When undertaking a major project such as "Secondary Manufacturing in Alberta, Pre-1915," it is important, both as a curator of the related department and as the project co-ordinator, always to keep in mind the ways in which such work can be made useful to the mandate of the museum itself as well as to museum staff both within the museum and without. For the Social History Program's technician, this inventory is proving to be very useful in more accurately dating artifacts in the collection if they are known to have been manufactured by Alberta companies. The inventory also provides company name changes and address changes, facilitating the dating of various Alberta-made objects. Researchers from other institutions as well as historians without institutional affiliation are coming to the museum to use the inventory. For example, students from the Home Economics Department of the University of Alberta used the inventory for information on manufacturers of bathing costumes for an exhibition at the Universiade '83 Games. Researchers from the Reynolds-Alberta Museum have also consulted our files for information on early carriagemakers for studies on the history of transportation, or on agricultural equipment for treatises on early agriculture.

For the curator, there are several benefits of such a project. First, in planning exhibitions or simply in conducting material history research on topics ranging from textile manufacturing to early domestic appliances, the inventory is a logical place to begin to track down potential sources of information, documents, and artifacts. It has also proven to be of great assistance in answering public inquiries as well as in authenticating the historical validity of potential acquisitions to our collection. It can also be used to trace descendants of the original employees of the various companies to gain further insights. It can be successfully used to link the artifact to its manufacturer, and in conjunction with oral histories, to the history of its use and consumption as well.

Research is now under way on the secondary manufacturing inventory in the 1915-20 period. Researchers interested in consulting the inventory are most welcome, by appointment. For further information, please contact Sandra Morton at the Provincial Museum of Alberta, 12845-102 Ave., Edmonton, Alberta, T5N 0M6 (403)427-1743.

NOTES
1. Leonard Wilson, "Some Factors Relating to the Attraction of Manufacturing Industries to the Province of Alberta," M.A. thesis (University of Alberta, 1971), pp. 47-49. Basic classifications are: food and beverage, textiles, clothing, wood industries, furniture and fixtures, paper, printing and publishing, rubber and plastics, primary metal industries, metal fabricating, machinery, electrical products, non-metallic products, petroleum and coal, chemical and chemical products, and miscellaneous (including jewellery, scientific instruments, clocks and watches, dental laboratories, sporting goods, toys, signs, brooms and mops, flooring, stencils, and furs).
3. Thirteen categories from the Canadian Industrial Index were used: food and beverage, textiles and clothing, wood industries, furniture and signs, paper and boxes, printing and publishing, metal industries, machinery manufacturing, non-metallic mineral products, petroleum and coal, chemicals and chemical products, electrical and gas-fired products, and miscellaneous. The latter included photographers, jewellers, saddlers, and so on. Each was coded with a different colour in the upper left-hand corner of the file card. Five locations were also colour-coded with a mark in the upper right-hand corner of the cards.

Sandra Morton

Waterloo Region Gardens in the Germanic Tradition

Waterloo Region in southern Ontario contains a variety of ethnic groups which may be designated "Germanic." Descendants of nineteenth-century settlers whose places of ancestry included Switzerland, Alsace, and parts of what are now West and East Germany, whose religious denominations included Mennonite, Amish, Lutheran, and Roman Catholic, form parts of this category.

The making of gardens for personal and communal use, and for ornamental and symbolic reasons, is deeply fixed in Germanic culture, and commentators from the eighteenth and nineteenth centuries have remarked upon the "German settler's garden" as a characteristic and distinctive feature of their North American settlements. The gardens of people of Germanic background, in both rural and urban settings, are a notable feature of Waterloo Region today.

The central paradigm of the Germanic garden is the Paradiesgärtnlein, an enclosed space or hortus conclusus. Perhaps the fundamental pattern for this garden is formed by two crossing paths which separate four hand-worked raised or bordered beds, the "Four-Square Garden." This composition symbolizes Eden watered by the four rivers of Paradise, and the Islamic gardens which introduced this form to Europe were divided by four actual watercourses pouring from a central fountain (fig. 1). This extremely old symbolic complex has remained constant in Germanic...
thought. The spiritual dimension of the garden was reiterated in seventeenth- and eighteenth-century German pietistic literature, and hymns and prayers from this source still form part of Waterloo Region religious life.

Historically, continental German garden art can be characterized by three traits. First is the strong tendency to use rectangular shapes, to create firmly defined walled spaces, precisely subdivided. This is the perpetuation of the mediaeval idea of a garden as an enclosed space where everything is in order. Second is an interest in the scientific aspects of gardening, a tendency to develop new plants, to concentrate on medicinal and exotic forms, to publish scientific treatises on these subjects, and to illustrate them not from fancy but from life. Third, and perhaps complementary, is the vision of the garden as a religious, symbolic, and moral expression.

