 Ross Residence

The Ross residence at 3647 Peel Street, was also designed by the Maxwell brothers. Commander Ross was a sportsman, racing enthusiast, businessman and "noted for his expansive hospitality"[20]. (Ross kept thirty servants as late as the 1920's to manage his house.) The front facade is in a Bostonian new classical manner, perfectly symmetrical. Ross' father, the millionaire James Ross, headed the contracting team which pushed the C.P.R. line through the Rockies. His villa on Peel Street was designed by Bruce Price (1893) in the "C.P.R. chateau style".

3.7 Molson Residence

The Herbert Molson Residence at 3617 Avenue du Musee (1911-1913) by Architect Robert Findlay, was also designed for a businessman,

brewer, financier and "gentleman"[21]. Molson served as director on the board of the Bank of Montreal, the Royal Trust Company and Bell Canada. He was a member of prominent gentlemen's clubs such as the Racquet and Tennis Club in New York. The facade is a classical statement with careful attention to detail. According to Kollar's Mansions of the Golden Square Mile,[22] the interior reveals both English and French influences; the drawing room was decorated in a light French rococo style (feminine) in contrast to the staircase and billiard rooms, which were "English" (male?). The house is now occupied by the Russian Consulate.

3.8 Purvis Hall

Purvis Hall, formerly the residence of Sir Mortimer B. Davis, at 1020 Pine Avenue, was designed by Robert Findley in 1907-1908. Davis, born in Montreal in 1864, was known as the "Tobacco King of Canada". Davis was President of the American Tobacco Company of Canada and served as director of the Union Bank. A typical Victorian, he was "A man of varied interests, powerful, influential and wealthy"[23] who chose to express that wealth in his house. He bought a lot on Peel Street at the corner of Pine Avenue across from Sir Hugh Allan's "Ravenscrag". The villa is designed in a restrained Renaissance style, perched high against the hill with all the principal rooms overlooking the garden at the back.

The house was bought by the Purvis family who redecorated it. They occupied it for six years before donating it to McGill University.

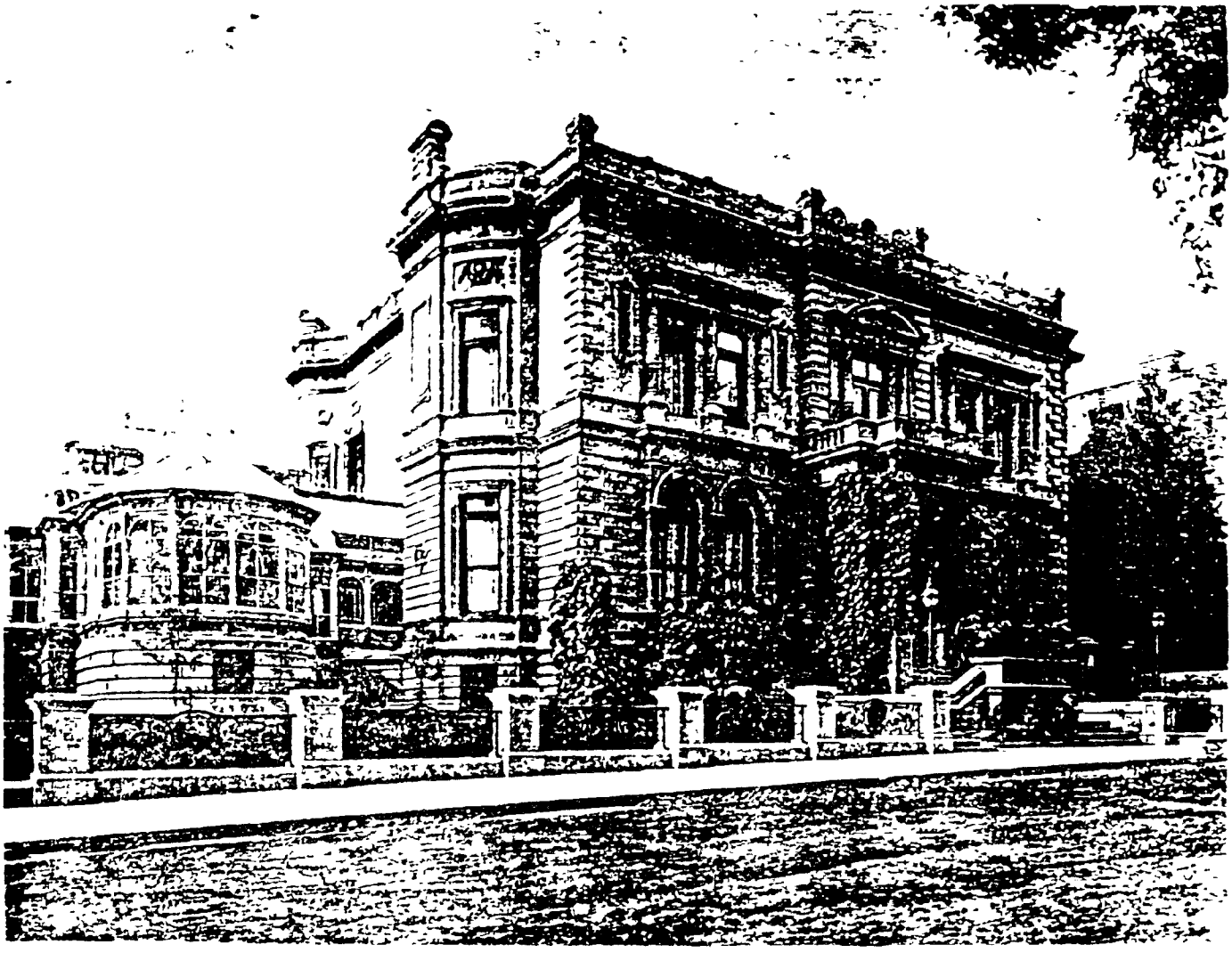
3.9 The Typical Plan

The planning pattern of the Webster[24], Ravenscrag, Lord Mount Stephen's house, Hugh Graham, Hosmer, Ross, Herbert Molson and Purvis Hall is a continuation of a Victorian tradition which was established as the integrated household of the eighteenth entury was transformed. Although the Victorian villas were designed in either a classical or Gothic style, (the Victorians looked at architecture as a means of communicating ideas[25]), the plan form is remarkably similar in terms of the relationship of rooms and use patterns. Victorian architects often designed facades because the plan form, once established, was laid down rigidly through convention. Both the classical villas (Orr Lewis, Mortimer B. Davis, Ross, Meighen, Hosmer, Hugh Graham, MacKay), or the Romantic ones, based loosely on the English tradition (Sir Henry Vincent Meredith and Orrim Squire Wood) exhibit a remarkably similar plan, and above all they required a large number of servants to operate. Allan Bott describes the Zeitgeist and villa interiors in his ironic statement:

> "The Victorian home, like the Victorian female body, was well covered, and like the Victorian female mind, filled to overflowing with superfluities...wherever a drapery could be draped, there it hung...dark, dull and expensive wallpapers...solid mahogany in the dining-room, rioting fancy in drawing-room. Clocks, vases, embroidered stools, firescreens, what nots, fancy brackets, wardrobes, toilet glasses, washstands, towel rails, and pedestal cupboards. Every article stamped and carved and twisted with ornament, a machine-made imitation of the furnishings of the great feudal palaces which every Victorian householder set out to recreate within the confines of his own walls..."[26]

SCENES AT TENNIS TOURNAMENT, COTE ST. ANTOINE, 27th JUNE.
(By our Special Artist.)

ILL 15 Anglo Montreal, 1891 Dominion Illustrated, July 11, 1891

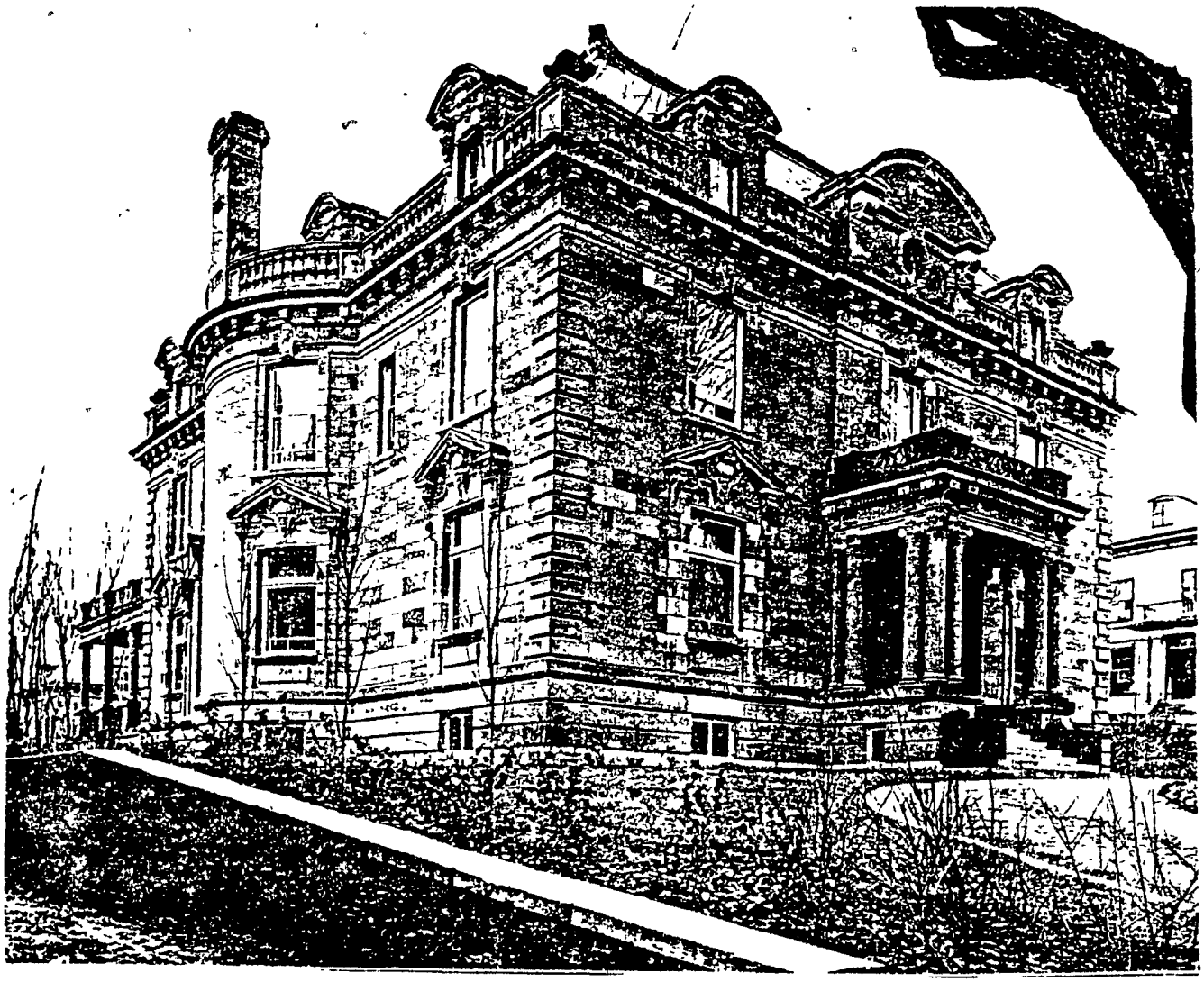


ILL 16 Robert Meighen's Residence, Drummond Street, Board of Trade

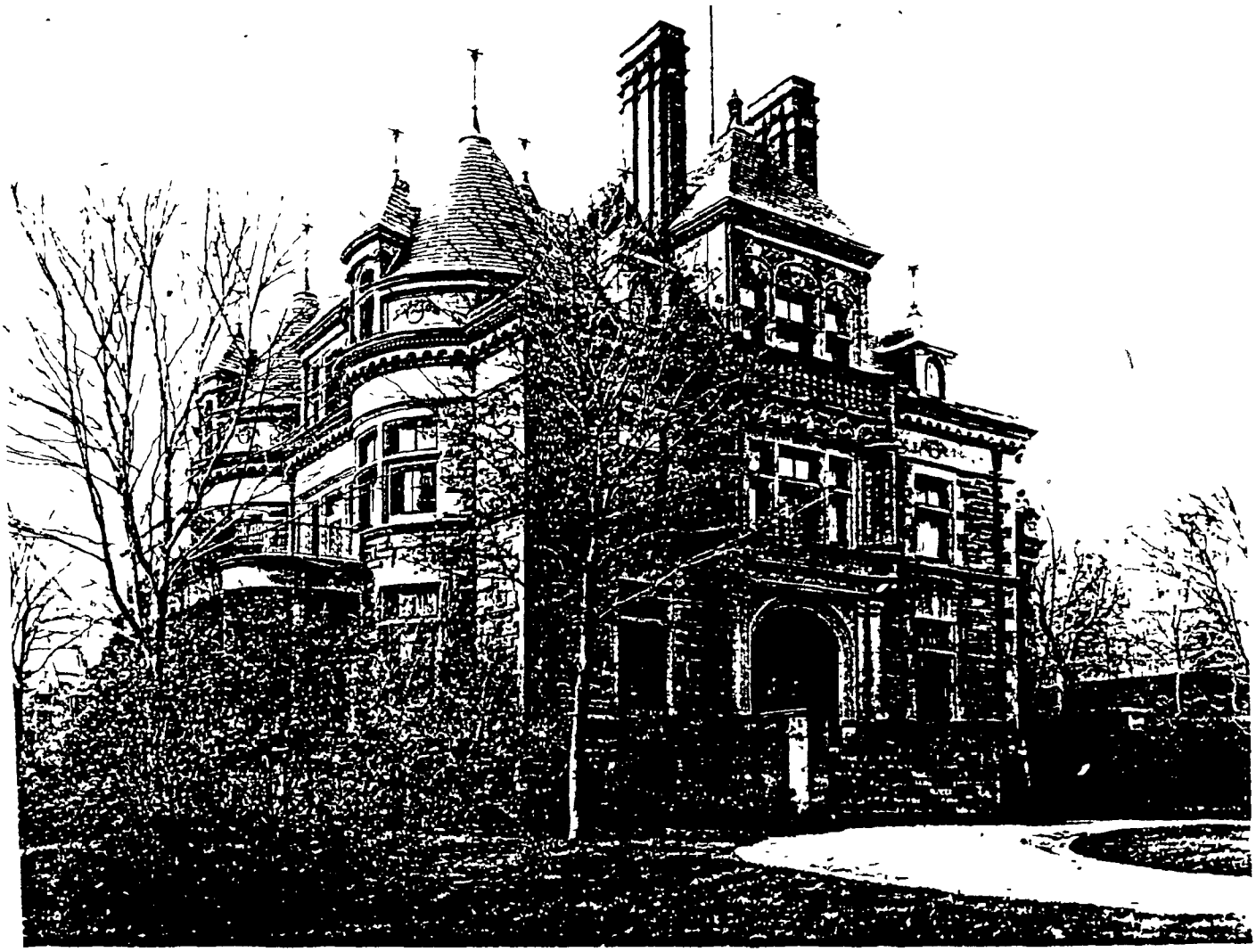
ILL 17 Robert Meighen's Residence, Drummond Street. A view of the "garden party" in honour of Lord and Lady Eileen Roberts, July 1908, Board of Trade

ILL 18 Montreal Residence of Lord Strathcona and Mount Royal, Dorchester Street West, Board of Trade

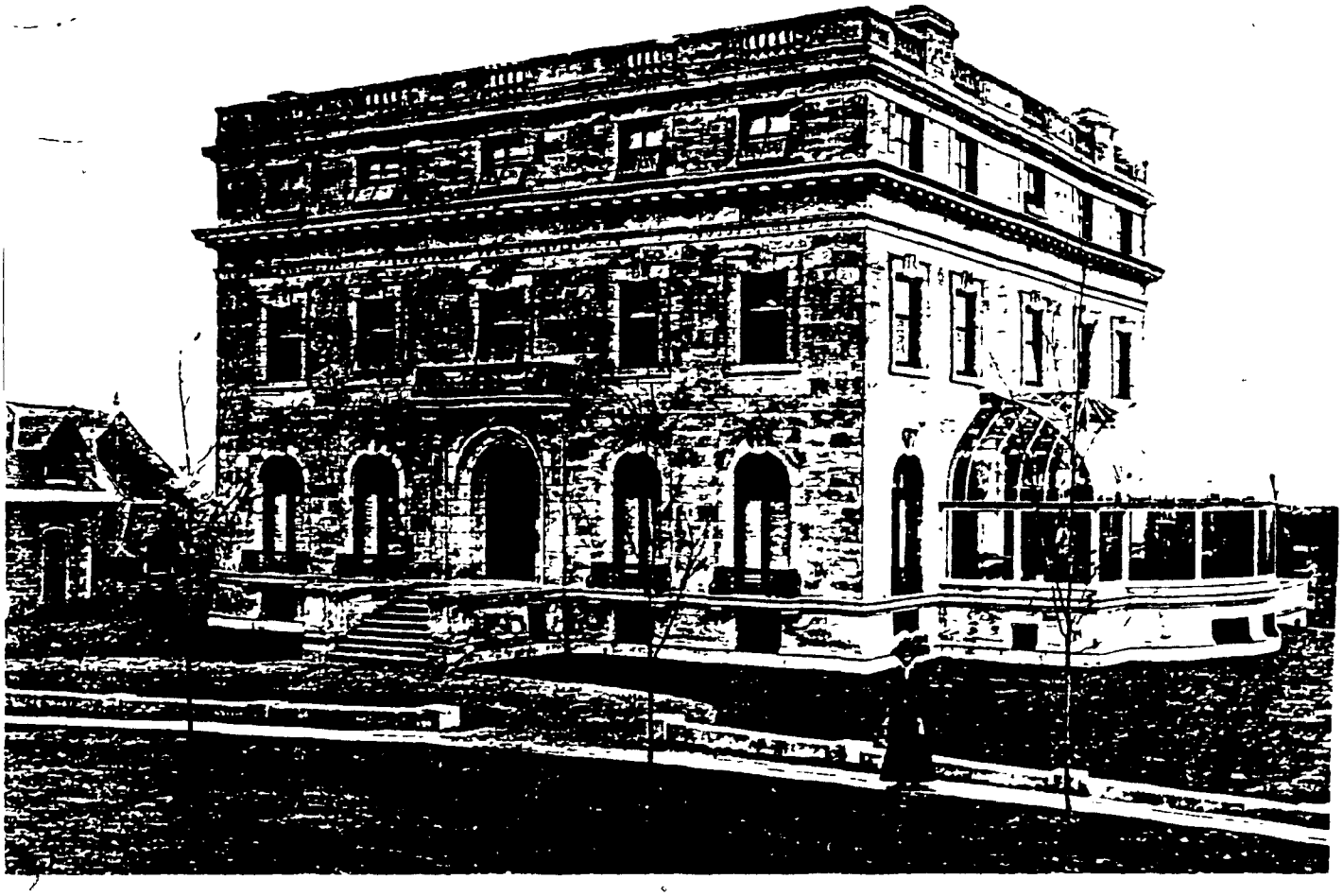
ILL 19 Residence of Sir Hugh Graham, Sherbrooke Street West, Board of Trade



