

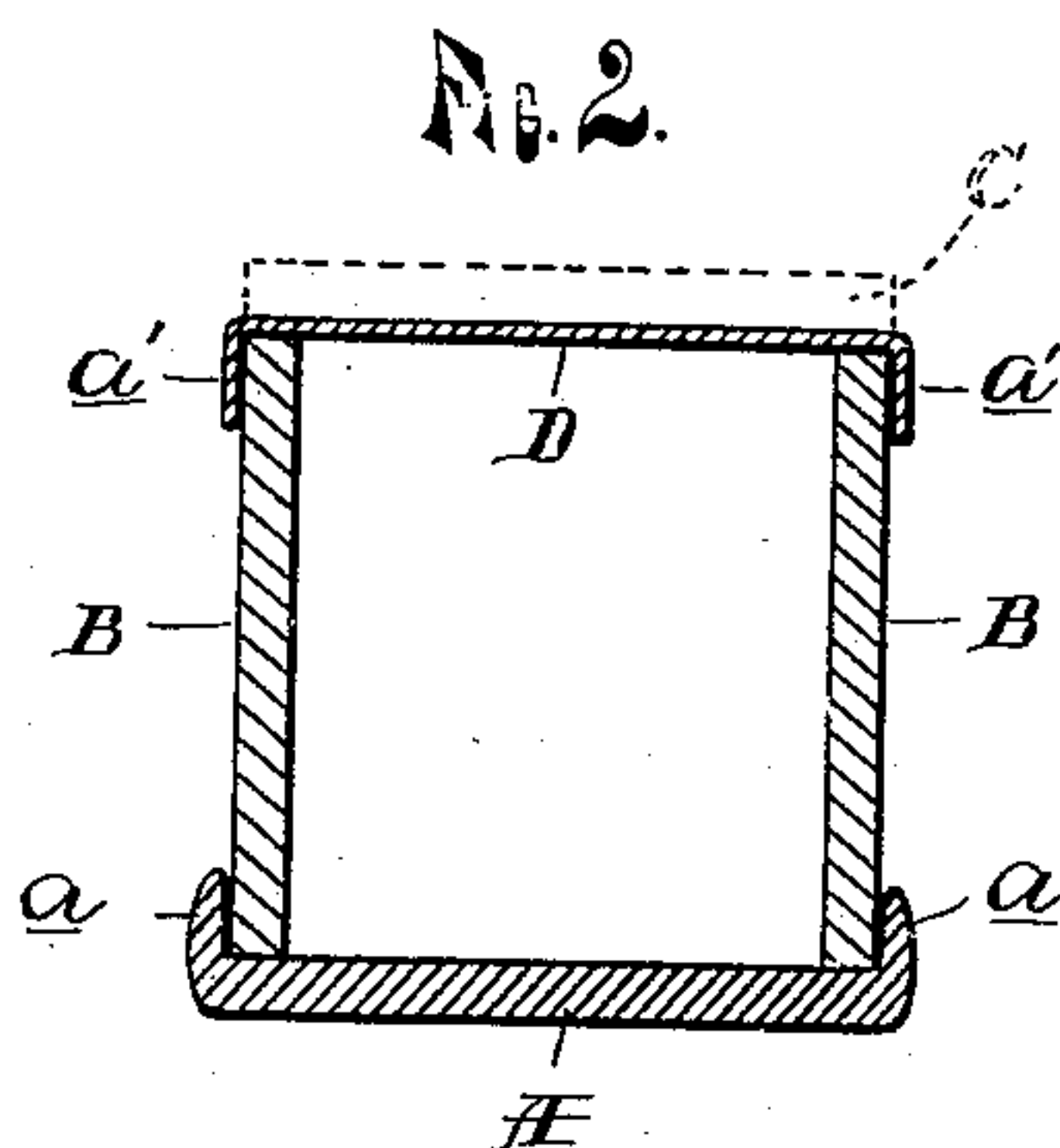
