

A cross-reference card looks like this:

S

WOMEN — ASSOCIATIONS

70.154 Casselman, Cora Taylor (1888-1964)

Correspondence, news clippings, photographs, government documents, personal documents, pamphlets, and miscellaneous material dealing with the life of Cora Casselman, first woman Liberal Member of Parliament, n.d., 1900-1964 1.2 m. See inventory.

The enormous task of revising the cards prepared since 1963 was lessened by the fact that accessions consisting solely of maps, plans or blueprints, sound recordings, films, and photographs put in the "A Collection" (a composite collection created by the PAA, containing particularly significant photographs) did not require main entry cards because there are separate indexes for each type of medium. In addition, consideration is being given to establishing a record group system for government records, and pending that decision, no revision of the cards for government records will occur at this time. Nevertheless, cards for more than two thousand accessions of private manuscripts remain to be revised.

The human resources to undertake the job arrived as part of our complement of summer employees. Two persons were hired to work on main entry cards — one had worked at the PAA during several summers in the past and the other had completed the Archives Course offered at the University of Alberta Summer School. Armed with some general instructions, they set to work on the accession register, going through it accession by accession. Each number was accounted for, whether the card was revised or not, and there is now a master list of the cards which have been revised and a list of those accessions requiring detailed inventories. Naturally, the project turned up a number of oddities, including collections containing such items as tea towels commemorating Queen Victoria's Diamond Jubilee, cigarette papers, and tubes for old radio sets. These were promptly transferred to the Provincial Museum. As well certain collections "temporarily misplaced" have come to light.

Each card was checked by the Senior Archivist for completeness of information and for consistency in its cross references. As the new cards were typed and filed, the old ones were discarded, producing a vastly improved reference tool. We have also converted the extents of our collections to metric measurement and have weeded out non-archival material. We now have the means to go ahead with the systematic preparation of returns for the *Union List of Manuscripts in Canadian Repositories*, an area in which we have been remiss because of a lack of staff. Moreover, a detailed inventory for each collection will not be required since many collections are now adequately described on main entry cards. The investment of time and effort was more than worthwhile. And we have taken one small step toward standardization of terminology — we no longer call them "yellow cards."

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Archives of Ontario Computerized Land Records Index

Land records are among the most commonly used documents in archives. For municipal, county, provincial, and national jurisdictions, they can disclose where, when and how settlement took place, and are consequently basic sources for

genealogists as well as the more academically oriented user. Yet, ironically, land records are among the most difficult to use. They are extensive, bulky, scattered throughout many record series, and frequently lack a comprehensive and accurate finding aid or index. Furthermore, these records, because of their age, are often extremely fragile and steady use accelerates their already deteriorating physical condition. For these reasons the Archives of Ontario has begun a computerized land records index. Although the general techniques involved have doubtless been applied elsewhere to other types of records, some discussion of the features and problems of this project is probably worthwhile, since so many archives have extensive holdings of land records.

Information on land settlement in Ontario derives from three main groups of records: Crown Lands Papers originating from the Office of the Surveyor-General, the Office of the Commissioner of Crown Lands, and the Department of Lands and Forests; the Canada Company Papers concerning the Huron Tract lands as well as a large portion of Crown Reserves throughout the province; and the Peter Robinson Papers relating to the settlement of the Peterborough area. From these records selected for computerization, a hard core of three principal descriptors was isolated: person's name, land location and date of transaction. The project concentrated on existing registers and indexes, and only those referring to the original alienation of land. To accumulate the basic data, only particular key registers, land rolls and indexes were included. These range from the 1780s to the beginning of World War I, from the grants to the United Empire Loyalists to those for the veterans of the Boer War. Only a few entries of sales of Clergy Reserves and Canada Company lands extend beyond that period. Despite these limitations, the conversion of manuscript data into machine readable form still involves approximately three hundred thousand individual entries scattered through 112 location registers, registers of fiats and warrants, and registers of assignments, leases and sales.

