RESEARCH BULLETIN

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Carron Stoves at York Factory

Archaeological field research was conducted during the summer of 1978 at York Factory National Historic Site near the mouth of the Hayes River on the west coast of Hudson's Bay. One phase of this work included the examination and cataloguing of artifacts recovered from the surface of York Factory III, particularly from the actively eroding river bank (Adams 1978).

Marcel Moussette (1971; 1972a, b, c; 1973a, b) has discussed both the methods of heating domestic homes and the stoves utilized east of the Great Lakes in the Canadas and New France prior to 1867. He notes the rarity of surviving Carron stoves in Canada (Moussette 1972c: 15) and illustrates an example from Moose Factory (Moussette 1972c: 55). This bulletin describes and illustrates cast iron stove parts, made by the Carron Company, which were noted at York Factory.

The stove parts all represent one basic stove form, although several decorative patterns occur (Figures 4 to 9). This stove is essentially a rectangular box in which two flat plates serve as sides, two as ends, a fifth (with a smoke hole) serves as a top and a sixth as a base with cast iron legs attached. This is the simple six plate or single stove of Figures 1a and 2. A variation adds a second storey or box to provide an oven above the firebox (Figures 1b and 3).

Six plate stoves have been referred to as chamber, draft, wind and Holland stoves on the basis of their form, function and supposed origins (Edgerton 1971: 49;

Mercer 1961: 5). The term "Canada" also appears in discussions of cast iron stoves like this; unfortunately, despite widespread usage in North America, its 19th century meaning is not well understood. Edgerton (1971: 61) illustrates a "Double Canada" stove designed for the Carron Company, while Thomas (1978: 43) contrasts "Canada" and "Carron" stoves as separate types. The terms "single Canada" and "double Canada" are frequently encountered as descriptors of stoves in the York Factory inventories during the 19th century (H.B.C.A. B.239/aa/98, 99). References to stove funnels indicate that sheet iron was rolled and rivetted into cylinders which were used to carry the smoke from the stoves out of the rooms. During the winter of 1843-44, the blacksmith and his assistant spent part of the first Saturday of each month cleaning the funnels and chimneys of the stoves in the buildings at the factory (H.B.C.A. B.239/a/163).

The current collection of cast iron plates and fragments from Carron stoves at York Factory includes parts of at least 14 stoves, as indicated by the presence of 14 bases or parts thereof. York Factory inventories list the stoves by size: 3 foot, 2½ foot, 2 foot (H.B.C.A. B.239/aa/55 f.296). These measurements are compatible with the observed lengths of side plates and bases at York Factory. Four of the bases are 3 feet long; six are 2½ feet; one is 2 feet, and two fragments come from either 2½ or 3 foot stoves. One base has a complete length of 28 inches, suggesting that stoves of dimensions other than the above three were also manufactured.

Four hoods for ovens occur, indicating the presence of at least four 3 foot double stoves. No parts for other sizes of double stoves were recognized at York Factory; thus, it seems likely that smaller sized bases all served for single six plate stoves. Seven end plates occurred without doors (for the back of the firebox) while fragments of a maximum of seven end plates with doors for refuelling were present. One complete top for a single (2½ foot) and a double (3 foot) stove as well as seven top fragments were counted.

Repair of broken side plates and bases at York Factory is one common feature which has also been noted on Carron stoves in the reconstructed Big House at Lower Fort Garry. Flat iron strips (Figure 10) were often placed on the interior surface across the fracture and rivetted or bolted to the separate fragments to hold them as nearly as possible in their original position so that continued use could be made of the stove. Sometimes a flat, rectangular strip was forged into a loop and fastened to the interior surface of a side plate (Figure 11). This gave support to a greater area of the plate than a single strip. In two cases, bolts

have replaced the rivets used to fasten the legs to the base plate and in another instance, two bolts and a clinched machine cut nail serve as the fasteners.

All tops, bases, end and side plates, except the side plate illustrated in Figure 8, are marked CARRON. The mark was part of the mould in which the plates were cast and always occurs on the surface of the plate most visible to the user of the stove. For side and end plates this is the exterior surface; on bases and tops the mark is found on the upper surface of the plate as positioned in the stove. Neither the hoods for enclosing the oven nor the legs have been marked.

The CARRON mark indicates that the origin of the stoves was Scotland. The Carron Foundry was established near Falkirk, Scotland in 1760 (Bremner 1969: 41). In 1868, Bremner noted the current tendency of the Carron ironworks to produce domestic ironwork (including stoves) after an earlier distinguished career of producing cannon and shot (1969: 46). Archival research now underway with both Carron and Hudson's Bay Company records suggests that Carron stoves played an important role in heating the 19th century Hudson's Bay Company establishments in North America.

