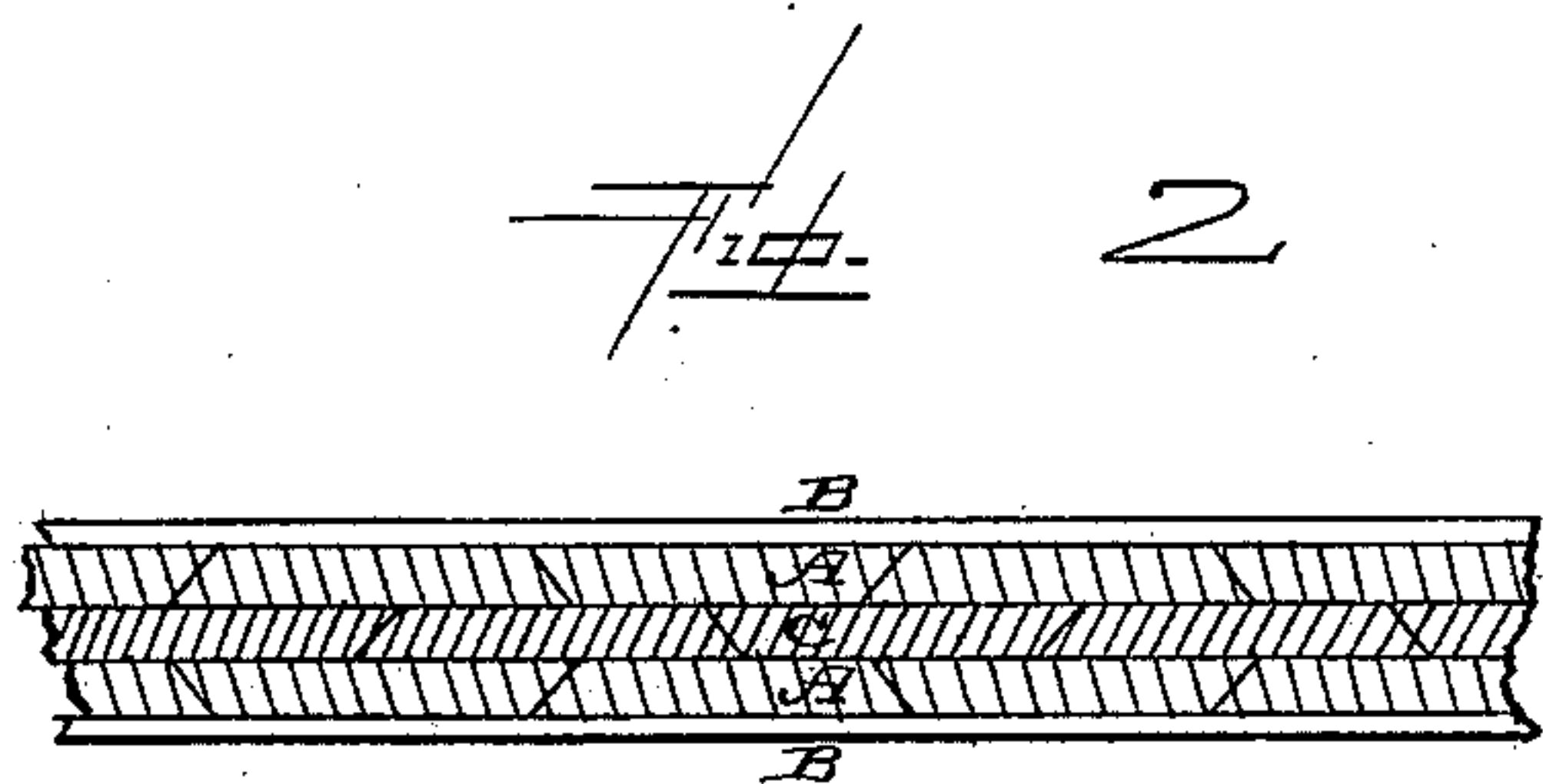
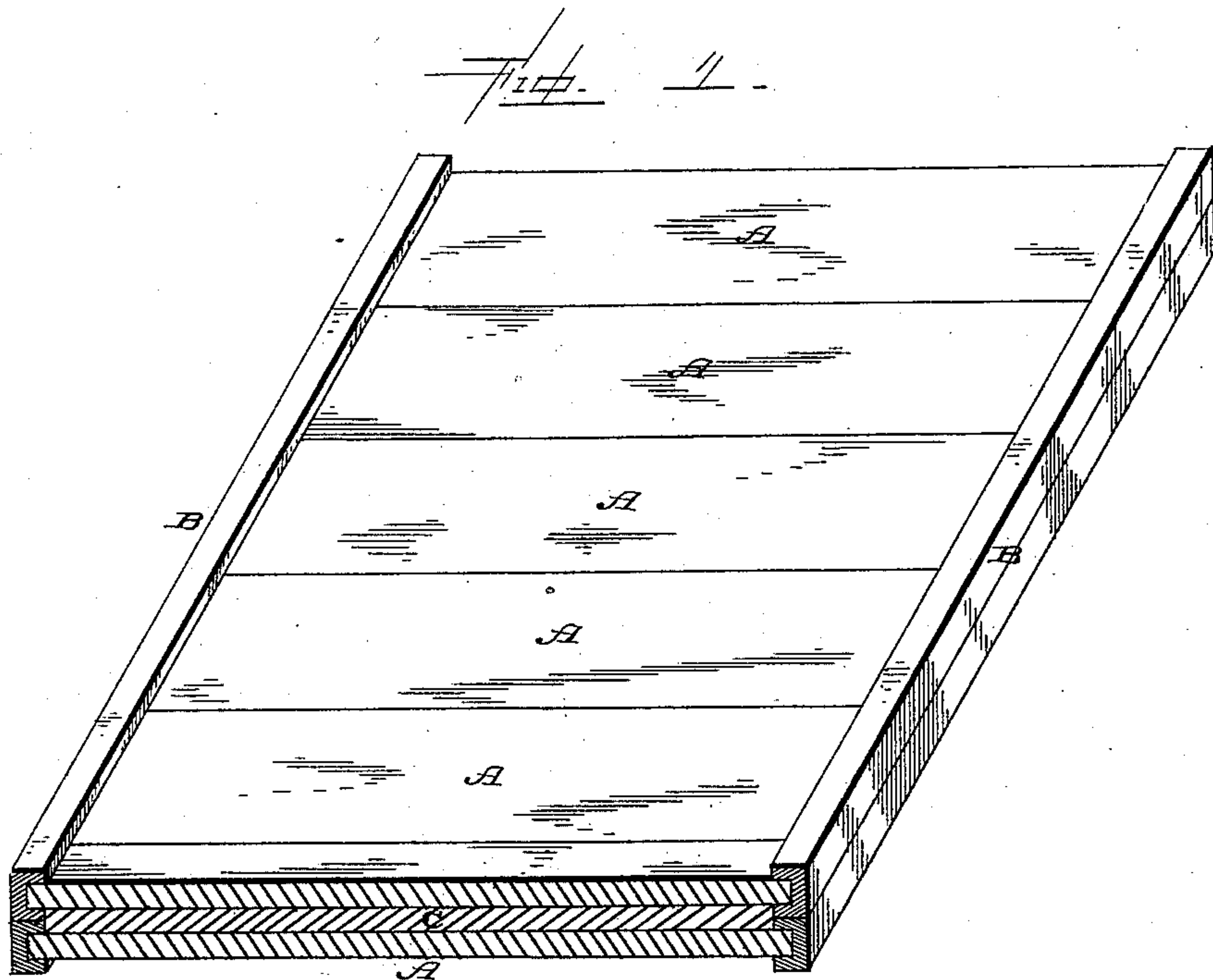