In 1974, the Archives engaged the Systems Development Services Division of the Ontario Ministry of Government Services to design a computer programme according to the Archives' criteria. The Archives provided an inventory of volumes to be done, copies of sample pages from the various record types, and the information requirements which the project's reports (printouts) would need to display. On completion of the programming, a pilot project using about seventeen thousand entries (names) was conducted, sampling a variety of the records for input. Two distinctly separate methods of input were used: by an Administrative Terminal System (ATS) on-site terminal connected with the Queen's Park Computing Centre and by key tape from manual code input forms. The first tests showed that both methods were very satisfactory for entering the data into the system. However, an experienced ATS operator was able to enter two hundred records (book lines of 144 characters each) a day, whereas the production rate using manual coding was only one hundred records a day. Therefore, except for some manual coding by students in the summer of 1976, the second method was abandoned. Moreover, checking of data sheets and master file updates, undertaken for both methods by regular Archives staff, took twice as long for manual as for ATS entries. The pilot project was terminated at the end of November 1974, after eleven thousand lines had been entered through ATS and six thousand by key tape. Regular in-putting began the following year when two ATS terminals were installed at the Archives and operators employed under contract. In 1976, the Computing Centre switched from ATS to ATMS (Advanced Text Management System), but the latter proved to be too sophisticated and costly for the Archives' requirements. As an alternative to the ATMS, the Optical Character Recognition (OCR) services from the Queen's Park Computing Centre were engaged. OCR is the automatic machine reading and electronic conversion of written or printed characters into machine readable code for computer processing. OCR has three important advantages: page typing is generally 30 percent faster than key punching, errors are more easily recognized and corrected, and the cost is only one-third that of the ATMS terminal.

Input volume can be increased simply by adding more typists. To ensure dependable character reading, special smooth and highly reflective paper forms are used to improve the optical scanning of the prepared documents and thus improve input to the system. For the project, however, only the mode of entering data had changed; the method of further processing remained as before.

A master file entry, and master file update printout, is produced for each new record entry, whether input by key tape, ATS or OCR. Three further printouts are also generated: an alphabetical listing by name of locatee; an alphabetical listing by township/town/city; and a listing by date of issue of land transfer instruments and devices. Obviously these three formats or finding aids represent different manipulation or orderings of the data base in the master file.

For each entry, the master file contains the following information or information codes: records source (Crown Lands, Canada Company, or Peter Robinson Papers); volume title; Archives' inventory volume number; page number; line number; name of locatee; location (with specification as township, town or city); date in order of year, month and day; date code as to whether a location or sale was signified; type of transaction (free grant, sale, lease or assignment); type of free grant, sale or lease (whether done under Old Regulations, Loyalist grant, Clergy Reserve sale, School Land sale and so on); and record group and series designation.

Printouts from this data base can provide a wide variety of information for the researcher. In the manipulation of the data into the alphabetical listing by locatee, for example, a printout line would be interpreted as follows: "Catherine Callender (residence unknown) as a United Empire Loyalist received a free grant. The grant was located in Hamilton Township, Lot 23, Concession 3. It was authorized by an Order-in-Council dated 28 February 1799, and location took place on 11 April 1799. All this information was derived from Record Group 1, Series C-1-3, Volume 80, Page 1." In preparing entries to produce ultimately this rich detail, accuracy is of utmost importance. Therefore, the input data are checked at several stages of processing. Because of limited resources, a project of this magnitude will take four years, completion being scheduled for mid-1979. The alphabetical listings by locatee and township will be available as paper printouts in the Archives' Reading Room. In addition, a computer output microfilm (COM) fiche of these two reports may be purchased by archives, libraries and universities. The third report, the chronological format of transactions, will be generated for scholars who wish to pay for the service.

Although the project is entitled "Computerized Land Records Index," it is much more than a nominal listing. While it provides researchers with file references, it also supplies the basic information of each transaction. For many researchers this information will be adequate and there will be no need to check the original records. In short, the system will give researchers a fast and efficient means of searching land records, tracing initial land grants and exploiting fully a valuable source of data that reflect the patterns of Ontario settlement and development.

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Science and Engineering Archives

On 16 September 1977 a meeting was held at the National Research Council in Ottawa to discuss the activities and problems related to science and engineering archives in Canada. At a previous meeting of individuals interested in promoting the history of Canadian science and engineering, it had been decided that one of the most crucial factors determining the direction and nature of historical research in these areas would be the existence of suitable archival material.