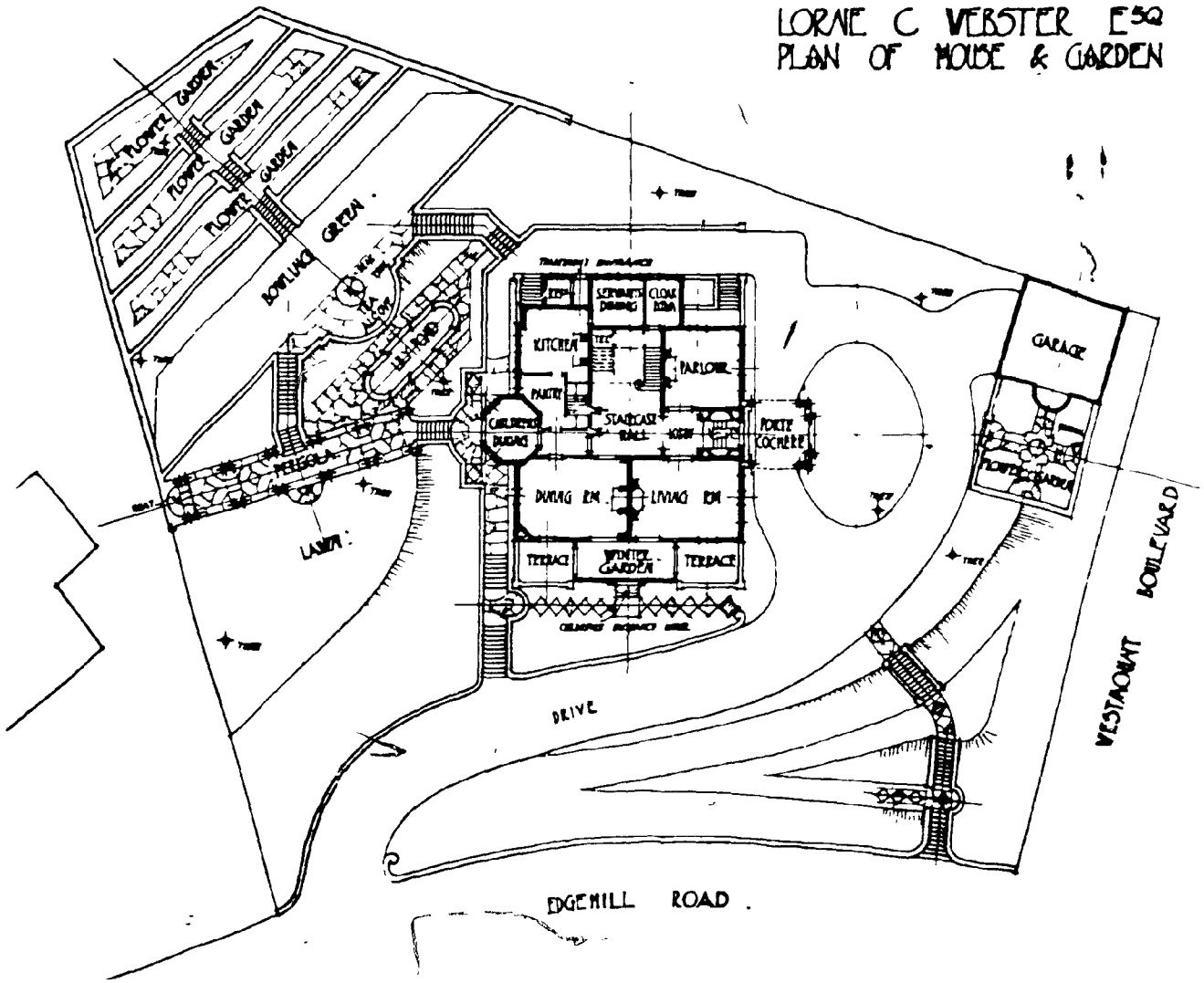
ILL 20 Charles R. Hosmer Residence, Upper Drummond Street, Board of Trade



ILL 21 Ross Residence, Upper Peel Street, Board of Trade



ILL 22 Mortimer B. Davis Residence, Pine Avenue, Board of Trade



ILL 23 Residence for Mr. L.C. Webster, Westmount Boulevard. Ground Floor and Garden Plan, Construction, Vol. 10, No. 5, May 1917.

NOTES

1. George Orwell, quoted in Alan Gowan's Building Canada, p. 140.

2. Morton, The Shields of Achilles , p. 311.

3. Julia Gersovitz, p. 12.

4. From John Irwin Cooper's Montreal: The Story of 300 Years, quoted by Gersovitz, p. 12.

5 Gersovitz, p. 14

6. Gersovitz, p. 16

7. L. Bernard, Tourists Guide to the City of Montreal, Montreal, 1869, p. 34.

8. Gabrielle Roy quoted by Jean-Claude Marsan, Montreal in Evolution, p. 178.

9. John Irwin Cooper, "The Social Structure of Montreal in the 1850's", Canadian Historical Association Report, 1956 p. 65, quoted from Gersovitz, p. 32

10. William Carre, 1878, Art Work on Montreal, Published in 12 Parts, Montreal, 1914, page 9, p. 14, Gersovitz, p. 32.

11. Stephen Leacock, p. 231.

12. Morton, pp. 169-184.

13. Gersovitz, p. 33-4.

14. Gersovitz, p. 35

15. The Story of the Mount Stephen Club, Montreal, p. 6.

16. Kathryn L. Kollar, Mansions of the Golden Square Mile, p. 10.

17. Mansions of the Golden Square Mile, p. 12.

18. Board of Trade Illustrated Edition of Montreal , unnumbered.

19. Mansions of the Golden Square Mile, p. 13.

20. Susan Wagg, Mansions of the Golden Square Mile, p. 16.

21. Mansions of the Golden Square Mile, p. 17.

22. Mansions of the Golden Square Mile, p . 18.

23. Stephanie Thomas, Mansions of the Golden Square Mile, p. 19

24. Construction, Volume 10 No. 5, p. 163.

25. Alan Gowans, p. 86.

26. Alan Bott, quoted by Gowans, pp 123-4.

4.0 LIVING IN THE VILLA

"Life at Castel Casteggio, as the Newberry's loved to explain, was conducted on the very simplest plan. Early breakfast, country fashion, at nine o'clock; after that nothing to eat till lunch, unless one cared to have lemonade or bottled ale sent out with a biscuit or a macaroon to the tennis court. Lunch itself was a perfectly plain midday meal, lasting till about 1:30, and consisting simply of cold meats (say four kinds) and salads, with perhaps a made dish or two, and for anybody who cared for it, a hot steak or a chop, or both. After that one had coffee and cigarettes in the shade of the piazza and waited for afternoon tea. This latter was served at a wicket table in any part of the grounds that the gardener was not at that moment clipping, trimming or otherwise using. Afternoon tea being over, one rested or walked on the lawn till it was time to dress for dinner.

This simple routine was broken only by interruptions of people in motors or motor boats.

This whole thing, from the point of view of Mr. Spillikins or Dulphenia or Philippa, represented rusticity itself"[1].

Stephen Leacock

4.1 Introduction

Leacock's description of "villeggiature", through the eyes of Mr. Spillikins and the other characters, describes the Victorian idea of the villa; the urban elite withdraw to the 'rusticity' of the country house, as a visitor over weekends, and for the gentleman every day, after working in the city.

The rationale, popularly expressed, for living in the country suggests the Renaissance writings of Cosimo de Medici or Alberti; the city is perceived as 'an evil place' which is undesirable to live in for reasons of health, family and class).

Conditions in nineteenth century Montreal, were very similar to those in any other industrial urban centre; the rich lived against the slopes of the mountain and the poor in the slums of the city. Both groups lived in separate communities, not only geographically but also socially; each group reducing its contact with the other to the barest minimum. For the upper classes rubbing shoulders with the poor was often not only regarded as socially unacceptable, but also physiologically undesirable. Contact between the classes was reduced to the relationship of employer and employee (or benefactor). The villa, not only exemplifies the taste, style and pattern of life, but also bears witness to the social order, an order of two solitudes, hierarchical households and the life of the 'idle rich'.

On the one hand, existed a reality of luxury laced with a peculiar sense of morality, expressed bitterly by social critics such as Orwell:

> "...there seems to breathe forth a smell of the more vulgar, un-grown-up kind of luxury, a smell of brilliantine and creme de menthe and soft-centred chocolates - an atmostphere, as it were, of eating everlasting strawberry ices on green lawns to the tune of the Eton Boarding Song"[2].
>
> And, on the other hand, behind the baize doors, lived and laboured a wen of servants, according to Girouard[3], in dark corridors, poky rooms surrounded by the "ghostly smell of stale cabbage".

4.2 Principles of Planning

The concept of designing villas as two solitudes became increasingly popular during the century and was viewed as 'progressive', an improvement on the eighteenth century integrated plan. Contemporary writers and practicing architects on both sides of the Atlantic advanced theories similar to those published by Robert Kerr in his The Gentlemen's House; on the one hand:

> "Quiet comfort for his family and guests, - thorough convenience for his domestics, - elegance and importance without ostentation"[4].
>
> yet
>
> "It is a first principle...that the Family Rooms shall be essentially private, and as much as possible the Family Thoroughfares. It becomes the foremost of all maxims,

> therefore, however small the estalishment, that the Servant's Department shall be separated from the Main House, so that what passes on either side of the boundary shall be both invisible and inaudible on the other..."[5]

The boundary between the worlds of the servants and the family was crossed by the 'servants' stair', the only stair which linked all the floors of the house, normally used only by servants and children. The efficient operation of the house depended on the backstair which connected the family suites and kitchen departments. These stairs were climbed from 4 a.m. to 11 p.m. by a bevy of housemaids who carried laundry, brass cans of water (for hip baths), meals, toilet jugs and children from the basement to the garret.

The success of the design of most Victorian villas depended on the resolution of the servant movement pattern. To increase efficiency, the service core included, particularly towards the turn of the century when 'the servant problem' developed, 'mechanical aids', such as dumb waiters or speaking tubes for better transportation and communication between floors.

Furthermore, coupled with a 'need for privacy', the Victorian plan, is a formal expression of a peculiar 'scientific theory' in design. This theory, as advanced by Kerr, Vaux, Muthesius, Downing, or practicing architects was based on the premise the that each function shall be separated, classified and enclosed in a specific

space. Rooms, then of similar classification and function are clustered in a unit. Once again, according to Kerr;

> "every room in the house, according to its purpose, shall be for that purpose satisfactorily contrived..."[6]

This passion for classification and partition of use reached perhaps its high-point in the rambling villas of the super rich, such as in Hugh Alan's Ravenscrag or Kerr's Bearwood, Berkshire; separate corridors for servants, guests, married couples, bachelors and children are all 'contrived' to facilitate 'snug comfort' and convenience. This ethos is expressed, somewhat sentimentally, by a popular Inglenook expression; 'Here's to the Ingle where True Hearts Mingle'. And in the Mount Royal villas, many hearts did mingle.

4.3 The Household

The Victorian and Edwardian household was large. It usually comprised two distinct realities and a twilight zone; the term 'family' described members of the extended family and those inevitable guests, whereas the 'servants' department' referred to the innumerable housemaids, butlers, gardeners, mechanics and coach men who saw to the smooth running of the establishment. In between these two clearly defined solitudes, which were expressed in house form and in the social order, hovered the poor relations and private tutors of French, etiquette, or other popular fad belonging in a sense to both communities.

At the head of the household sat the 'master' be it only in the evenings or over week-ends. At his side the 'mistress', homebound, passing time doing needlework (or good works), reading the latest novels, attending meetings, making formal house calls or instructing the housekeeper. Each lived largely in a separate world, he with his male companions at the club, or at home in the smoking room, billiard hall or library. She, on the other hand, sought refuge in the drawing room or in her boudoir - they met over the dinner table (and occasionally in the 'Family-Bedchamber-Suite').

Sharing the dinner table, beside the guests, were the grown-up children and that institution of the Victorian home, a spinster aunt. Dinner was a particularly important event for the daughters since the purpose of their lives was to find a husband, preferably of a social standing and wealth comparable to or better than their own. Entertainment at home provided the best surety against 'being left on the shelf'.

Grown-up sons rarely were at home. They were away most of the time, attending the right schools, universities or fighting wars to expand the Empire. Their arrival at home over week-ends or on leave, provided reason for celebration - the 'bachelor party', and opportunity to meet eligible women; as Beatrice Webb wrote in the 1880's; 'the business of getting married; (was) a business carried on by parents and other promoters, sometimes with genteel surreptitiousness, sometimes with cynical effrontery".[6]

Closely intermingled with the family were the guests. As Franklin[7] notes, entertainment was largely the raison d'etre in the lives of the rich; guests provided the opportunity to enjoy lavishly and 'correctly' one's idleness.

The social behaviour and conduct of family and guests was laid down rigorously by convention (and books on etiquette) ranging from what to wear, to how to spend one's time. For example, guests were expected to stay in the downstairs communal rooms during the day and to dress appropriately, so much so, that the bachelor required a hardy disposition (and patient valet); for him 'villeggiature' could mean a constant change of apparel to suit breakfast, riding, walking, tennis, fishing, afternoon-tea, a drive in the country, dinner, cards, billiards, church, etc.

The Victorian house-party was also an insular affair, according to Girouard[8], requiring a ponderous and slow arrival (or departure), lasting perhaps a full week-end because of the mode of travel by 'carriage and pair'. The tradition of the Victorian house-party is perhaps best described by Lord Ernest Hamilton;

> "The house-party, shut off from the outside world, sang and danced and flirted and shot and hunted and fished in a little self-contained kingdom, of which the host and hostess were the undisputed King and Queen, and which, from purely physical causes, was immune from unheralded invasion from outside, for - by the grace of God - neighboring Kingdoms were, as a rule, beyond the compass of a carriage and pair"[9].

4.4 The Family Apartments

Most of the weekend activities were centered in the "Family Apartments" and, if weather permitted, the garden. The so-called "Day Rooms", after Kerr, could either be formal or informal, depending on their use. Perhaps the most important suite of rooms were the drawing room/dining room/smoking room suite which was universal.

The Drawing Room

Girouard and Kerr attribute "feminine" qualities to the Drawing Room which in architectural terms, translated into rosewood, silk and chintz, and the Dining Room, on the other hand, is regarded as "masculine", metaphorically perhaps the domain of the "provider" who sits at the head of the table and carves the roast. The Drawing Room was a formal space where the Lady of the House received visitors for a few minutes of polite conversation or afternoon tea. The room was more than merely a reception chambre, it was the exhibition hall in which family treasures were on display, furnished with chairs, a central table, piano, chandelier, couch and bric-brac. Most architects provided access from the Drawing Room onto a balcony or into the garden where "tea could be taken" in good weather. In the evenings, the family and guests assembled in the Drawing Room before dinner, the ladies also returned there afterwards. According to Kerr[10], the ritual procession from Drawing Room to Dining Room along a "dinner

route", was an important element in the design of all elegant villas and country houses. This route provided perhaps, the transition from the "feminine" chintz to the "masculine" oak, mahogany and turkish carpets; the route also provided the link in a symbiotic relationship of use and space.

The Dining Room

The Victorian Dining Room was usually a large space determined by two interdependent factors namely, the size of the family, guests, and the number of servants attending at the table, one servant per diner. Dinner, and later luncheon, was served à la Russe and its success depended on the availability of a pool of inexpensive servants. The custom to sit down for dinner at a large central table survived well into the Edwardian period when, in some houses, it was replaced by a number of small tables. By the turn of the century, the Dining Room was also reduced in size because of the "servant problem": far fewer women were prepared to seek employment in a domestic capacity and a servant was no longer required for each guest. The room was usually furnished formally with servant access to the kitchen through a butler's pantry.

The third room in the suite, the Smoking Room, was an exclusive male domain. Here the men gathered after dinner, donned in elaborate smoking jackets, to enjoy a cigar, to discuss politics or business over a brandy or a game of billiards.

Other Day Rooms

In some of the more elaborate villas, such as Ravenscrag, the day room suite was expanded to include auxillary spaces for special occasions, such as the ball room or swimming pool at McTavish. These "Secondary parlors" were additions to the main frame and complemented the use pattern, rather than detering from it.

Perhaps the most important factor which contributed to the demise of the formalized pattern of Victorian society, was the development of improved transportation, particularly the automobile according to Girouard[11] and Lord Ernest Hamilton[12]. As the latter wrote:

> "The party is in a ceaseless state of metabolic flux. You come down to breakfast to find that your charming neighbor at dinner the night before has gone off in her car to some other country house 200 miles away. Somebody else - probably a complete stranger - arrives during breakfast and introduces a discordant note that does not, perhaps even begin to blend in with the general harmony for two or three days."[12]

The automobile not only brought the kingdoms closer together, but also the restaurants, hotel dining rooms, the club and theatre. The importance of the villa as an isolated entertainment centre was reduced as the city became more accessible (and, due to improved sanitation, less smelly and less obviously unhygenic).

In terms of the house plan, architects re-introduced the "Great Hall", Lounge an informal space reminiscent of the hotel lounge where "everything goes" and customs are relaxed. Here it was acceptable for both sexes, to mingle in informal dress for a short, according to Girouard[7] with "no precisely defined purpose" The room was usually furnished to facilitate talking, sitting around, enjoying a drink, reading the newspaper, playing pool or listening to the gramaphone

The last of the Day Rooms, the "gentlemen's business room", or "reception room" was used by the "master" as an office or study. Kerr stresses the requirement to separate callers such as the family lawyer or agent from the cortile. It was deemed not appropriate etiquette to mix family and business.