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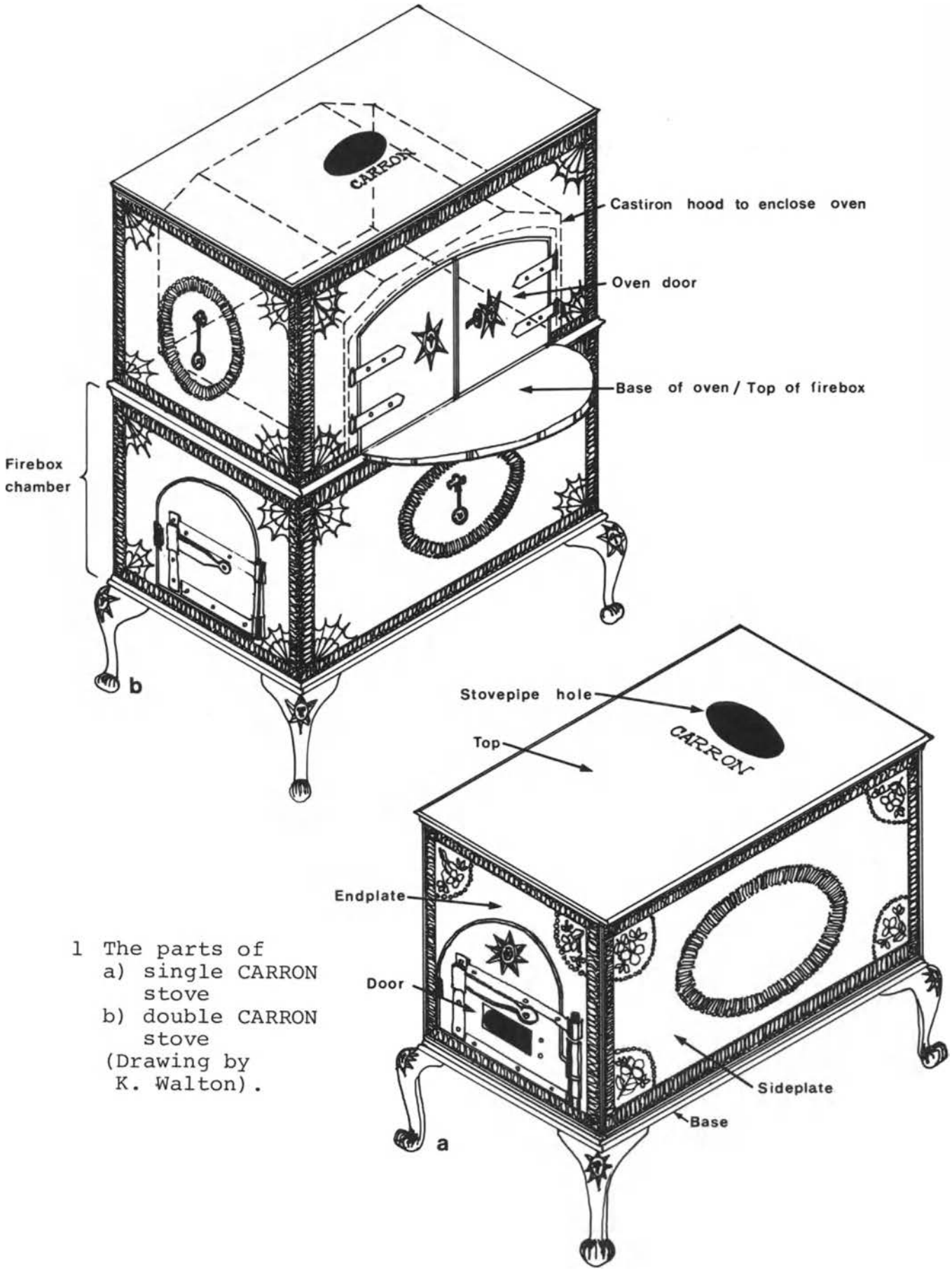