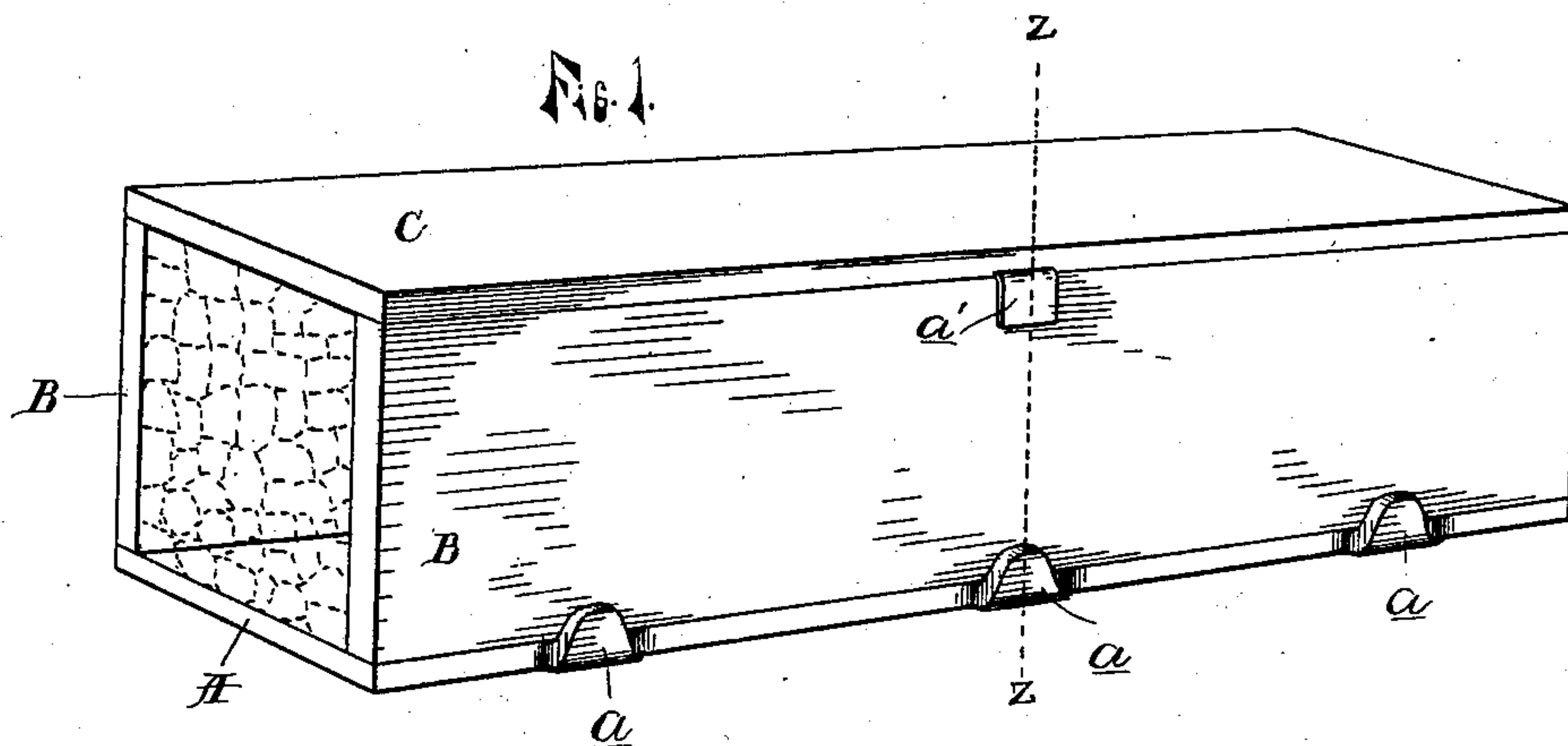
No. 697,519.