Evening Rooms

The private domain of the villa, whether used by the family or the guests, was separated from the communal rooms, usually located on the second and third floors. The evening rooms reserved for family and guest use were the "Family Bedchamber Suite", bedrooms for guests, the nursery, and ablution facilities.

The "Family Bedchamber Suite" normally comprised a bedrooom for the lady of the house, en suite with a dressing room and bathroom. The "Master" slept in an adjoining bedroom, euphemistically referred to on contemporary architectural plans as

a "study" The two rooms were joined by a "Private passage", which had to be carefully planned to ensure the maximum amount of privacy to prevent embarrassing encounters between master, mistress and servants

The guest bedrooms, depending on the size of the household and complexity of family arrangement, could be grouped with bathrooms and dressing rooms en suite on the second floor, or distributed on different levels with areas reserved for married couples, bachelors, young ladies and close friends.

The children's rooms were isolated, often in the garret. Their world usually existed independently from the rest of the house. The nurse and governess ruled in the nursery, school room, dayroom, scullery, nurse's bedroom and the governess' chamber

Since the small children of the wealthy elite were often educated at home by private tutors, they seldom left the house and were always supervised. The dictum that children should be seen and not heard described accurately the rigid confines of the child's role in the household.

To supervise the children, provide for their physical needs, as well as those of the rest of the family and guests, was an onerous task requiring extensive organizational skills and human resources. Sophisticated planning techniques were also necessary to create a "functional" environment in which the servants could prepare and

deliver changes of clothing, meals, hot water, heating, light and waste disposal.

4.5 The Servants Apartments

Both, in terms of social organiztion and physical lay-out, the Servants Apartment was ordered on a hierarchical model - at the top of the organization, in private offices, accountable to the "Mistress" herself, were the butler and housekeeper, the latter responsible for the kitchen and laundry. Reporting to the butler, in many houses, was a staff comprising valets, coachmen, gardeners, and later, mechanics. The housekeeper may oversee the purchasing of perishable goods and supervise the cooks, kitchen help, laundry women, housemaids, nannies and hairdressers. In terms of numbers alone, a large villa such as Ravenscrag could require a staff of between thirty and fourty to operate.

Kitchen Offices

Perhaps the most important zone in the Servants' Apartments was the Kitchen Offices which, according to Kerr, should attain "...at least in our own day (1870) the character of a complicated laboratory, surrounded by numerous accessories specially contrived, in respect of disposition, arrangement, and fittings, for the administration of the culinary art in all its professional details..."[14]

The Kitchen Offices usually comprised a number of interdependent rooms of which the main functional elements, were the housekeeper's room, the kitchen, scullery 'wash-up), cook's pantry 'dry larder , meat, and game and fish larders. Direct access to the pantry serving, and dining room, on the piano nobile, was provided by the back stair 'and food hoist). The laundry which formed part of the kitchen offices, was either in the basement or a separate building, including rooms such as the wash-house, laundry, drying room and soiled and clean linen closets.

The design approach taken in the Family Apartments, to separate uses 'and the sexes) also determined the lay-out of the servants' wing - areas were reserved for working, eating, and sleeping. The sleeping accommodation of Male and Female servants were further isolated to prevent, (to use Leacock's expression), "...the sad decline of the morality of the working man..."[15]

Sleeping Quarters

The servants' sleeping quarters were mostly located in the garret and in the bsement. Ablution facilities were scantily distributed in the basement. The servants' hall usually completed the Servants' Apartments.

Other Zones

The stable and later the garage, formed the last functional element in the servants' grouping. These units were usually located in separate buildings forming part of a kitchen courtyard.

Accessible from the courtyard was a carriage house, harness and saddle rooms, a grooming shed, dung pit, well, hay/corn loft, gardener's shed and sleeping accommodation. Sometimes a conservatory (potting room) formed part of the stable complex, as for example at Purvis Hall.

4.6 Site Development

The idea of the separate worlds, one reserved for servants and the other for the family and guests, also formed the principle for site development - the formal access from the street to the house was in most cases designed to celebrate the ritual of arrival and departure which formed such an important element in the house party culture. For example, at Purvis Hall, a semi-circular driveway off Pine Avenue, led to a grand staircase, a porch and the front door. A second driveway and path from the side street facilitated service access to the Servants apartments and stables. A morning caller arriving by coach and pair would never see, nor hear, the activity related to the running of the villa. Furthermore, the stables screened the view of the mews from the main house, in accordance to Kerr's dictum;

> "the principle rooms of the house should not have a view over the stable yard of the outdoor domestic servants' work areas."

Similar site planning concerns dictated the pattern at other houses, such as at the Residence of Lord Strathcona or Charles R. Hosmer Residence.

By the late nineteenth century the typical villa garden is yet another reflection of the passion of the Victorian mind to separate functions and to classify uses. The family would, weather permitting, entertain guests in the "family garden", usually laid out to facilitate a variety of activities ranging from "taking tea" to playing croquet, tennis, raising flowers and finding romantically "secluded corners" to read poetry. An important consideration was obviously to design for easy servant access - most paths led back to the kitchen as Leacock suggests in his Arcadian Adventures. In winter, on the other hand, many of the outdoor activities would be transferred to the "winter garden" (or conservatory) where summers lasted forever. In many villas the conservatory formed part of the drawing-dining room suite. Access and transition to the outside was contrived by architectural elements such as loggias, verandas, a terrace and formalized stair.

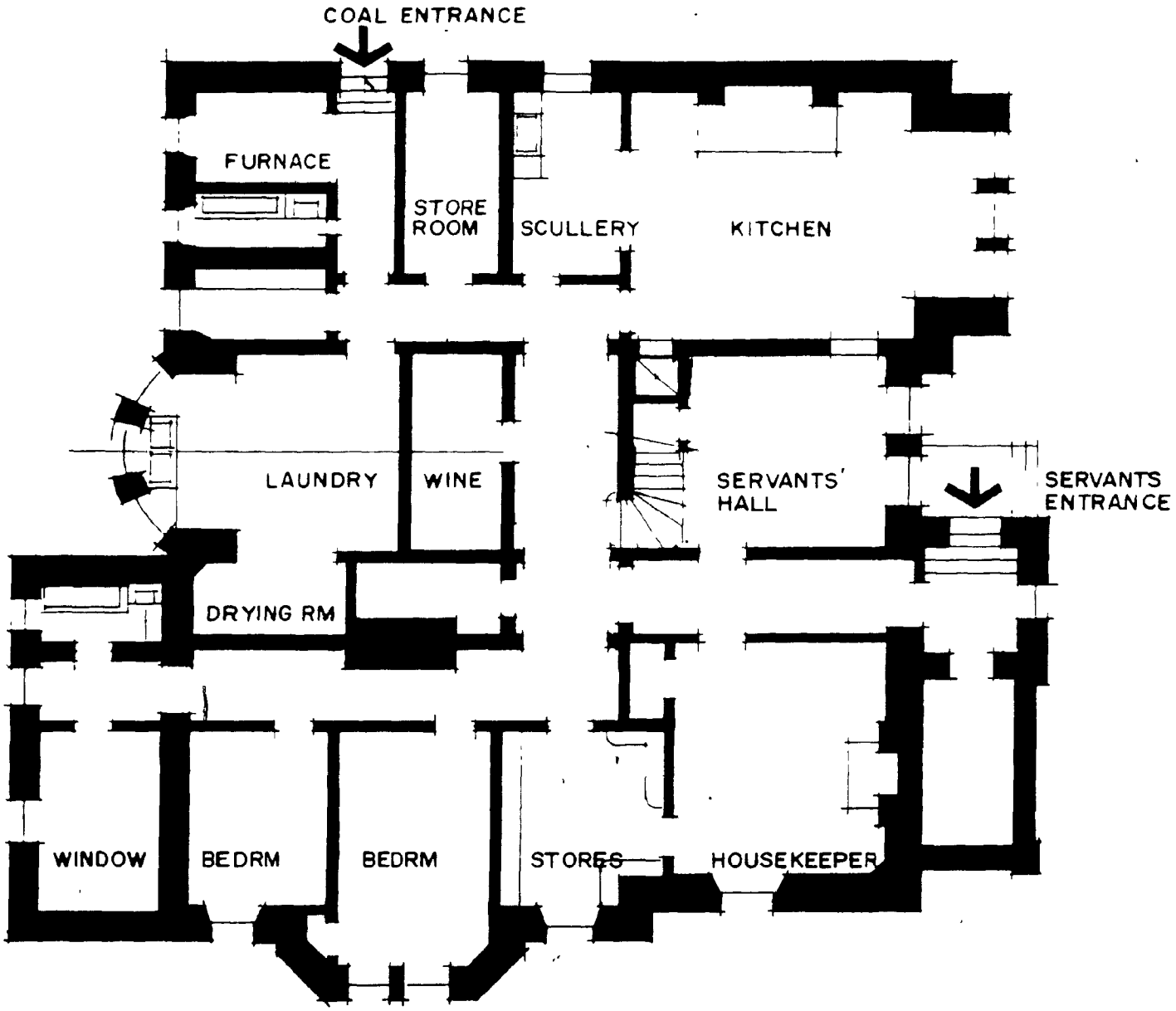
On the other side of the house, often separated by a garden wall, the outdoor servants worked, perhaps tending a vegetable garden, orchard or potting plants to be transferred to the conservatory.

4.7 The "Servant Problem"

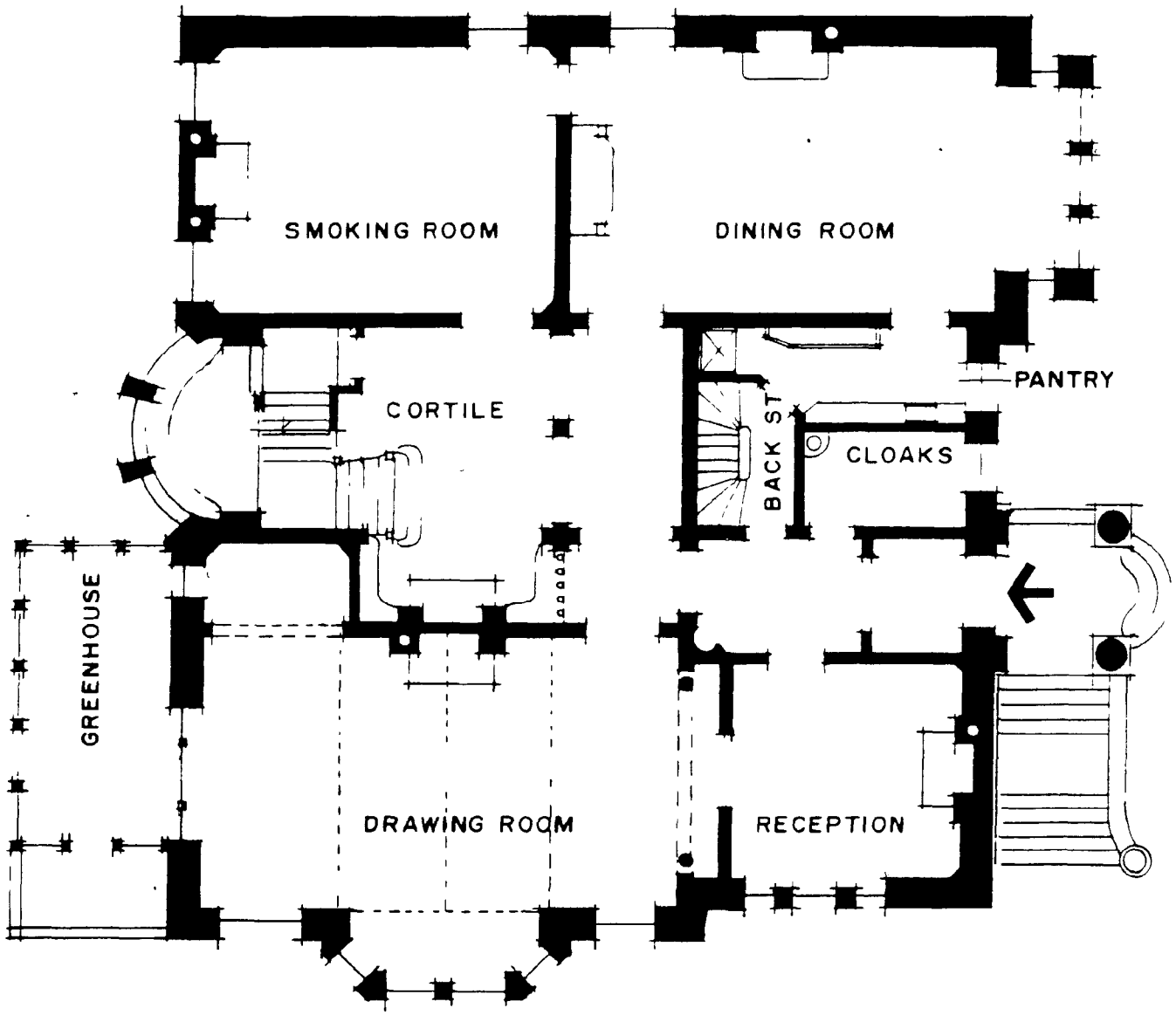
The pattern to provide labour intensive servant's apartments ruled over by the Mistress survived into the twentieth century - only after the First World War were more opportunities created for people to seek employment ouside the domestic sphere. Needless to say, this shift, referred to by Girouard and Franklin as the "Servant Problem", changed the design and concept of houses radically; after the war the "Mistress" status changed, dramatically - here rule by "God given charter" over a large staff, never having to do any work, was turned inside out. According to Mrs. Beeton in 1923;

> "The continued shortage of domestic labour, and high wages, have faced housekeepers (mistress) to take a much larger part in the work of the house themselves".

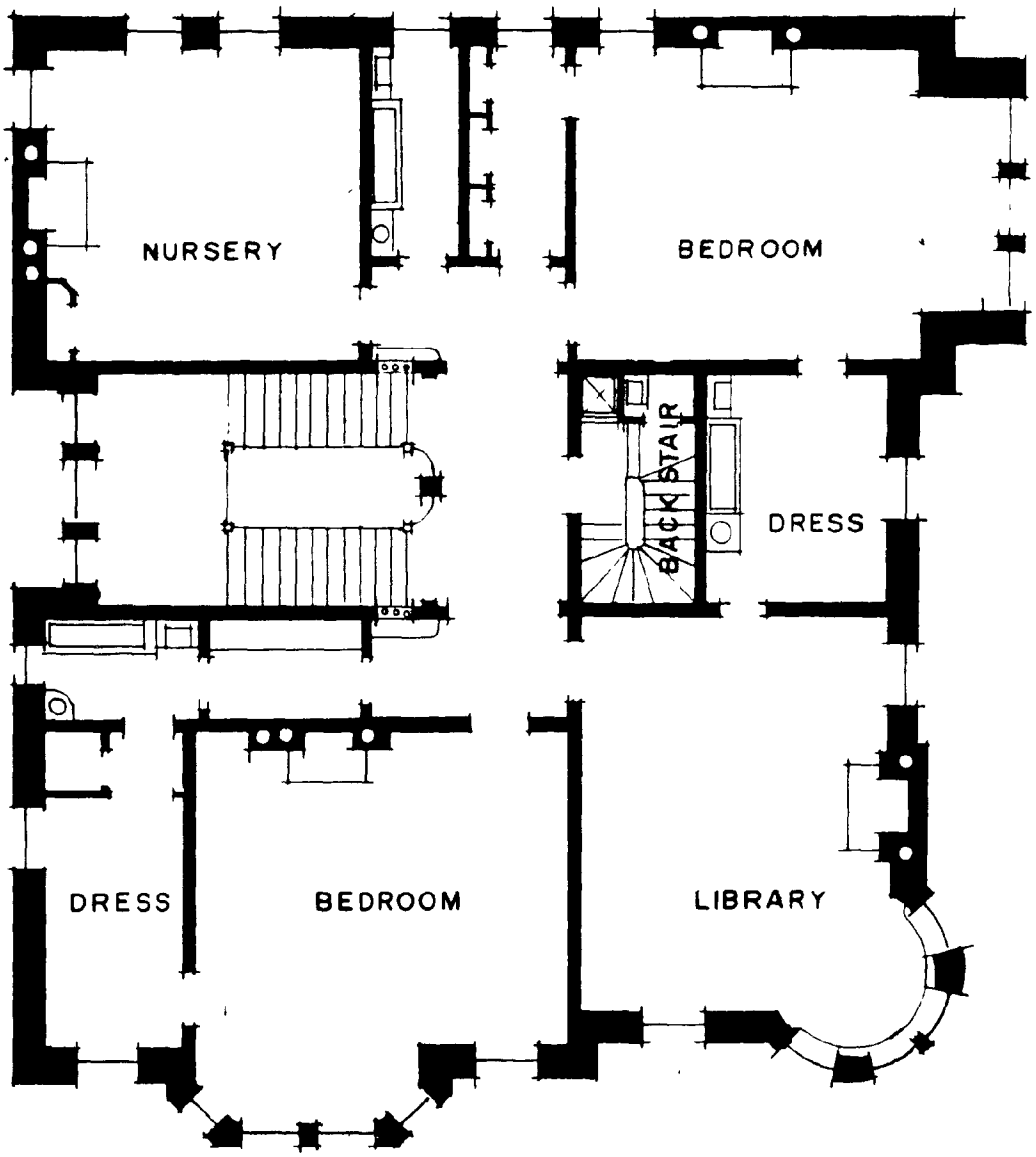
Furthermore, the relaxed formality brought about by the automobile and decreasing wealth, further contributed to the compact and technologically dependent villa of the later part of the twentieth century. This transition influenced architectural form and design requirements extensively.