1 The parts of
a) single CARRON stove
b) double CARRON stove
(Drawing by K. Walton).

2 Single CARRON stove (2½ foot) reconstructed from parts found at York Factory (Photo by G. Adams).

3 Double CARRON stove (3 foot) reconstructed from parts found at York Factory (Photo by G. Adams).

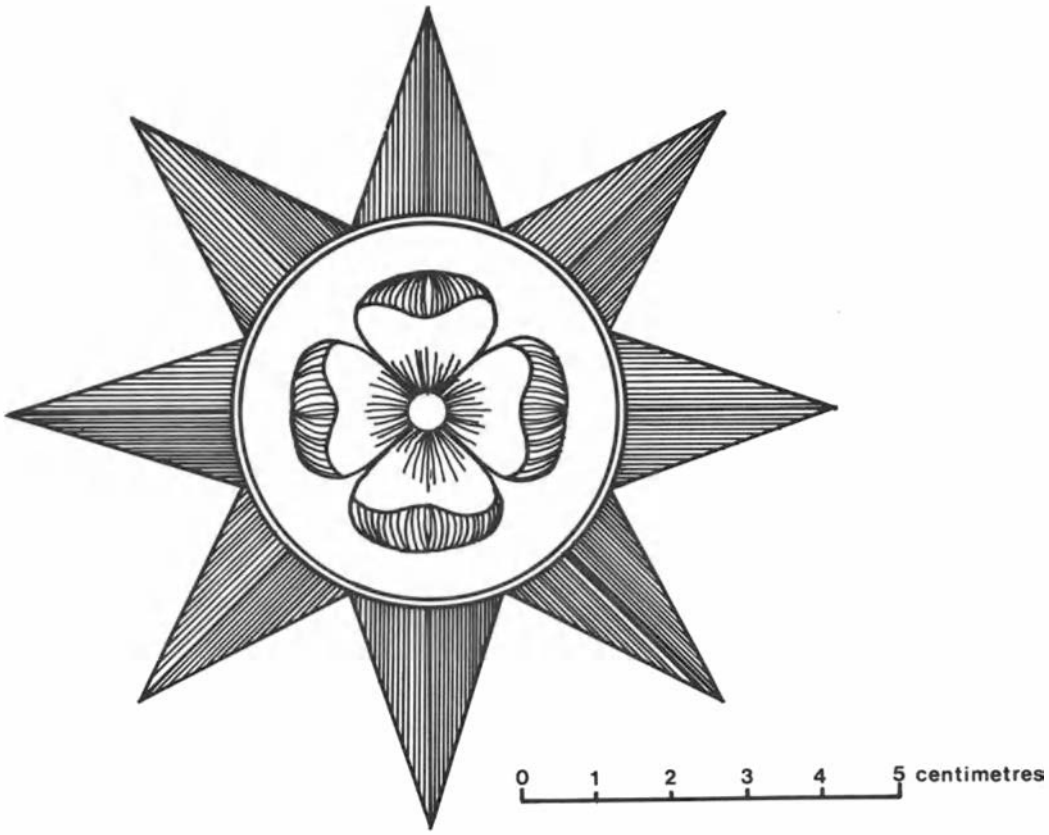
4 End plate from single CARRON stove (no scale) (Photo by G. Adams).

5 Central motif from CARRON stove end plate (no scale) (Photo by G. Adams).

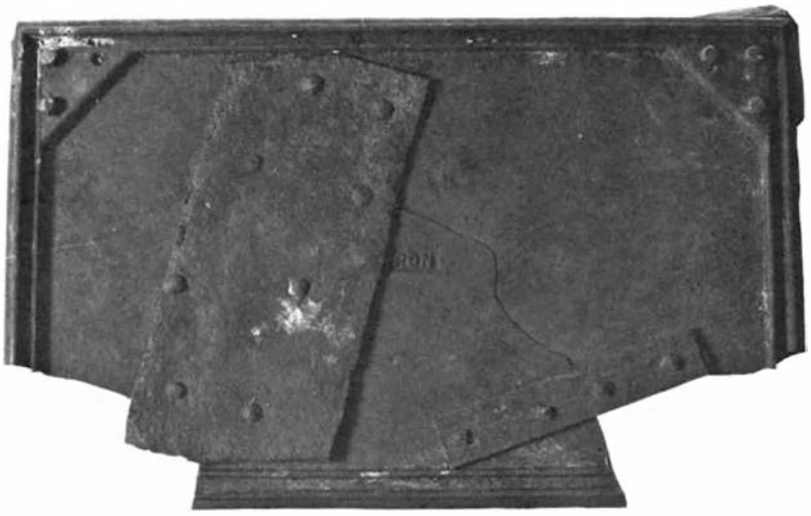
6 Frontal view of CARRON stove leg. Height is 23 cm (Photo by G. Adams).

7 Upper side plate with oven doors from a double CARRON stove (3 foot) (Photo by G. Adams).

8 Side plate from single CARRON stove.
(Photo by G. Adams).



9 Central motif from a single CARRON stove door.
(Drawing by K. Walton).



10 Interior view of repaired CARRON stove base (no scale). (Photo by G. Adams).

11 Interior view of repaired CARRON stove side plate (no scale). (Photo by G. Adams).

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