By the fourteenth century the making of fine gardens in Germany had expanded from the nobility to the burgess class, and their style had begun to be influenced by Italian models. The fifteenth and sixteenth centuries saw the publication of the great German herbals. Gardening in southern Germany was brought to a tragic halt in 1618 with the onset of the Thirty Years' War. During the recovery from this era of devastation, other influences entered: in the late seventeenth century, Baroque gardens were made after the French model, and in the eighteenth century, landscape gardens were made in the English style.

But settlers coming to North America from southwestern Germany in the eighteenth century brought what were essentially mediaeval traditions and adapted these to new conditions. While their barn forms and land-use patterns underwent modification and expansion, the garden proved to be a more conservative element, remaining close to the house, retaining its geometric form, its fence and four-square structure, and containing vegetables, flowers, berries, and fruit trees in a single or closely related space.

Mennonite settlers moving to Upper Canada from Pennsylvania in the early nineteenth century brought these garden practices with them. Amish settlers from Alsace followed their example. Later Germanic settlers of Lutheran and Roman Catholic background brought elements of the same complex, though in more varied form. The introduction of rototilling in the early twentieth century brought a gradual end to hand-worked four-square gardens but two very late survivals of this form have been studied.

The garden of Mrs. Clayton Toman had been converted to longitudinal form but in 1921 she recreated the four-square shape and worked it by hand for the next fifty-seven years. Bordered on the south by a grape arbour and on the north by rhubarb and fruit trees, it contained a variety of bulbs and perennials. In 1981 it was reconverted to rototilling by her son. Although this garden has been called "the last four-square garden in Waterloo County," there is a second candidate for the status, the garden of Esther, Mary, Lydia, and Sarah Herrfort, near Wellesley, Ontario, which continued to be hand-worked without interruption until circa 1970 (fig. 2). It retains its square shape and the entrance to one of its paths demarcated by an opening in a peony plantation along the southern border. At this entrance is an "Adam and Eve plant" (as identified by the Herrfort sisters), in this case Aconitum (Monkshood).

Twentieth-century rural gardens are inclined to be large, located next to the farmhouse and close to the road. Typical is Mrs. Minerva Martin's garden, which she took...
over in 1939 and worked until 1977. Its large rectangular area was planted with rows of fruit trees and a rich assembly of flowers, vegetables, and berry bushes which were much admired in the neighbourhood. When the house was sold in 1979, this garden was bulldozed to create a larger lane but Mrs. Martin planted a new longitudinal garden across the back yard of her new home in nearby Elmira. A similar rural garden still under cultivation near Waterloo is the work of Amsey and Mabel Martin. The earlier garden and orchard areas were combined to produce a very large rectangular garden divided by one path, containing flowers, vegetables, and vines in rotation.

The local villages contain numerous gardens, some of which are also very extensive. In Conestogo, behind her home and small commercial bakery, Mrs. Alvin Sittler maintains a narrow longitudinal garden nearly half a block long. In addition to the usual rows of vegetables and arbours, it contains one square hand-worked bed devoted exclusively to flowers. St. Jacobs contains two large gardens beside its main road, both produced by the sons of a retired market gardener. Aden and Alice Martin's garden is well known for its vivid flowers and is fertilized organically. On the original family property, Henry and Mary Martin maintain a large house-related garden of flowers and vegetables as well as a “field garden” for commercial produce.

The City of Waterloo has numerous gardens planted in side or back yards. One of the most notable was planted by Alvin and Lydia Duench in 1940 (fig. 3). It occupies the entire rear portion of their corner lot and contains flowers, vegetables, berries, herbs, and turf and earthen paths. Mrs. Duench prepares herbal remedies, teas, and seasoning with her own produce.

In this and the above-mentioned gardens, most of the ornament is supplied by the display of flowers, typically planted close to the house for family viewing. In addition there are bird-houses (to attract birds) and whirligigs (to repel them). Sometimes the ornamental additions become dominant, and a form of personal expression develops into
the creation of full-scale "yard art" environments. In the 1970s Daniel Snyder began to decorate his Waterloo front yard with a bird-house, bird-bath, and windmill. He went on to add a large population of wooden animals of his own manufacture, including rabbits, foxes, horses, chickens, and birds.

In contrast to this public display is the environment created in Waterloo by Karl Hirzer in the last two decades. The elaborate assembly includes a large windmill, an elegant castle and church, a complex stone fountain, and a neat longitudinal garden, all placed behind the house and enclosed within hedges, a true hortus conclusus, a little image of Paradise in the urbanized Regional Municipality of Waterloo.

Nancy-Lou Patterson

"Now this Indenture Witnesseth...": Some Comments on the Use of Chattel Mortgages in Material History Research

John T. Regan was a barber. In June 1885 his barbering business in Charlottetown, Prince Edward Island, was not doing very well and he had accumulated a number of debts. One of these was to a local painter, Patrick Burke. Regan had no cash. He had no real estate on which he could get a mortgage and the banks were extremely loath to loan small sums. He did, however, have the furnishings of his house and shop, apparently paid for, and this provided several possibilities. He could sell the goods outright or perhaps pawn them in hope of being able to redeem them during future prosperity. If he sold his barber tools there would be no future prosperity so he decided to