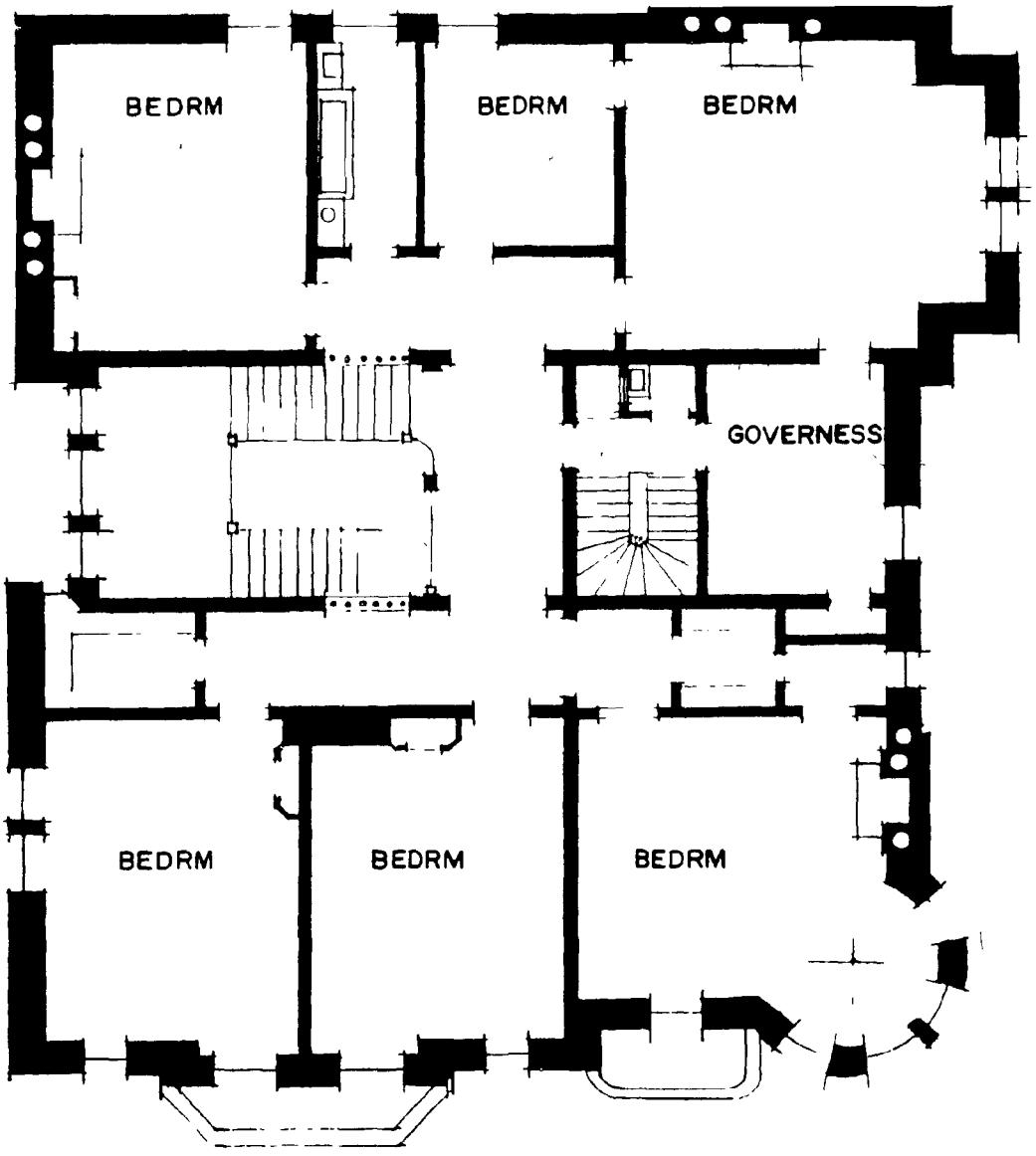
ILL 24 "Basement Plan" Villa designed by Architect Taylor, 1880's, McGill University Archives, drawing by author



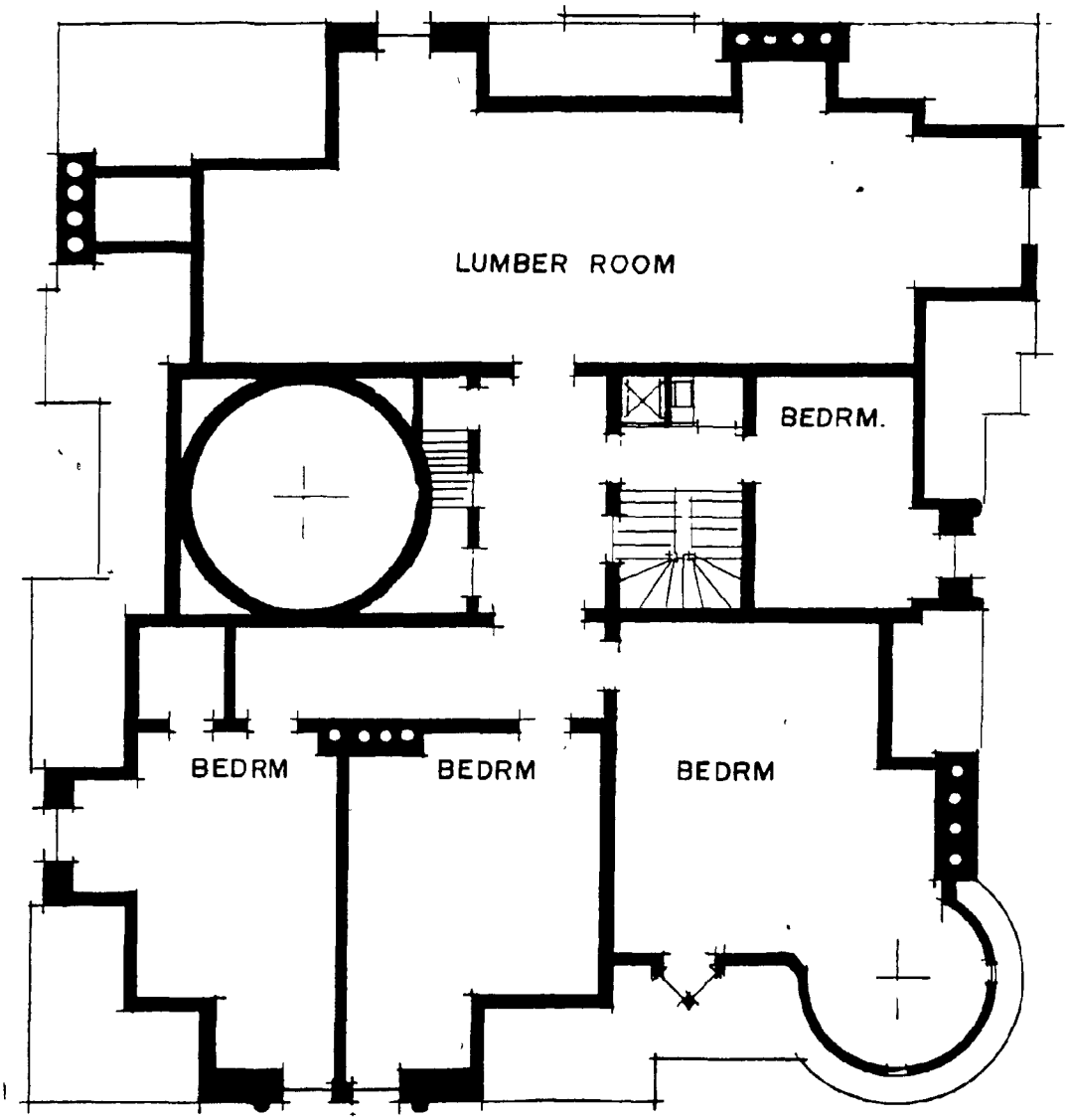
ILL 25 First Floor Plan, Family Apartments; Day Rooms. Villa designed by Architect Taylor, 1880's, McGill University Archives, drawing by author.



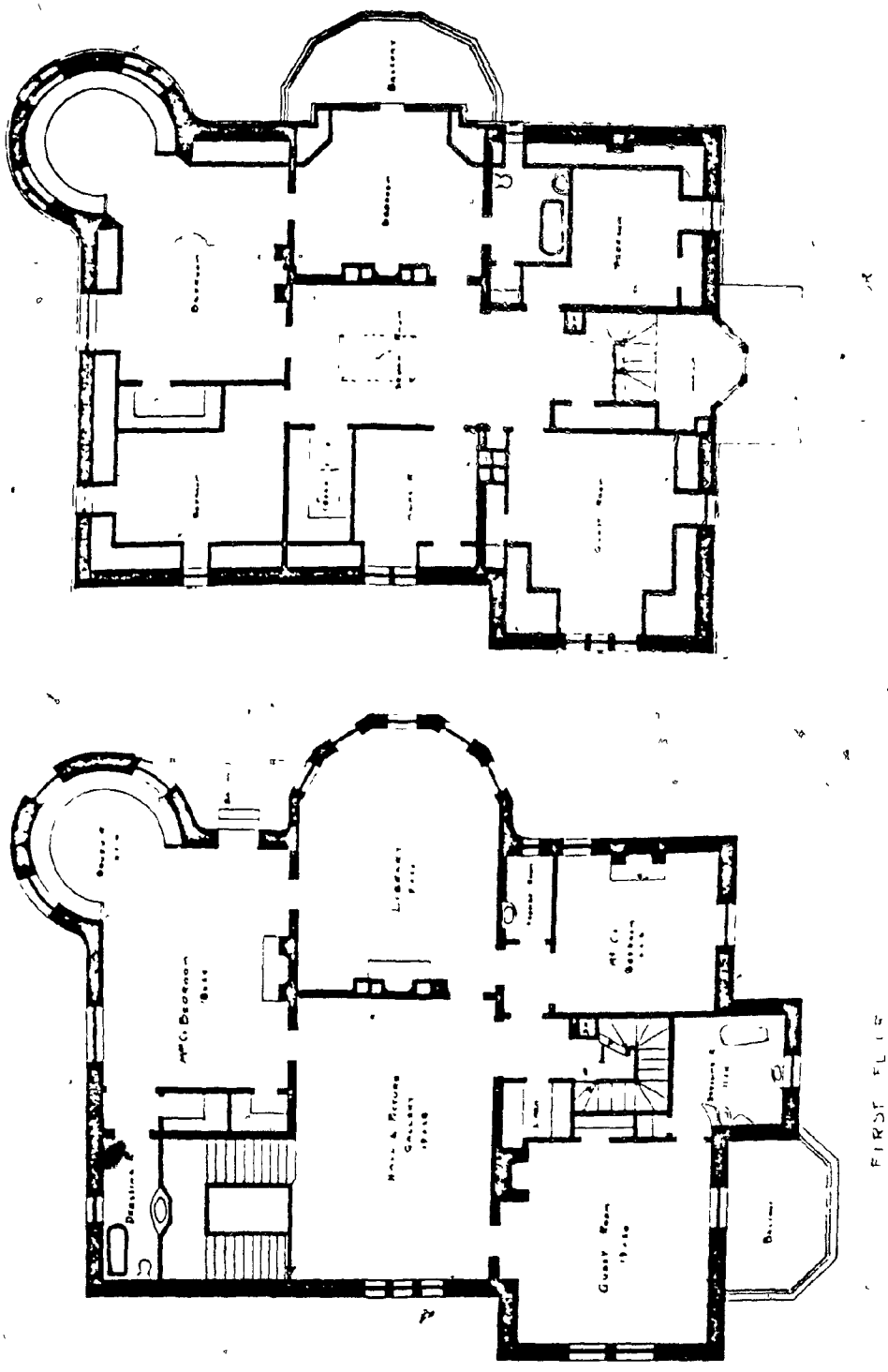
ILL 26 Second Floor Plan, Family Apartments; Evening Rooms. Villa designed by Architect Taylor, 1880's McGill University Archives, drawing by author.



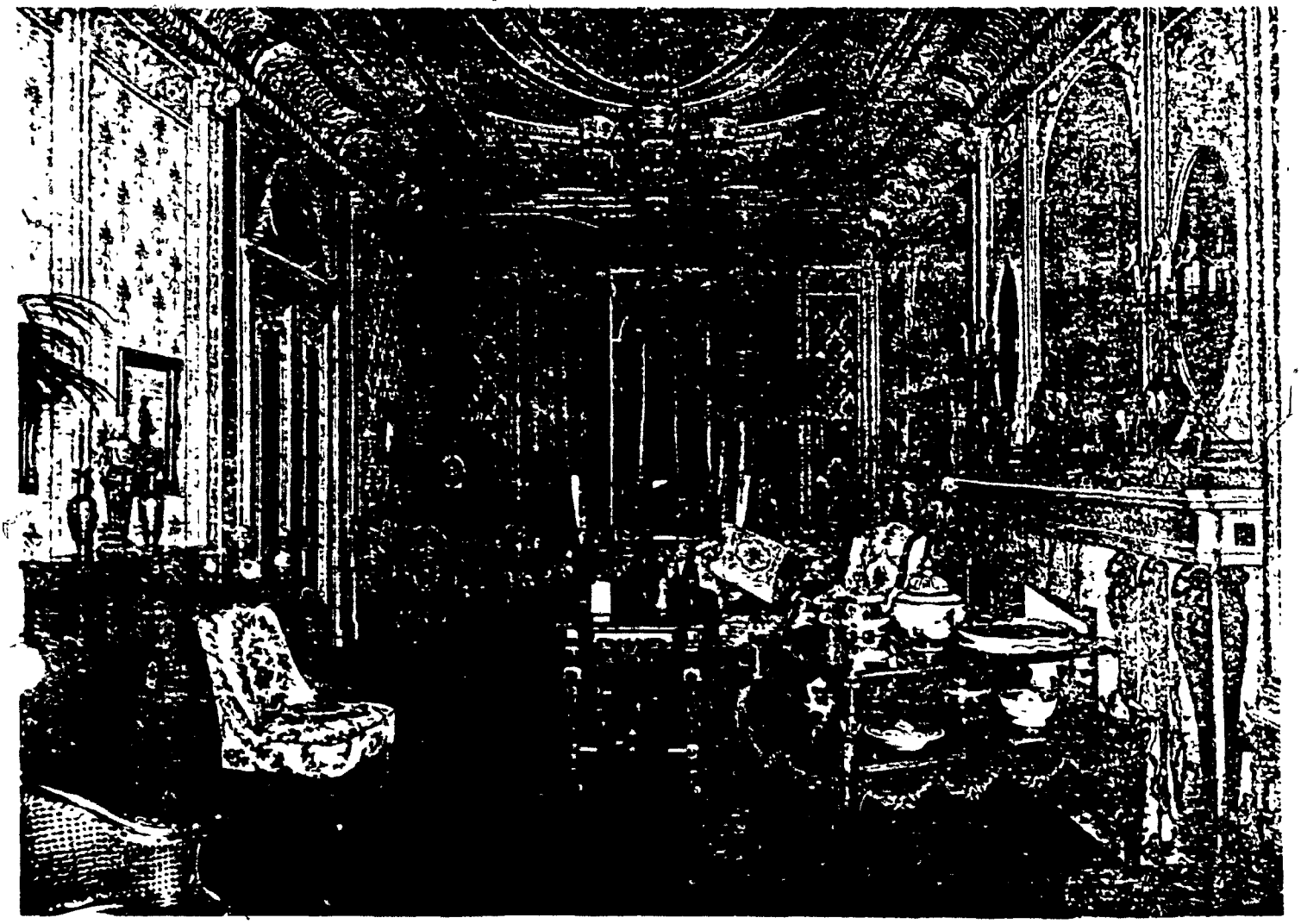
ILL 27 Third Floor Plan, Family Apartments; Childrens' Rooms. Villa designed by Architect Taylor, 1880's McGill University Archives, drawing by author.



ILL 28 Attic Plan, Servants' Apartments. Villa designed by Architect Taylor, 1880's, McGill University Archives, drawing by ~~author~~.



ILL 29 Villa for Mr. Thos. E. Hodson c. 1900, Edward Maxwell Architect, C.C.A. Collection, Montreal



ILL 30 F. Orr Lewis House, Sherbrooke Street West, View of the Drawing Room, Board of Trade

NOTES

1. Leacock, p. 92-93
2. George Orwell, quoted by Alan Gowans, Building Canada, p. 139.
3. Girouard, p. 284
4. Kerr, p. 66
5. Kerr, p. 67
6. Webb
7. Franklin, p. 41
8. Girouard, p. 294-7
9. Lord Hamilton, p. 69
10. Kerr, p. 98
11. Girouard, p. 284-287
12. Lord Hamilton, quoted by Girouard, p. 21

13. Girouard, p. 59

14. Kerr, p. 204

15. Leacock, p. 3

5.0 TECHNOLOGIES FOR COMFORT AND CONVENIENCE

5.1 Introduction

An essential part of "villeggiatura" in the Victorian mind is the notion of comfort and convenience, in terms of planning, building systems and social organization required to ensure sufficient heating, clean laundry, the processing of food, cooking, hot water and waste disposal. Comfort and domesticity were valued and the nouveau riche anxiously wanted their houses to express "shelter" and "family life". To ensure a life of leisure and comfort for the family, a "factory was required in the basement, referred to by Kerr as the Servant's Departments", filled with technological gadgets, powered by hand, steam, coal and later electricity.

The transfer from manual powered equipment to electricity occurred at the turn of the century, largely due to the "servant

problem" as more opportunities in industry or in Western Canada became available, fewer immigrants could be recruited as domestic servants. According to Buehr[1], the development (and assimilation) of labour saving devices increased in the home, as servants became scarcer (and more expensive).

Domestic technology (and household management techniques) remained largely unchanged from the Middle Ages to the early nineteenth century; the villa was a self-sufficient warehouse and processing plant, where food was stored in its "raw state", processed by hand and cooked over an open fire. There was no running water, the rooms were drafty, and the running of the house was entirely dependent on servant labour.

With the mechanization of communications (the telegraph, newspaper) and transportation systems, (the railway, steamer), a "domestic revolution" occurred in the household as more mass produced and efficient gadgets became available to ease some of the back-breaking work. For example, housework was made lighter with the introduction of carpet sweepers, mops, washers, wring dryers, hand operated vacuum cleaners, coal burning stoves and central heating. Yet, the operation of these devices were dependent upon servant labour - without servants the furnace fire would burn out, the kitchen stove would be cold, the carpets not cleaned and laundry not washed. However, although domestic work was hard, some of the more unpleasant duties were replaced by technological developments, for example, with the introduction of

sewage systems and flush toilets, the number of chamber pots to be cleaned was (perhaps) somewhat reduced.