Patented Apr. 15, 1902.

W. D. MURRAY.
BOX OR FAGOT PILE.

(Application filed Feb. 28, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM D. MURRAY, OF DETROIT, MICHIGAN.

BOX OR FAGOT PILE.

SPECIFICATION forming part of Letters Patent No. 697,519, dated April 15, 1902.

Application filed February 28, 1901. Serial No. 49,215. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. MURRAY, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Box or Fagot Piles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention refers more particularly to the construction of a box for piling scrap-iron; and the invention consists in the novel manner of constructing the box of four metal bars and one tie, whereby certain disadvantages of the present construction are done away with or greatly minimized, while at the same time a saving is effected in the cost of the box, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of the box as it appears when the box-pile is completed. Fig. 2 is a cross-section of the box on line $z z$ without the top.

The box is open-ended, and consists of a bottom A, two sides B, and a top C, each formed of an iron bar. The bottom A is provided along its outer edges with upwardly-turned lips a , which are formed integral with the bar itself and may be continuous, the whole length of the bar or discontinuous, as shown. The sides B and tops C are plain pieces of bar-iron, the former being placed upon edge upon the bottom bar and held together on top by a tie D, loosely placed across the middle. The tie D is made of thin band-iron with ends turned down upon the sides. The top bar C, however, may be formed with lips similar to the bottom A, thus securely holding all four bars together.

In constructing the pile the box is set up without the cover and suitable pieces of scrap are piled lengthwise into the open ends of the box to keep the sides apart and close the ends flush with the box. The smaller or more irregular pieces are piled in between the ends till the whole box is closely packed, or I may put in bars of the full length of the box instead of using scrap. After the scrap or bars are filled in level with the top the cover is placed on and the whole pile transferred to the heating-furnace, all as in the usual manner.

It is old in the state of the art to form the inclosing box or case for piling scrap into of four metal bars; but my invention consists in the novel manner of tying the sides together, so that they will not be displaced in handling the box. In the older way straps or bands have been placed around the outside of the bundle; but this has proved unsatisfactory, as such straps had to be removed again after the bundle was taken out of the furnace, or otherwise their presence would have shown on the finished product. This was remedied in part by using short ties, like the one I use, and placing two across the bottom and two across the top of the side plates to hold them together. While in this construction the ties are concealed in the pile, (except the ends a' ,) the bottom and sides are not tied together, and it frequently happens that in handling the pile in transferring it into the furnace the box is disarranged, besides the projecting ends of the bottom ties have to be knocked off afterward in working the pile. With my construction I tie either three or four bars together, while former constructions simply tied the two sides together, leaving the top and bottom loose and necessitating the wrapping the pile with wire or bands, which being of a different material cause the finished product to scale or sliver where wrapped. My construction has several advantages over the prior constructions. In the first instance, it will be understood that in working up scrap-iron the cost of the boxes is considerable of an item, and it is therefore an object to use no other material in its construction but what the scrap-mill can provide. In my construction the only material that will have to be provided from elsewhere is the tie D; but I use only one tie for each box, whereas other constructions require three or four, and by making the top similar to the bottom I may even dispense with this tie. Then by using one tie only across the top the outer ends a' being quite exposed in heating will burn off, thus obviating the necessity of removing it after the pile is heated. The bars are perfectly plain bars except the bottom bar, which, however, can be readily rolled or pressed by the mill, as it makes no difference how rough or irregular the flanges a are formed provided they accom-

plish the object in view of tying the sides of the box together at the bottom. Being thus tied together the pile can be easily handled without danger of disarranging it, and as the
5 flanges *a* are formed integral with the bottom bar and of the same material with the box they will readily be welded into the mass and leave no mark or blemish on the outside of the billet or the bars rolled from it.

10 What I claim as my invention is—

A box for piling scrap, composed of two plain side bars, a bottom bar upon which the side bars are supported and having upturned marginal flanges adapted to tie the side bars

together at the bottom, a tie of band-iron laid 15 across the top of the side bars in the middle and having short ends turned down upon the outside of the side bars for tying the same together at the top, and a top placed over said tie, the bent-down ends of which tie are ex- 20 posed beyond the cover and sides to be burned off in heating the fagot.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM D. MURRAY.

Witnesses:

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