5.2 Cleaning the House .

Nevertheless, housework, whether cleaning, laundry, ironing, cooking or doing grounds maintenance, was largely manual work. For example, carpets were either untacked, carried downstairs and beaten with carpet beaters, or rolled with mechanical carpet sweepers. These appeared early in the century[2]. When pushed, a stiff rotating brush rolled over the carpet sweeping up dirt. The more advanced models featured agitators which turned with the brush to loosen dirt. Carpet sweepers were readily available and were featured in the Sears, Roebuck catalogues[3]. Also, towards the end of the century, a number of hand or foot operated vacuum cleaners were on the market, usually requiring at least two servants to operate.

The servants pulled a plunger up and down which created a vacuum in the lower chamber causing outside air (and some dust) to rush into a bag where dirt was deposited.

By the first decade of the twentieth century, electric power was applied to these principles, making centralized vacuum cleaners and hand operated models commercially available through the British Vacuum Cleaner Company or the Hoover Company in Ohio. They were advertised as the answer to the "servant problem"; for

example, an advertisement in the Academy Architecture (1909) read:

> "One servant using the British Portable Vacuum Cleaner can clean all your Carpets, Drapery, Upholstery, and Furniture without removal or disturbance to the household".[4]

5.3 Laundry

Providing clean clothing in the Victorian (and Edwardian) household was a major task - the leisured classes wore a number of outfits during the same day, and because outward appearances was valued, clothes had to be pressed, starched and kept spotlessly clean. Furthermore, to do the laundry (and ironing) was hard on the garments (as well as the maids). Although the washboard and tub was replaced in the 1860's by early hand operated washing machines, such as Terriff's Perfect-Washer-With Boiler - (1868, doing the laundry remained a difficult task. The Perfect-Washer, comprised an outer and inner tub. The outer tub and sink stood on leg within which rotated a cannister ("the inner tub"), with holes. The outer tub was filled with water, and laundry placed in the inner tub, was rolled back and forth to facilitate a cleaning action.

By the second half of the century the laundry room usually contained, a mechanical wringer, perhaps similar to the Riley Smith model (1857) as described by Buehr, which applied a "kind of tourniquet to the wash"[6] when a wooden handle was turned, twisting the garments and squeezing the water out. These wringers

were replaced by the roller type later in the century, such as Sears, Roebuck's "Wringer and Bench"[7]. The laundry was dried on racks in a "drying room", specifically built for that purpose. The room was heated with a coal stove or radiators. Full mechanization of the Laundry Apartments occurred round about the First World War, when electric power was available and servants hard to come by. On the other hand, in some houses the laundry was "sent out" to commercial laundries which replaced the Laundry Apartments entirely.

5.4 Ironing

Ironing, before the electric iron, was, as Clive indicates, a frustrating and hazardous affair;

> "Either the iron was too hot which caused a brown mark called a burn, or else it was too cold, which caused a brown mark called iron mould; and well meant efforts to remove either by dipping them in blue-water merely turned the material pea-green. And then if I didn't iron in all the wrinkles, I found, after toiling laboriously round yards of skirt, that the sleeves had meanwhile been crumpling themselves up and gone back to start or that the bodice had become sudenly damp again, owing, apparently, to spontaneous condensation. If, however, I did glide home with a decent bit of ironing it merely revealed how completely I failed to wash out any of the original dirt. It was a heart-breaking, back-breaking business, particularly as the floor was concrete and we ran to and fro to the stove in an atmosphere of steam and short tempers, carrying our heavy red-hot implements, bumping into each other as we all frantically tried to exchange bad irons for good, spitting hopefully and knocking each other's chef d'oeuvres of laundress' art off the line onto the floor".[8]

Clive's "back- and heart-breaking" labour was done, as was most ironing, with a solid flat iron. The flat iron was heated on a stove top. The major problem, as indicated by Clive, was to heat and reheat the iron to a temperature suitable for cotton, linen, or steam pressing. Reheating could also reduce production time, often one servant would use two flat irons, heating one, whilst working with the other. "Improved" models, which were marvelled at later in the century featured removable iron slugs, which fitted into a cavity. While one slug was being used, the other was heated, to permit continuous work. By the 1850's special stoves to heat a large number of irons were manufactured, such as the Charcoal Iron (1852) by Cummings and Bless[9].

5.5 The Kitchen

In the 1800's all kitchen activity was centered on the hearth in which a fire burned year round. Usually a built-in brick-lined oven was provided on the one side with a wrought-iron door. According to Buehr, the first practical cooking stoves appeared on the North American market by the 1830's[10], although cast-iron heating stoves were brought to the U.S. by Scandinavian immigrants in the 1700's. The stove fire was concentrated, contained and safe. Often manufacturers marketed models which featured an added oven and a boiler to heat laundry water, in addition to the standard cooking plates. The stoves could burn coal by the 1850's.

Food Processing

Although cooking by the 1850's was becomming easier for the kitchen staff, food processing was a messy and time consuming process. Fresh food was normally purchased from the market, a farm or even grown in the kitchen garden. Fruit, vegetables, fish and meat arrived in the kitchen in its raw and unrefined state, packed in sacks, baskets or metal dishes. The produce contained garden dirt and insects. Vegetables and fruit were usually trimmed and washed and either cooked for immediate consumption of "put up" in jars as "preserves". This was normal practice until the turn of the century when the art of refrigeration facilitated longer storage. Out of season fruit or specialities could usually be obtained from the stores at high prices and the very wealthy cultivated exotic fruits and vegetables in green houses. Apples, oranges or grapes were imported from the Mediterranean or the West Indies.

Refrigeration

To keep food fresh demanded a lot of care, time and energy during the first part of the century. The villas probably had their own ice houses where blocks of ice could be stored in sawdust to ensure an ice supply through the summer. Later, commercial ice companies delivered ice to the kitchen. The ice usually arrived in a horse-drawn vehicle and the blocks cut to order.

The invention of the "ice-box" was regarded as a major technological advance at the time, (Buehr[11]). The ice-box was an insulated container, large enought to allow for the storage of food and ice. As the ice melted water dripped from a drain into a bucket or basin. Improved ice-boxes also made the commercial delivery of milk possible - the milkman would stop his wagon at the kitchen door and ladle milk from metal cans into pitchers brought by the maid. Pasteurized and bottled milk was sold by the 1870's. By the 1880's the iceman delivered artificial ice from the ice-plant. The regular supply of ice through industrial processes, made it possible to convert freight cars into "moving ice-boxes". The shipping of perishable goods across the continent by rail, such as meat, lettuce, strawberries or oranges, resulted in a better and more stable out of season supply of food at the Montreal grocer (and at lower prices).

Storage

The kitchen apartments were always designed with large storage areas in the form of dry larders, fish larders, et cetera; and for a very good reason. Goods, such as flour, sugar, salt and coffee were delivered in bulk. For example, flour and other grain products were bought by the barrel or fifty pound sack. The sacks had to be stored in a dry room and small amounts transferred to the kitchen as required. Sugar was marketed in huge blocks which were hung from the ceiling, covered in netting to keep the flies away. The maids would chip chunks from the block with a hammer or cut

pieces off with "sugar cutters". The chunks were then crushed into granules for the table. Alternatively, after the Civil War, granulated sugar could be purchased in the U.S.A. The sugar was packed in barrels and extremely coarse - so much so that a "sugar auger" was required to get it out!

Salt also arrived in the kitchen apartments in blocks. Spices, such as pepper corns, nutmeg, clover or cinnamon were purchased in bulk form and had to be ground as needed.

Most households tended their own private herb gardens to raise thyme, rosemary, parsley or chives. The herbs were harvested in the fall, aired and stored, to be used as seasoning.

Coffee was stored in large sacks. The green beans were then roasted in a coffee roaster. Small amounts of the roasted beans were stored in a cannnister which was then ground in a coffee mill in small quantitites for immediate use, because vacuum packing techniques were unknown and coffee went stale easily.

The processing and procuring of meat and fish was a major problem before efficient refrigeration. Poultry, such as chickens, ducks or turkeys were usually bought trussed up but very much alive. The birds were slaughtered in the yard for immediate use. Maids had to singe, pluck and clean the birds by hand at the sink. Fish was scaled, shelled and prepared on the kitchen counter. Beef or pork was usually purchased from the butcher after slaughtering day, to

be eaten immediately or to be smoked, dried, pickled or made into sausage. Even with the development of the "ice box", meat products could not last very long and had to be used quickly.

Dairy products posed a similar problem to the kitchen staff. Often a cow was kept in the yard to procure fresh milk, butter and cream. Alternatively, sufficient dairy products would be purchased from the milkman to satisfy daily needs.

Buehr's summary, perhaps describes the kitchen best:

> "...the nineteenth-century kitchen - with its heavy iron cooking equipment, its apparatus for grinding, sifting, slaughtering, churning, and pressing, its sugar cones and salt blocks and overflowing baskets and pickling barrels -was literally a large-scale food-processing plant, and it demanded a fantastic amount of work..."[12]

5.6 Heating

To keep warm also required an amazing amount of work and manpower, particularly prior to the introduction of central heating and the striking match;

> "To start a fire, the householder filled a tinderbox with dry, crumbling wood, with a small steel bar, he would strike a piece of flint stone until sparks fell into the tinder. Then, blowing vigorously, he might hope that with luck the tinder would begin to smolder. Not much better than the caveman's rubbing of sticks, this nineteenth-century process could actually take, even on a dry day, fifteen minutes to produce a fire"[13].

The open fire place was very inefficient because of the unequal distribution of heat and cold drafts - while it might be warm in front of the fire, the water in the washstand could be frozen. To provide at least some comfort, the parlour furniture was designed with high backs and sides. When facing the fire, one was at least warm.

Starting the fire, however, was only part of the work - servants cleaned the ash out daily, tended fires regularly and sawed and split wood.

The introduction of the Franklin Stove in the villa provided more heat and burned less wood. Coal buring models were even more efficient in terms of fuel consumption and BTU output. To allow heating of the upper floors, floor registers were provided for convection.

The stoves, like the storm windows were in some households "taken-down" for the summer and "put-up" again in the fall as part of the winter preparations.

By the middle of the century central heating was slowly becoming available, in the form of steam boilers feeding radiators in the rooms of the house, such as the system produced by Baker and Smith of New York (1856). By the 1890's most existing villas had converted to some form of coal fired central heating, whether a

hot air, steam or a hot water system. By the late 1890's The Canadian Architect and Builder regularly carried advertisements for coal fired warm air furnaces[14] by Clare Bos. & Co. and hot water "apparatus" by the E. & C. Gurney Co. of Toronto[15].

Radiators were available in a variety of styles, shapes and forms - the trend, however, was to hide the radiator behind a metal grill and to cover it with a shelf. As suggested by an article in The Canadian Architect and Builder, a typical complaint was that the system provided an unequal distribution of heat - those rooms located near the boiler were hotter than the more distant ones:

> "Many buildings, large and small, can be found wherein, when first erected, the heating apparatus worked excellently, but in a year to two began to snap and pound vigorously, while its lack of vigor in heating some parts of the building becomes uncomfortably apparent to complaining occupants".[16]

Open fireplaces in major rooms appear on most floor plans of villas with central heating. They may have provided for "atmosphere" (and supplementary heat) in most houses. The fireplaces and boilers required constant attention. They produced dust, soot and drafts. The amount of labour involved to keep them burning, cleaned, stoked and fueled, (coal or wood had to be carried upstairs from the coal or wood shed by hand) was tremendous.

5.7 Air Infiltration

Many architects and builders tried to resolve the draft problem by designing and building airtight windows and doors. Hand crafted doors and windows could fit snugly in their frames. Factory-made units were available by 1907. The "Alza English Sash Window"[17] advertised in the January 1907 issue of The Canadian Architect and Builder, featured not only air tight construction but a mechanism to allow the sash to swing into the room for cleaning purposes, ostensibly to reduce the time required to clean windows.

5.8 Plumbing

Perhaps one of the great achievements in the nineteenth century was, ironically, in plumbing - the "progress-minded idle rich" could afford the latest in flush toilets, running water, hot water heaters and vent stacks. In this case, the upgrading of older systems was more than a fashionable whim, in the early nineteenth century, many villas drew water from a well by bucket or pump. Outhouses, near the wells, often created ideal conditions for typhoid fever. The kitchen sink was a wooden tub, or stone bowl filled from a kettle or dipper, emtied outside. Later sinks were lined with copper. Mass produced iron sinks were also available - these rusted out and had to be wiped dry after each wash.

The first tap water lines ran from the well to the kitchen sink. The lines were later extended to the bathroom. Water was pumped by

hand to a faucet or to a cistern in the attic for gravity flow to the kitchen, bathroom faucets and to provide the pressure to flush the W.C. Some cisterns were filled with water collected from the roof. Public water supply replaced private wells by the turn of the century.

Hot water in the first part of the century was carried from the stove to the tub. The introduction of a centralized coal or wood fuel boiler in the basement made it possible to pipe hot and cold water to the bathroom. By the 1890's a wide variety of boilers were available, such as Spence's "Daisy", "...the only boiler that can be repaired without disturbing the piping"[18].

Waste water in the early villas was piped from a hole in the sink to an outside drywell, and later to a cesspool until Public Sewage was introduced.

The development of traps and ventilation occurred by trial and error. Articles on "Sanitation, Heat, Light" abound in architectural publications and books such as S.S. Hellyer's The Plumber and Sanitary Houses. Kirk[19] wrote the following in favor of trapped drains: "It is bad enought to contend with the foul air contained in one's own drain, without contending with the accumulation of a whole community"[19]. Kirk quoted the following from S.S. Hellyer's The Plumber and Sanitary Houses (on the same subject); "It is, to say the least, a little communicative"(!)

Great care was exercised by architects to ventilate soil stacks to prevent "sewer gas" from escaping into the rooms. For this reason the placement of wash basins were rare in bedrooms in fear of insanitary gases escaping from the plug.

5.9 Ablution

Ablution in the early nineteenth century was a major undertaking, once again relying heavily on the labour of servants. The family generally preferred to take a bath in a dressing room or in the bedroom. A tub was hauled up the back stair. Water was heated on the stove or fire and then carried, two pails at a time, to the room. After the master or the mistres had washed (discreetly) the bath was emptied, a bucket at a time. The floor was then mopped, the tub washed out and returned to the basement. With the development of a better supply of running hot and cold water, bathrooms became more popular in the villas, and, one might suspect so did bathing!

The location of the bathroom was given special consideration in terms of planning - the bathroom was placed on an outside wall to ensure natural ventilation, often off a special lobby. The bathroom, however, may not necessarily have been used, Oscar Wilde preferred to "ring for hot water".

Whereas Oscar Wilde might have wished to maintain the status quo, by the end of the First World War there was no return to the "good

old days" of bountiful servant supplies. Anticipating a servantless house, B.C.J. wrote the following article in 1907 about designing tiled bathrooms;

> "A room so covered (tiled) can be made one of the most attractive in the house, as it is very easy to keep clean, thus lightening considerably the work of the housekeeper. It is very durable and when once properly set requires no painting or papering of the wall, nor oiling or carpeting of the floor...the fact that the clay tile is germ proof and, consequently, quite sanitary..."[20]

5.10 Lighting

Technological advances in lighting and new energy sources further contributed to comfort and convenience in the Edwardian villas with their fewer servants. In the early nineteenth century, on the other hand, servants were a necessity to provide the care necessary to illuminate the rooms. The candles, providing a flickering light, burned out fast and had to be replaced continually. Spermaceti candles, in chandeliers with cut glass pendants provided a brighter (but much more expensive) light.

Oil lamps utilizing whale oil were available. They smoked and smelled a lot and tended to increase the servants' cleaning load. Buehr feels that one of the great achievements in lighting engineering in the first part of the nineteenth century was the "student lamp"[21]. For the first time the light was bright enough to work or read by. The "student lamp" combined two Argaud burners

(a flat, cylindrical wick fitted around a wick tube) with a polished reflector. Ironically, with the new demand for whale oil, the principal lamp fuel, the whales were hunted out. This "energy crisis" led inevitable to new and ingenious technological applications.

Inventors searched for alternative energy sources, such as "burning oil" (oil of turpentine mixed with alcohol) or "camphorene" (turpentine)[22]. Unfortunately, both sources were highly explosive. With the discovery of crude oil in North America (1859), the crude was refined to provide cheap kerosene. Kerosene lamps appeared on the market with another innovation, the glass chimney. The lamp could provide clear and steady illumination, yet required constant attention. Servants refilled, trimmed the wick and cleaned the chimney.

The servants' work load was made substantially lighter when it became possible to pipe natural gas to the villa. The gas flame burned without a wick, had no cannister to fill and required no chimney cleaning. However, the open flame was easily snuffed out - with disastrous consequences, until the "gas mantle" (a lace-like fabric on a wire frame) was invented by Carl Auer von Welsbach (1858-1929)[23]. When the incandescent mantle glowed, it produced a clear, bright light. The mantle required protection - a variety of decorative glass mantles and shades were available at the turn of the century.

Electric lighting appeared in the 1880's[24]. Aided and prompted by the expiration of the basic Edison patents, the race to provide electric lighting was entered into by other inventors and manufacturers, such as the Thomson-Houston Company or Westinghouse. By the 1890's electric light appeared in local installations such as the villas. Each house had to generate its own power until electricity was produced by the public utilities. It became common, according to Russell, to convert gas fixtures to electricity by threading the wires through the gas lines.[25]

By the 1880's the villa was reasonably comfortable - it was warm in winter, it had running water, bathrooms with flush toilets and an efficient lighting system. Servants saw to the smooth running of the Kitchen Apartments, stables and cleaning functions.

5.11 Communication

Communication, whether verbal or physically between floors remained difficult, particularly if one considers that all the laundry was carried down the back stair to the basement and dishes carried up the kitchen stair to the dining room. With fewer servants around the house, more technoloigical innovations were introduced. The introduction of dumbwaiters, an invention credited to Thomas Jefferson[26], ensured that the dinner from the basement kitchen would reach the table warm. The dumbwaiter was a hand operated elevator running in a shaft forming part of the servant stair.

Communication between the floors of the house was also improved when the "speaking tube" arrived, a pipe buried in the walls, running from the main rooms to the kitchen and pantry:

> "Master blew into the tube, making a shrill whistle, to get maid's attention. If and when she responded, he spoke into his trumpet and then raised it to his ear to hear her reply"[27]

A much quieter system used indicators. Each Family Room was allocated a number, connected to a bell pull. When the pull was tugged, a cord would drop in a panel located against a kitchen wall, indicating to the servants which room required attention.

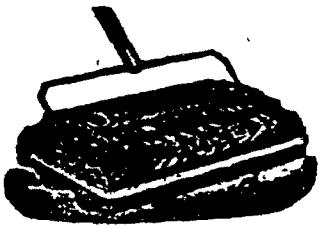
As the noise level in the house increased with dumbwaiters creaking up and down between floors, people yelling into speaking tubes and generators roaring away, new inventions were required to replace the front door knocker. A wide variety of bells became fashionable which could be tugged, or turned to draw attention to the caller, who by the early twentieth century arrived by automobile or bicycle.

5.12 General Considerations

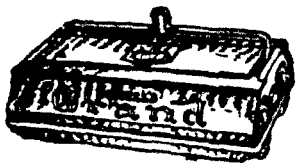
The technological products of the nineteenth century, such as the automobile, bicycle or household aids, transformed domestic technology from the technology of the Middle Ages into the twentieth century mechanized dream house. It only required attaching the alternating current electric motor to the hand

operated sewing machines, pumps, washers, dryers, hot air furnaces and vacuum-cleaners to produce the twentieth century gadgets. These mechanical aids also made houseowrk less laborious and time consuming. And, as fewer servants were required to run a villa, the market for mass produced household gadgets increased. The distribution of electric power and municipal water and sewage systems coupled with a redistribution of wealth, brought the exclusive comfort of the rich into the residences of the working classes. Architectural theory also changed, as the house, by the 1920's, was seen as a practical and constructive order of purely technical aspects. Le Corbusier in Vers une Architecture wrote the following, by now, familiar slogans;

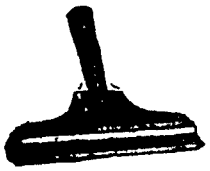
> "Demand a bathroom looking south, one of the largest rooms in the house....Demand bare walls...built-in fittings to take the place of much of the furniture...If you can, put the kitchen on top of the house to avoid smells. Demand concealment or diffused lighting. Demand a vacuum cleaner. Teach your children that a house is only habitable when it is full of light and air, when the floors and walls are clear."[28]



No. 13555. Bissell's Prize Carpet Sweeper, the latest of the Bissell patterns, and differing in appearance from any other sweeper on the market.
A sweeper of the highest grade, with one of the handsomest patent cane designs.
The cases is hand polished. The bail, trimmings and lamp end pieces are plated with nickel, brass or antique copper, according to the finish of the case.
It contains our broom action, our patent reversible bail, and our pure bristle wire staple brush, adapted to be easily removed from the sweeper.
The spring dumping device is convenient, opening one gate at a time.
The construction throughout is as perfect as care and skill can make it. Price, each, $2.50

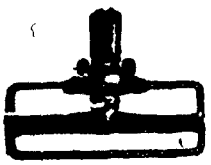


No. 13556. Bissell's Grand is constructed after one of the handsomest of our patented designs. The wheels do not project outside the case.
The bail and trimmings are nickeled, and the case is hand decorated.
The spring dumping device is one of the most convenient that we make.
This sweeper is made in natural walnut, maple with mahogany finish and oak with the 16th century finish. Length of case, 17 inches. Price, each, $4.



FLOOR SCRAPERS.

No. 13558. Rubber Scraper. For cleaning and drying floors and windows, 13 inches wide. Price, each, 10c.



MOP HEADS.

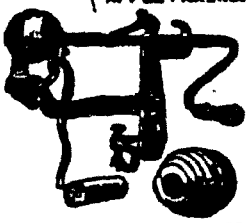
No. 13559. Mop Head. Made of extra heavy wire with galvanized iron screw head, thumb screw to hold handle firm when screwed down upon rags. Price, each, 10c.

CHERRY STONER.

The accompanying cut illustrates our Cherry Stoner, which is intended to stone cherries with rapidity. It is adjusted by thumb screws to adapt it to the different size cherry stones. It is nicely tinned to prevent rust.
No. 13607. Price, each, 65c.

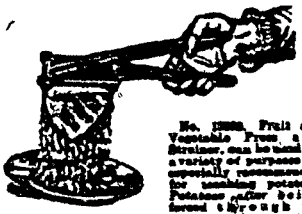
Be sure to read the introductory pages of this Catalogue. You will learn therein the Fair and Liberal Policy of our house. Such facilities for satisfactory Mail Order service will be found in no other concern.

APPLE PARERS.



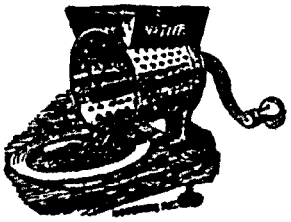
No. 13605. Apple Parer, Corer and Slicer. For paring, coring and slicing, this is the simplest and best machine in use. The knife arm works on a swivel, and always faces the apple when in use. weight, 2¼ lbs. Price, each, 45c.

FRUIT PRESSES.



No. 13606. Fruit and Vegetable Press and Strainer, can be used for a variety of purposes, is especially recommended for mashing potatoes. Potatoes either being forced through the strainer have a delicious creamy taste that no other method of mashing will impart. Weight, 1 lb. 6 oz. Each, 35c.

REVOLVING GRATERS.



No. 13602. Revolving Grater for grating horseradish, cocoanut, pumpkins, squash, lemons, crackers, cheese, etc. The cylinder is three inches in diameter and three inches long. No family should be without one. Weight, 1 lb. 10 oz. Each, 40c.
No. 13603. Revolving Grater, larger than No. 13602, has a cylinder 6 inches in diameter, 8 inches in length. Weight, 7 lbs. 7 oz. Each, $1.35.

REVOLVING SLICER.

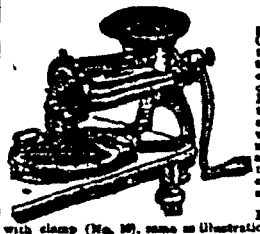
No. 13604. Revolving Slicer, for slicing apples, Saratoga potatoes, pumpkins, cucumbers and other vegetables. Weight, 1 lb. 13 oz. Each, 40c.

MINCING KNIVES.

No. 13607. Double Mincing Knife. Polished steel blades, rosewood handle. Weight, 8 oz. Price, each, 5c.
No. 13608. Mincing Knife. Cast steel blade, ground sharp, blade nickel plated to prevent rusting, retinned shanks, solid cherry handle. Weight, 13 oz. Each, 10c.

MEAT CHOPPERS.

No. 13612. Triumph Meat Cutter. Cuts meats and vegetables equally well. Simple in construction, nicely tinned to prevent rust. Cutters are self sharpening. Price, each, $1.45.



The Enterprise Meat Cutters cuts the meat on the same principle as a pair of shears. By means of the stuffing attachment, which we furnish at a small additional cost, they make excellent sausage stuffers.
No. 13616. Family size, with clamp (No. 10) same as illustration, chops one pound per minute. Price, each, $2.25
No. 13417. Stuffing attachment for No. 13416 chopper. Price, each, 35c.
No. 13417½. Extra knife for No. 13416. Each, 25c.
No. 13418. Family size, with legs to screw on bench or table; otherwise like illustration and of same capacity. Price, each, $2.
No. 13419. Stuffing attachment for No. 13418 chopper. Price, each, 35c.
No. 13420. Extra knives for No 13419 chopper. Price, each, 25c.
No. 13421. Hotel size, with legs to fasten to table or bench. Chops two pounds per minute, weight, 12 lbs. Price, each, $3.50
No. 13422. Stuffer Attachment for No. 13421 chopper. Price, each, 45c.
No. 13423. Extra knives for No. 13421 chopper. Price, each, 40c.

SAUSAGE STUFFER.

No. 13429. Lever Sausage Stuffer. Iron japanned. No. 0 for butchers' use; No. 1 for family use. No. 0, price, each, $3. No. 1, price, each, $2.

SAUSAGE STUFFER, FRUIT AND LARD PRESS COMBINED.

The Enterprise Combined Sausage Stuffer, Fruit and Lard Press; unexcelled for butchers' and farmers' use for stuffing sausages, and will be found useful for many purposes in every family. Directions will be found in catalogue that accompanies with each press.
No. 13430. Two-quart size, japanned, rack movement, weight, 25 pounds. Price, each, $2.60.
No. 13431. Four-quart size, japanned screw movement; weight, 30 pounds. Price, each, $3.50.
No. 13432. 8-quart size, japanned screw movement; weight, 44 lbs. Price, each, $4.35.

FRUIT, WINE AND JELLY PRESS COMBINED.

No. 13433. Combination Fruit, Wine and Jelly Press. Can be used for many purposes, such as making wines, jellies and fruit butter from fruits, the entire substance being extracted in one operation. Weight, 12¼ lbs. Price, each, $2.35.

MEAT HOOKS.

No. 13440. Wrought iron tinned Meat Hooks, to drive.

Nos.	1	2	3	4	5	6
Size of iron.	¼	¼	⅜	⅜	⅝	⅝
Price, per doz.,	$0.10	.11	.12	.21	.25	.35

No. 13441. Wrought iron tinned Meat Hooks, to screw in.

Nos.	1	2	3	4	5	6
Size of iron.	¼	¼	⅜	⅜	⅝	⅝
Price, per doz.,	$0.10	.12	.13	.22	.30	.35

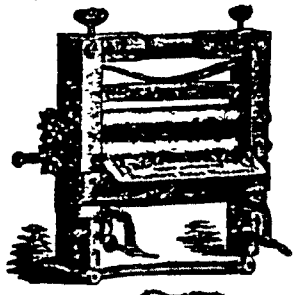
ILL 31 Sears, Roebuck and Co., Catalogue, 1886, Russell

WRINGERS.

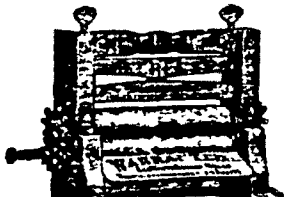
Our Wringers are manufactured by a firm who have been in this business for thirty years. The workmanship is of the highest order. All parts are closely machined, with no rough, ragged or chipped edges. Even the under parts and inside of posts are finished smoothly. The rubber rolls are the vital part of the machine. The vulcanized rolls in our Wringer are made of solid white rubber and they are vulcanized inseparably to the shaft. We guarantee that should any warranted rolls turn on the shaft, become loose, bulge or give out because of defects within a year from time of being put into service, we will replace them free of charge.

Wringers weigh about 10 lbs. each.

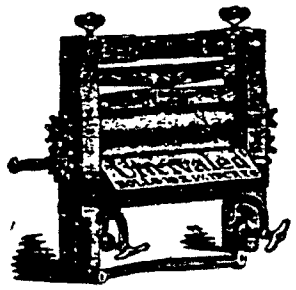
No. 13286. The Cyclone iron frame Wringer, with steel springs, galvanized malleable iron apron. Rolls, 10x1¾ inches. This wringer will give satisfaction for the price, and we have never seen its equal sold at anything like this price. Only $1.80.



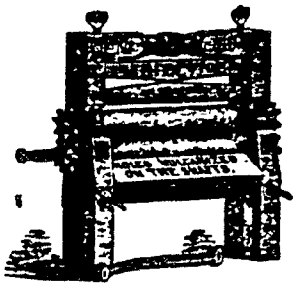
No. 13287. The Cleveland Ball Bearing Wringer. The greatest improvement yet applied to clothes wringers. Turns with half the strength required for others. This ball bearing must not be confounded with the roller bearing introduced some years ago. The arrangement of this bearing is always automatically the same as applied to bicycles. The cones and bearings are made of steel, hardened and tempered, and the balls of hardened steel, same as are used in bicycles. Has wood frame, steel adjusting spring, 2 adjusting screws; rolls, 10x1¾ inches; warranted. Price, each, $2.35.



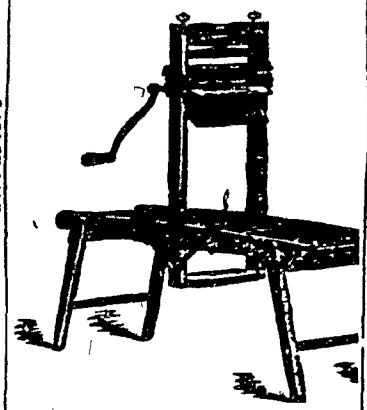
No. 13288. The Peerless Wringer is the most popular wringer with high-class trade, and we can not recommend it too highly. The distinguishing feature of the Peerless is the clamping device which has recently been imitated by other makers, but comparison shows the imitation is only in general appearance and not in fine workmanship and finish which characterizes the Peerless. Has guide roller, double gears and rolls 10x1¾ inches; warranted. Price, each, $2.



No. 13289. The Unrivaled Wringer. Desiring to give our customers a large variety of wringers to select from we have added this first-class Wringer to our line. The material for the frame is carefully selected from first-class lumber. Has guide roller, 2 top screws and swinging iron clamps. Rolls, 10x1¾ inches; warranted. Price, each, $2.



No. 13272. The Perfection Wringer. While this Wringer will give excellent satisfaction for the price, and is as good as the first quality of some makers, the frame is not made from the same selected material as our other wood frame wringers. The frame is good and strong and the rolls of good material. Size, 10x1¾ inches, not warranted. Price, each, $1.50.

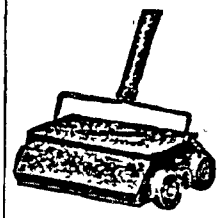


No. 13273. The combination of Wringer and Bench combined is popular, and the Peerless is the best in the market. The bench is constructed on the principle of the truss bridge, and is exceedingly strong though light. When folded for shipment or putting away when not in use it occupies but little space. With the ordinary tub wringer it is about as much work to hold the tub as to turn the wringer. The Bench Wringer does away with all this trouble. Rolls, 10x1¾ inches; warranted. Price, each, $3.50.

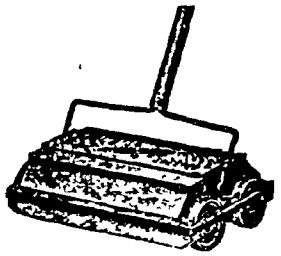
When you build your house, barn, or other buildings, buy your hardware and material of us, and save enough to pay your carpenter bill.

CARPET SWEEPERS.

Something New. Cheap as a Broom.



No. 13279. Bissell's Baby Sweeper is a toy that every parent will want. It is useful, durable, beautiful and cheap. The maker's name is a guarantee that it is first class in material and workmanship. Is about quarter the size of a regular sweeper, has broom action, strongly made and nicely finished. Price, each, 75c.



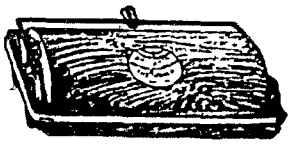
No. 13280. Bissell's Child Sweeper is a toy or a high small sweeper for practical use. Is about ½ size of a regular sweeper, has broom action. Price each, 75c.

Our Carpet Sweepers are not mere crumb brushes. They do away entirely with the need of a broom on the carpet. They go into the nap and raise the dirt from where the broom never reaches. They will follow up a broom and remove more dirt than the broom did.

They sweep without dust or noise or wear on the carpet—almost without labor. They sweep any carpet.

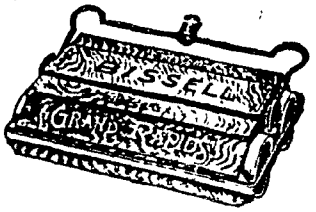
The largest sweeper makers in the world make them. Sixty-five patents cover their devices.

And the price is low. Quantity makes it low.



No. 13282. The Sears, Roebuck & Co.'s Sweeper is unquestionably the best low priced sweeper ever put on the market. It is a good sweeper and a good looker. It has the broom action—everlasting pure bristle brush—and spring dumping device.

The case is made with selected 3-ply veneer top, gracefully carved and attractively finished. Price, each, $1.85.



No. 13284. Bissell's "Grand Rapids." The best known and most widely sold carpet sweeper in the world.

Contains the famous Bissell broom action and every other patented feature necessary in a first class sweeper.

Made from the best selected cabinet woods in an assortment of attractive finishes.

Has rubber furniture protector encircling the case, Bissell's patented reversible bail-spring, wheels concave the case, our everlasting pure bristle brush, both pass over at once by an easy pressure of the fingers. Weight, 6 lbs. Price, each, $2.45.

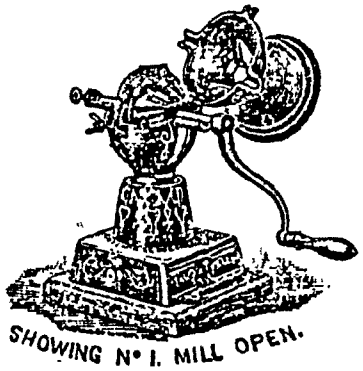
If you don't find just what you want quoted, write for prices. We can supply you with anything in the Hardware line, and always at lowest factory prices.

American Coffee, Spice and Drug Mill,

No. 1.

With Iron Hopper, holding 4 ounces Coffee.

SHOWING N° 1 MILL CLOSED.



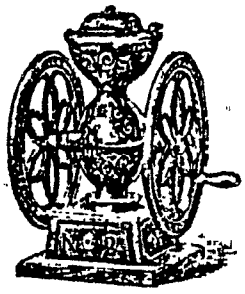
SHOWING N° 1. MILL OPEN.

The above cuts represent our smallest Counter Mill, both closed and open, and illustrate the simple principle of operating our Mills, and the easy mode of opening them. It stands 12½ inches high, weighs 8 pounds, grinds 6 ounces of Coffee per minute, and is regulated either coarse or fine by a thumb screw on the side. It is adapted to family use and prescription counters.

PRICE, ... $2.00.

American Coffee, Spice and Drug Mill,

No. 2.

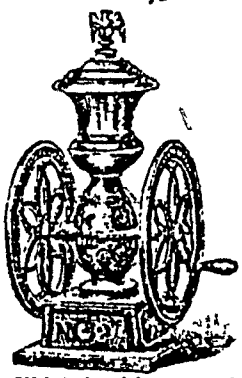


Iron Hopper; stands 10½ inches high, and weighs 10 pounds.

PRICE, $3.00.

Our Nos. 2 and 2½ Mills are alike, excepting as to dome, and will grind 6 ounces of coffee per minute. They are very desirable for prescription counters and family use.

No. 2½.



Nickel-plated dome; stands 15 inches high, and weighs 10 pounds.

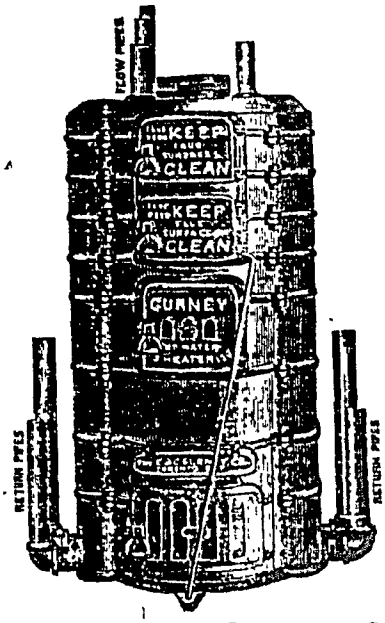
PRICE, $4.00.

Extra Grinders, for Nos. 1, 2, 2½, 3, 4, ...	per pair,	$	.75
" " " 5, 6, 7, 8, ...	"		1.00
" " " 9 to 18, ...	"		1.60
" " " 19 and 20, ...	"		3.00

Grinders Warranted equal to Steel.

ILL 33 Enterprise coffee grinders from the Enterprise Mfg. Co. catalogue, 1883, Russell.

Hot Water Heating Apparatus



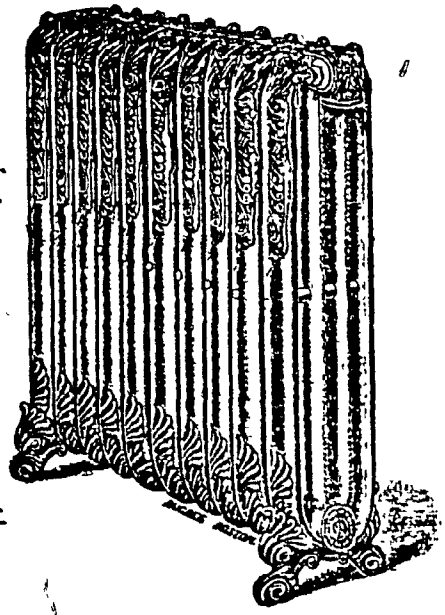
THE BEST IS

THE CHEAPEST

This Time

THE CHEAPEST

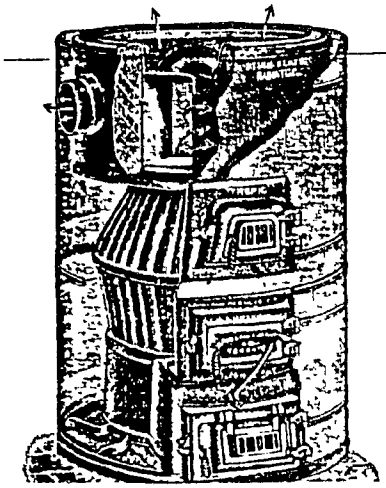
IS THE BEST.



THE E. & C. GURNEY CO. - TORONTO.

- THE NEW TROPIC HOT AIR FURNACE -

Latest and Best Steel Plate Furnace in the market.



LITTLE GIANT FURNACES,

BOYNTON FURNACES,

PENINSULAR FURNACES

The Largest and Best Assortment of Cast and Steel Furnaces ever made.

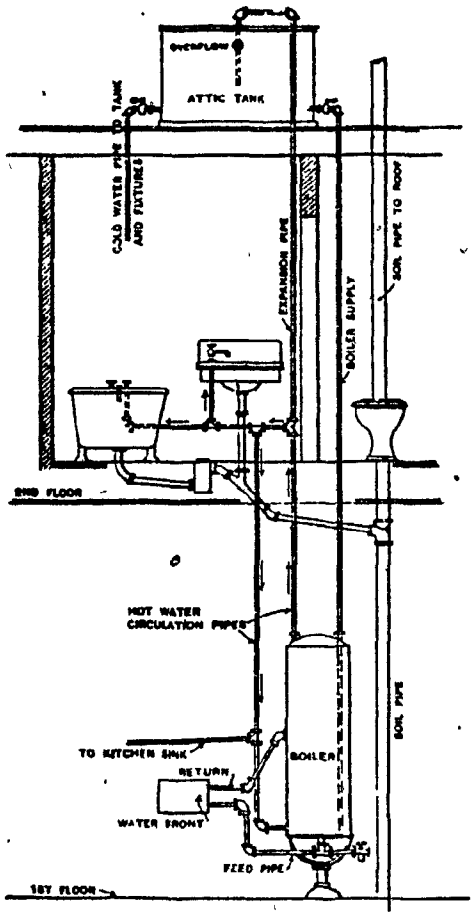
Patent Peerless Registers.

UNION STEAM AND HOT WATER RADIATORS.

Laidlaw Mfg. Co.,

HAMILTON

ILL 34 Hot water heating apparatus and hot air furnace, The Canadian Architect and Builder July 1889.



Domestic Hot Water Circulation System.

ILL 35 Domestic Hot Water System, 1907, Canadian Architect and Builder, April 1907.

A. E. Carpenter, Sec.-Treas. J. H. New, Vice-Pres. Henry New, Pres.

THE HAMILTON AND TORONTO SEWER PIPE CO.

WATER PIPE **CULVERT PIPE**

FLUE LININGS **CHIMNEY TOPS**

SMOKE PREVENTIVES **INVERTS, &c.**

Write Head Office for Discounts:

HAMILTON, - ONTARIO.

A GREAT LOSS!

If you have any pipes or boilers uncovered, you are losing on same at the rate of 80 cents every year on each square foot of surface exposed. By having them covered with our .....

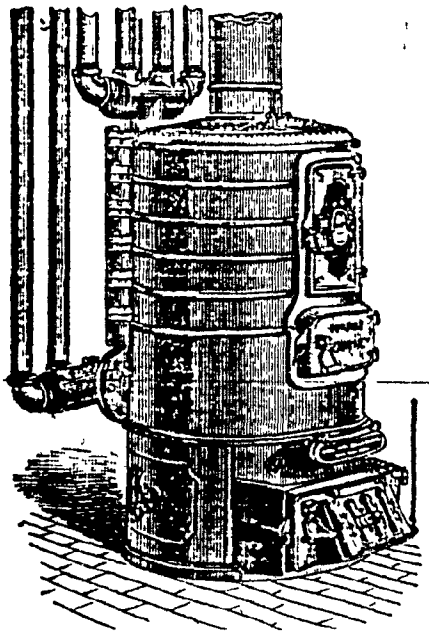
Mineral Wool Sectional Covering

you will save 85% of this loss. The saving thus effected in fuel will in one year more than pay the cost of covering, which we guarantee to last as long as the pipes. Our covering is the best fuel saver on the market.

Montreal Agent
GEO. A. COWAN,
Room 23 204 St. James Street.

CANADIAN MINERAL WOOL CO., Ltd.,
122 Bay Street, Toronto.

OXFORD HOT WATER HEATER



LATEST AND BEST

FOR

ECONOMY

DURABILITY

and EFFICIENCY

WE CHALLENGE THE WORLD.

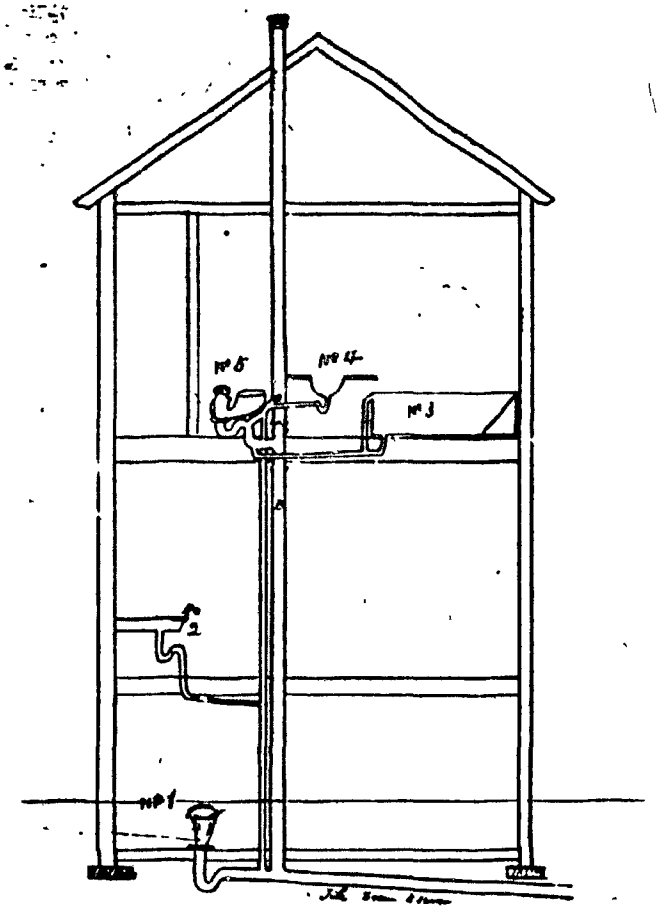
Examine the **Oxford** before deciding or placing your order for any other, as it combines all the best features of modern construction. Very large ash pan; the most perfect combustion chamber; quick and positive circulation. Sold by the leading fitters throughout the Dominion.

MANUFACTURED BY

THE E. & C. GURNEY CO.

Hamilton, Montreal, Winnipeg, Toronto.

ILL 36 Sewer pipes, insulation and hot water heaters, The Canadian Architect and Builder, January, 1893.



NOTE.—B, 4 in. cast iron pipe; A, 4 in. lead pipe, with slip joint made with putty; No. 1, hopper closet; 2, kitchen sink; 3, bath tub; 4, wash basin; 5, Demarest water closet. About one-half of the joints in lead and iron waste pipes were made with putty, and one joint on the 2 in. lead vent pipe was made with *brick*.

ILL 37 Plumbing diagram, The Canadian Architect and Builder, March 1889.

BATH TUBS.

SITZ BATHS.

Zinc.

	Each
No. 1. 28 in. diam., Green	$5 00

SITZ BATHS.

Zinc.

	Each
No. 2. 25 in. diam., Green	$3 75
No. 3. 23 in. diam., Green	4 25

FAMILY BATHS.

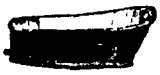
Zinc.

	Each
No. 1 28 in. diam., Green	$5 00
No. 2. 24 in. diam., Green	4 75

SPONGE BATHS.

Zinc.

	Each
No 1 28 in diam Green	$5 25



PLUNGE BATHS.

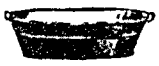
Zinc.

	Each
No 4 [illegible] in long, Green	$7 75
No 5. 70 in long, Green	9 75

CHILD'S PLUNGE BATHS.

Tin.

	Each
No 1 [illegible] in long, Green	$1 00
No 2. 38 in long, Green	2 25
No 3. 46 in long, Green	3 00



CHILD'S BATHING PANS

Tin.

	Each
No 0. 22x15x8½ in., Green	$1 00
No 1 24x16x10 in., Green	1 50

TOILET WARE—IN SEPARATE PIECES.

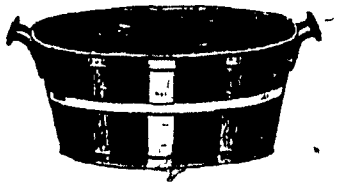
LARGE SIZE.

WATER CARRIERS.

Cast Handles.

	Doz
No. 10. Dark Green, Bronzed Band	$10 00
No. 11. Vermilion, Bronzed Band	10 00

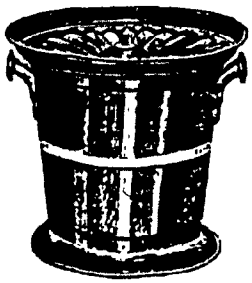
FOOT BATHS.



Cast Handles.

	Doz
No. 10. Dark Green, Bronzed Band	$10 00
No. 11 Vermilion, Bronzed Band	10.00

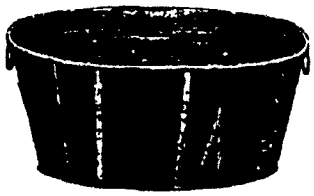
SLOP JARS.



Cast Handles.

	Doz
No. 10. Dark Green, Bronzed Band	$10 00
No. 11. Vermilion, Bronzed Band	10 00

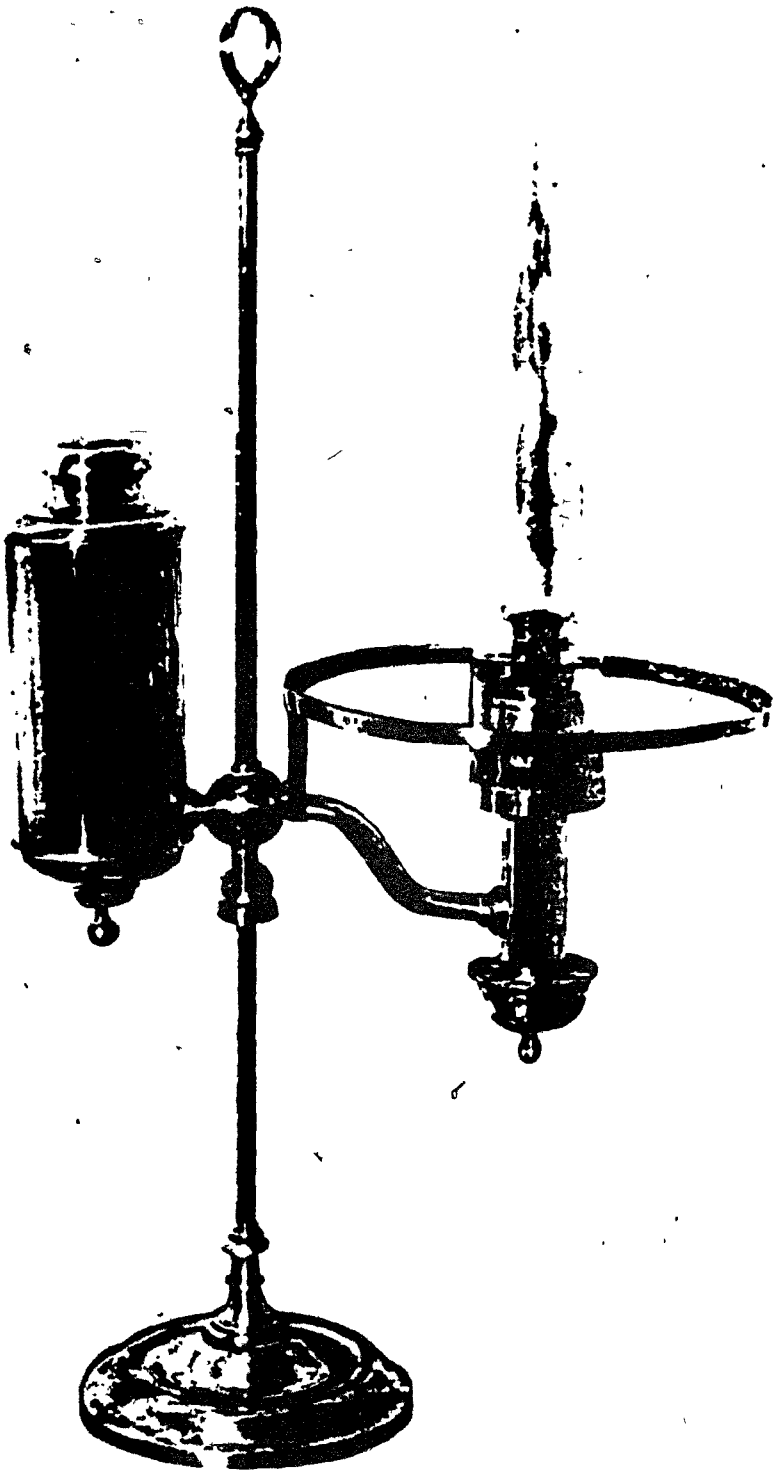
FOOT BATHS.



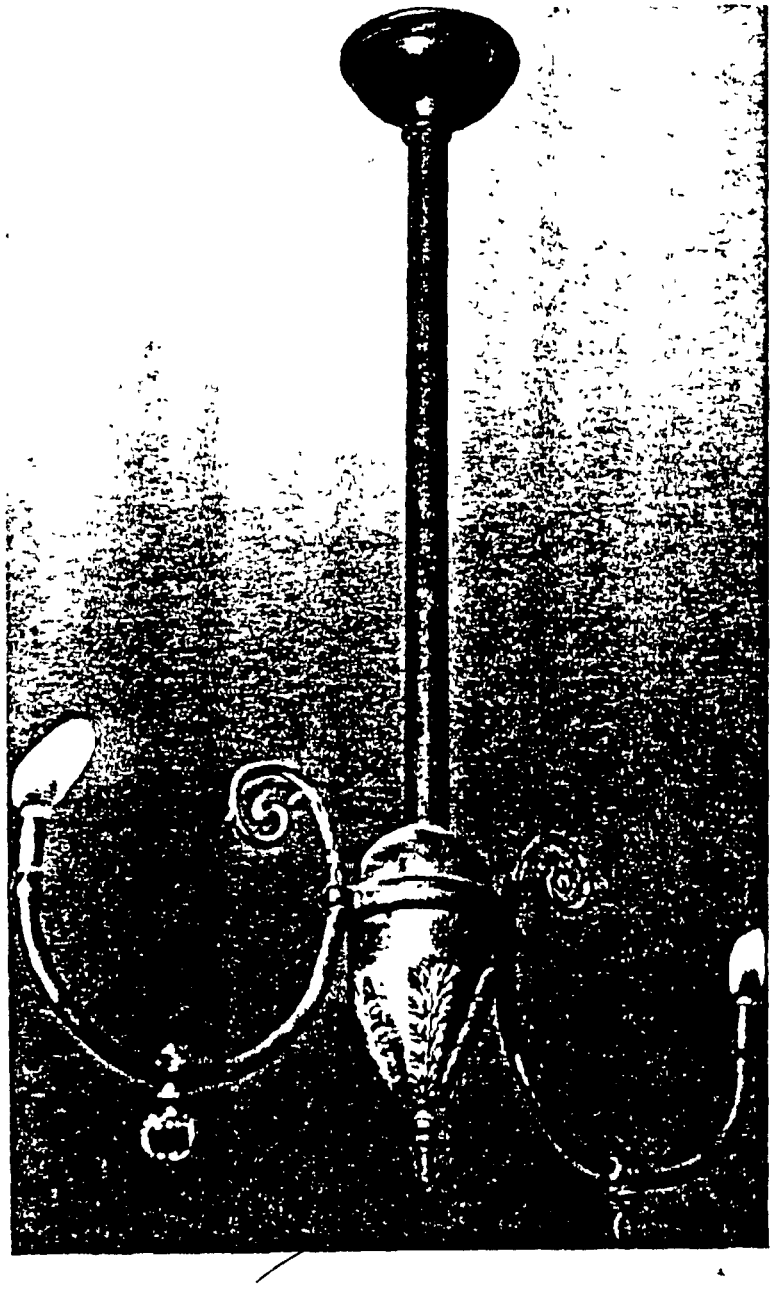
Wire Handles.

	Doz.
No 01. Dark Green, Plain	$6 00
No. 02. Vermilion Plain	6 00

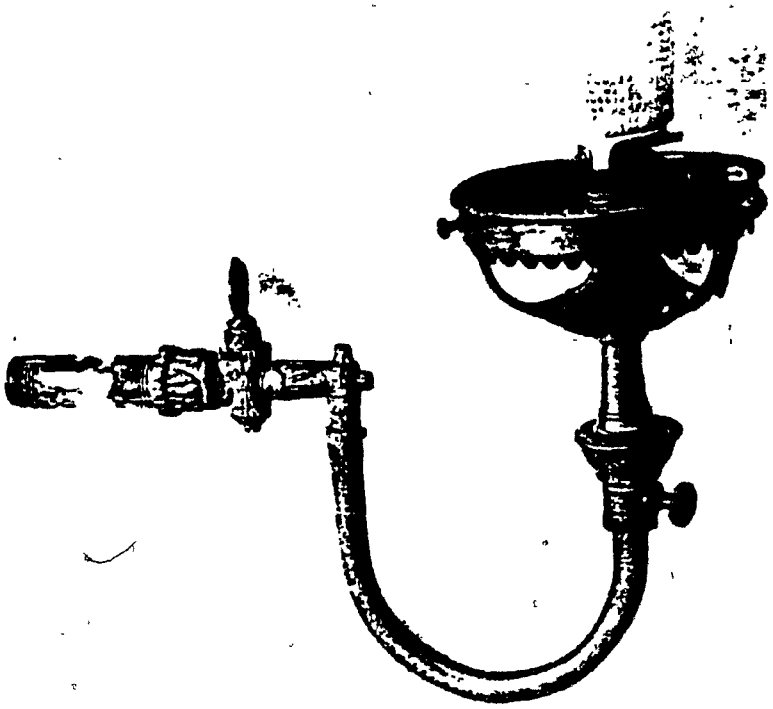
ILL 38 Bathtubs and bathing equipment, 1880's, Catalogue of Sidney Sheppard & Co., Bufalo, N.Y. Russell.



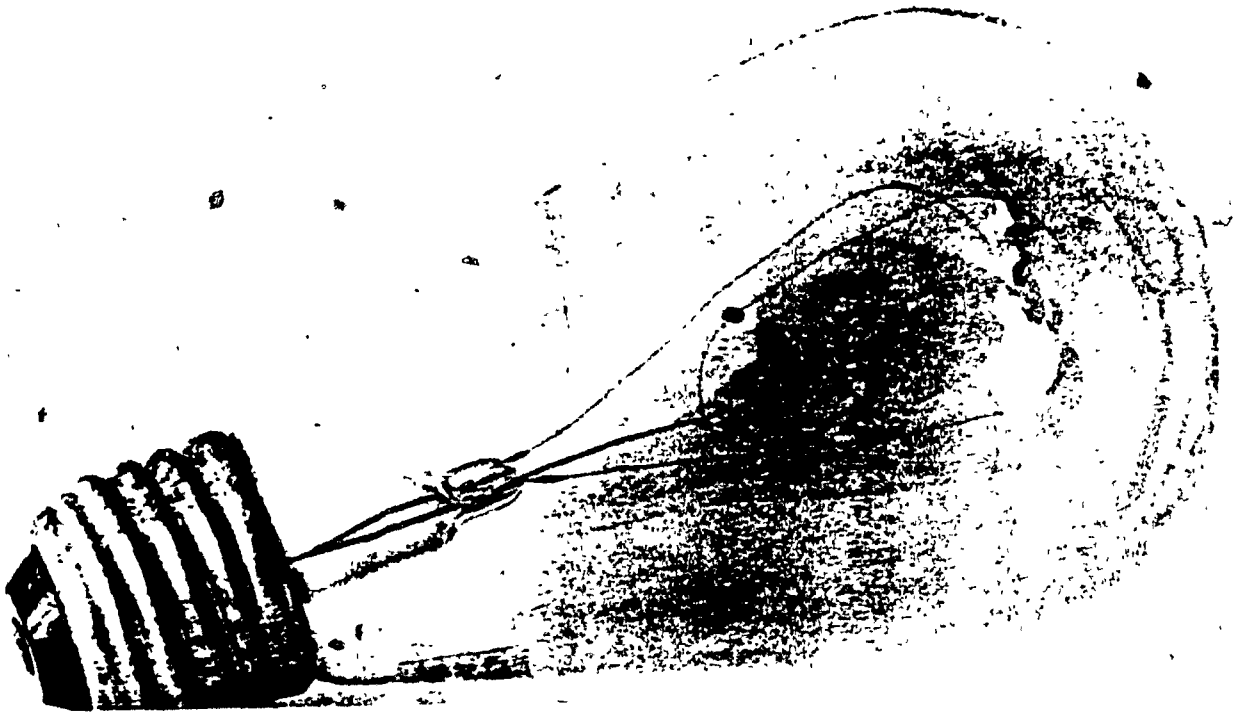
ILL 39 "Student Lamp", Kleeman patent, 1863, 1870 Russell.



ILL 40 "Fish tail" gas light, MacKenzie House, Toronto, Russell.



ILL 41 Wall-mounted gas burner with Welsbach incandescent mantle, Russell.



ILL 42 Edison Carbon - filament electric lights ca. 1900, Russell.

NOTES

1. Buehr, p. v.
2. Buehr, p. 67
3. Sears, Roebuck and Co., catalogue, 1896
4. Advertisement of 1909 in the Academy Architecture, Aslet, p. 84
5. Buehr, p. 62-63
6. Buehr, p. 64
7. Sears, Roebuck and Co., catalogue, 1896
8. Clive, Brought Up, p. 144-5, quoted by Aslet, p. 106
9. Buehr, p. 65-6
10. Buehr, p. 30
11. Buehr, p. 42
12. Buehr, p. 39

13. Buehr, p. 19

14. The Canadian Architect and Builder January 1893 p. xv.

15. The Canadian Architect and Builder July 1889, p. viii.

16. The Canadian Architect and Builder "Effectiveness of Heating Apparatus", August 1893,p. 89

17. The Canadian Architect and Builder January 1907

18. The Canadian Architect and Builder January 189, p. xvi

19. B. Kirk, "Traps and Their Ventilation" published in The Canadian Architect, March 1889, p. 34

20. B.C.J., "The Tiled Bathroom", published in The Canadian Architect and Builder, July 1907, p. 131

21. Buehr, p. 90

22. Buehr, p. 93

23. Buehr, p. 94

24. Loris S. Russell, p. 112

25. Loris S. Russell, p. 113

26. Buehr, p. 53

27. Buehr, p. 53

28. From Vers une Architecture quoted by Reyner Bauhan, Theory and Design in The First Machine Age, p. 243.

6.0 CONCLUSIONS

Until recently, most studies on the Montreal villa looked at the subject in terms of traditional architectural values, that is, the art of building beautifully, and well. These studies dealt with architects, owners and craftsmen. Little was written on how the families lived in the houses, or why they preferred to villa over other housing forms.

Perhaps part of the explanation can be found in the term "villa". The term was first used by the Romans, rediscovered by the Renaissance and turned into a sustained tradition through emulation. By the nineteenth century the figura was well established. The term "villa" was associated with a "substantial" house in a garden for a wealthy person. In the Montreal context, the form symbolized power, wealth and success; the self-made business men had villas designed and built for them on the slopes of Mount Royal to assert their power, wealth and arrival (in the nouveau-riche club).

To sustain a lifestyle in keeping with the expectations of these families, the proverbial army of servants ran the household. The architectural design problem by the middle of the century essentially became an exercise in designing two solitudes - a first principle of "good design" was to separate the worlds of the family and the servants, or, expressed in contemporary language, "to separate the two classes". The relationship of rooms became formalized to the extent that architects were only designing facades, whether in a classical or English manner, because the plan was set by convention. The relationship of the public rooms, servants apartments and evening rooms were formalized by a use pattern and expectation until the "servant problem" brought about change.

After the First World War fewer immigrants sought domestic employment because alternative and better remunerated opportunities were created in industry and in the West. The "god-given" role of the mistress, that of "overseer", changed, and she had to become more involved in the daily running of the household.

The "servant problem" also made the mass production of "domestic aids" more lucrative. The early nineteenth century villa was a hand-operated factory and processing plant. Domestic technology had remained unchanged since the Middle Ages. A "domestic revolution" was brought about in the house as mechanical gadgets were developed to replace some of the back breaking labour. By the turn of the century, with fewer servants, and mass produced aids, housework was made easier and the living environment more convenient and comfortable. The use of

central heating, electricity and later, the electric motor, transformed the eighteenth century household into the "machine to live in" of the twentieth century.

These benefits, which were only available to the wealthy few during the nineteenth century, slowly found their way into the ordinary households after the Great War as wealth was being redistributed more equitably. The dream of the powerful, a villa in a garden, also became a popular ideal, exemplified by the residential suburb. The concept of "villeggiatura", originally an arcadian state for the very few, became within reach of the masses in the twentieth century.

And this dream, which has been pursued vigorously, starting with the writings of Pliny, has equated the term "villa", consistently with more than simply a physical form. Rather, the term also suggests a way of life - metaphorically, the villa is a den which the urban animal can escape to from the pressures and tumult of the city, a refuge from the "rat race". During the Renaissance, the merchant kings spent summers in their villas at the foot of the Appennines and other famous locations. The Victorian capitalists acquired villas against Mount Royal for similar reasons, however, they could, because of improved transportation technologies, commute to and from the city where they worked, on a daily basis. This pattern to separate the work place and the home multiplied exponentially in an egalitarian society coupled with automobiles, brought about our familiar urban sprawl and anonymous suburbs, dotted with row upon row of bay windowed mini villas, an urban heritage which may become the nightmare of future generations.

7.0 BIBLIOGRAPHY

Architecture Québec, October 1983

Les Villas de Pline
Le Group Culturel Prefontaine, Montreal, 1983.

Architectural Record

Vol. 2 - 8 1892-1899
McGraw Hill, New York.

Aslet, Clive

The Last Country Houses,

Yale University Press, New Haven & London, 1982.

Bicknell, A.J. & Comstock, William T.

Victorian Architecture,

Watkins Glen, New York, 1976.

Bonta, Edwin

The Small-House Primer,

Little, Brown and Company, Boston, 1925.

Board of Trade

The Board of Trade Illustrated Edition of Montreal,

The Trade Review Publishing Company, Montreal, 1907.

Banham, Reyner

Theory and Design in the First Machine Age,

M.I.T. Press, Cambridge, Massachusetts, 1982.

Buehr, Walter

Home Sweet Home in the Nineteenth Century,

Thomas T. Crowell Company, New York, 1965.

Cameron, Christina (ed.)

Mansions of the Golden Square Mile,

Compiled by Feindel, Susan; Kollar, Kathryn; Lucas, Georgina; Ross, Lucille; Thomas, Stephanie; and Wagg, Susan

Graduate Program in Canadian Art History,

Faculty of Fine Arts, Concordia University, Montreal, 1976.

Camesasca, Ettore (ed.)

History of the House,

G.P. Putnam's Sons, New York, 1971.

Canadian Architect and Builder

Vol. 2, 3-12 1889

Vol. 6-17 1893-1903

C.H. Mortimer Publishing Company, Toronto.

Casavant, G./Cofsky, A.

Répertoire D'Architecture Traditionnelle, Unversité McGill

McGill University Archives, Nov. 1978.

Charney, Melvin

Of Temples and Sheds,

published in Architecture/Québec, October, 1983.

Coffin, David, R.

The Villa in the Life of Renaissance Rome

Princeton University Press, Princeton, New Jersey, 1979.

Cook, Olive

The English Country House,

Thames and Hudson, London, 1984.

———

The English House Through Seven Centuries,

Penguin Books, 1984.

Construction

Volume 10, No. 5, May 1917

H. Cagnier, Toronto, 1917.

du Prey de la Ruffinière, Pierre

Four Cardinal Points of a Ville,

Published in Architecture/Québec, October 1983.

"The Villas of Pliny: Reflections on the Exhibition",

The Fifth Column,

Vol. 4, No. 2, winter 1984.

Delderfield, R.F.

The Dreaming Suburb,

Book I of the Avenue, Coronet Books,

London 1975, Seventh impression.

Dixon, Roger and Muthesius, Stefan

Victorian Architecture,

Oxford University Press, Thames and Hudson, London, 1978.

Downing, A.J.

The Architecture of Country Houses,

Da Capo Press, New York, 1968 (reprint).

Downing, A.J.

Cottage Residences; or a Series of Designs for Rural Cottages and Cottage Villas and their Gardens and Grounds, adapted to North America,

Part I, Secton Edition, Wiley and Putnam, New York and London, 1844.

Fletcher, B.

A History of Architecture on the Comparative Method,
Athlone Press, University of London, seventeenth edition, 1963.

Franklin, Jill

The Gentleman's Country House and Its Plan 1835-1914,
Toutledge & Kegan Paul, London, Boston and Henley, 1981.

Gans, H.

The Levittowners,
New York, Random House, 1967.

Gersovitz, Julia

The Square Mile; Montreal 1860-1914
M. Arch. Thesis, 1980.

Girouard, Mark

Life in the English Country House
Penguin Books, Harmondsworth, Middlesex, England, 1980.

Gowans, Alan

Looking at Architecture in Canada,
Oxford University Press, Toronto, 1958.

Building Canada An Architectural History of Canadian Life
Oxford University Press, (Canadian Branch) Toronto, 1966.

Looking at Architecture in Canada
Oxford Univ. Press, Toronto, 1958.

Graham, Gerald S.

A Concise History of the British Empire,
Thames and Hudson, London, 1970.

Grierson, Edward

The Death of the Imperial Dream, The British Commonwealth & Empire 1775-1969
Doubleday & Co. Inc., Garden City, N.Y. 1972.

Hale, Katherine

Historic Houses of Canada,
The Ryerson Press, Toronto, 1952.

Hamilton, Lord Ernest

Old Days and New,
London, 1924.

James, Ellen

Les Villas de Pline Et les Eléments Classiques Dans L'Architecture A Montreal
published in Architecture/Québec, October 1983.

Johnson, E.D.H. (ed.)

The World of the Victorians An Anthology of Poetry and Prose

Charles Scribner's Sons, New York, 1964.

Kerr, Robert, Architect

The Gentlemen's House or, How to Plan English Residences From the Parsonage to the Palace,

John Murray, Albemarle Street, London, 1871, Third edition.

Leacock, Stephen

Arcadian Adventures With the Idle Rich,

The Canadian Publishers, McClelland and Stewart Ltd.,

25 Hollinger Road, Toronto, 1969.

Lofts, Norah

Domestic Life in England,

Weidenfeld and Nicolson, London, 1976.

MacLennan, Hugh

Two Solitudes

MacMillan, Toronto, 1965.

Marsan, Jean-Claude

Montreal in Evolution,

McGill - Queen's University Press, 1981.

Morton, W.L. (ed.)

The Shield of Achilles,

McClelland and Stewart Ltd., Toronto/Montreal, 1968.

Mount Stephen Club

The Story of the Mount Stephen Club, Mount Stephen Club,

Montreal, 1967.

Mumford, Lewis

Roots of Contemporary American Architecture,

Reinhold Publishing Corporation, New York, 1956.

Percival, John

The Roman Villa: An Historical Introduction,

University of California Press,

Berkeley and Los Angeles, California, 1976.

Post, Emily (Mrs. Price Post)

The Personality of a House,

Funk & Wagnalls Company New York, 1930.

Robertson, D.S.

Greek and Roman Architecture,

Second Edition, Cambridge University Press, Great Britain 1971.

Ross, J.

Lives of the Early Medici as Told in Their Correspondence,

Boston, 1911.

Rowe, Colin

The Mathematics of the Ideal Villa and Other Essays,
The MIT Press, U.S.A., Third Printing 1978.

Russell, Loris, S.

Handy Things to Have Around the House Oldtime Domestic Appliances of Canada and the United States,
McGraw-Hill Ryerson Ltd., Canada, 1979.

Scott-Brown, Denise,

Suburban Space, Scale and Symbols
VIA III, 1977.

Sears, Roebuck & Company

Catalogue 1896.

Service, Alastair

Edwardian Architecture and its Origins,
The Architectural Press Ltd., 1975, Wallop, Hampshire.

Short, E.

The Development of the City of Westmount up to 1920,
McGill University, unpublished paper.

Stern, R.A.M., ed.

The Anglo-American Suburb
A.D. Profile, London, Architectural Design, 1981.

Tannenbaum, Edward R.

1900, The Generation Before the Great War,

Anchor Press/Doubleday, Garden City, N.Y. 1976.

Trevelyan, G.M.

A Shortened History of England,

Penguin Books, Baltimore, Maryland. 1963 edition.

Vaux, Calvert

Villas and Cottages,

Da Capo Press Series in Architecture and Decorative Art, Vol. 12,

Da Capo Press, New York, 1968.

Ward-Perkins, John, B.

Roman Architecture,

Harry N. Abrams Inc. New York, 1974.

Wells, H.G.

Ann Veronica

New York, 1909.

W.H. Ltd.

40 ans de transformation

Rapport de recherche exploratoire soumis à la Société Canadienne d'Hypothèques et de logement,

Denys Marchand, Alan Knight

Ecole d'architecture, Université de Montrèal, Mars 1983.

Wilson, P. Roy

The Beautiful Old Houses of Quebec,

University of Toronto Press, reprinted 1976.