(No Model.)

W. G. HOWELL.
PILE FOR SKELP IRON.

No. 359,508.

Patented Mar. 15, 1887.



Witnesses.—

L. F. Gardner
A. W. Brecht.

Inventor
Wm. G. Howell,
per J. A. Lehmann,

att'y.

UNITED STATES PATENT OFFICE.

WILLIAM G. HOWELL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-THIRD TO GEORGE H. BOKER, OF SAME PLACE.

PILE FOR SKELP-IRON.

SPECIFICATION forming part of Letters Patent No. 359,508, dated March 15, 1887.

Application filed November 26, 1886. Serial No. 219,969. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. HOWELL, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Piles or Fagots for Skelp-Iron; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in piles or fagots for skelp-iron; and it consists in a pile or fagot which is formed from a number of pieces of puddle-bar, which are cut of a length according to the width which it is desired the pile or plate shall have, and which pieces have their ends held in or between channel-bars, which form a binding for their ends, as will be more fully described hereinafter.

The object of my invention is to so form the pile or fagot that when rolled it shall have just the desired width, and which shall have uniform edges, and thus dispense with the necessity of having to shear the edges, so as to make the plate uniform, as has heretofore always been the case.

Figure 1 is a perspective of a pile or fagot to which my invention is applied. Fig. 2 is a vertical cross-section of the same.

In preparing my pile or fagot, I take a puddle-bar which has been constructed or rolled in the usual manner, and which preferably has beveled edges, and this bar I cut into lengths A, according to the width it is desired that the plate shall have when the pile is rolled. The edges of the plate are preferably beveled, as shown, so as to make a lap-weld between the pieces when they are rolled, in contradistinction to a butt-weld. As a portion of the bars forming the pile are to have their ends inserted in the grooves in the channel-bars B, and another portion, C, of them are to be loosely placed between the channel-bars, those bars C which are simply piled upon the tops of the ones A are cut of just sufficient length to drop in between the chan-

nel-bars, which form, as it were, a binding for the ends of the bars A. The channel-bars B may either be formed with only a single groove, or they may be formed with two or more grooves, as may be preferred. The number of grooves made in the channel-bars will depend entirely upon the thickness of the pile which is to be made. Where channel-bars are used, as here shown, having only two grooves in them, there are two layers of the bars A and one layer of the bars C, the bars C being placed in between the bars A, as shown. After the ends of the bars A have been placed in the channel-irons B, and the bars C have been placed in between the two layers of bars A and the channel-irons, the whole pile is heated, and is then passed successively through a series of rolls, which may be grooved or not, as may be preferred, until it is reduced to a bar of the desired thickness.

The channel-irons B serve to prevent the edges of the bar which is formed from the pile from fraying out, and thus necessitating the necessity of taking the bar after it is rolled and shearing its edges, as has heretofore always been the case, in order to give the bar a uniform width and finish.

It will be seen that the width of the pile depends entirely upon the length of the pieces which are used, and thus the width of the pile or fagot can be increased or decreased at will. The lower edges of the channel-irons prevent the bottom layer from coming in direct contact with the bottom of the furnace, and thus permit the flames to pass freely under the pile while being heated, and thus the pile becomes uniformly heated throughout.

In making piles heretofore they have rested solidly upon the bottoms of the furnace, and hence, as the flame could not pass under them, they have been cooler at the bottom than at any other point, thus producing very uneven work in the rolling of the pile.

Having thus described my invention, I claim—

1. A pile or fagot for making skelp-iron, composed of a number of layers or pieces which are cut from puddle-bars and piled one upon

the top of the other, the ends of the bars being held by means of channel-bars, substantially as shown.

2. A pile or fagot for making skelp-iron,
5 composed of bars A C, of unequal length, and which are held together at their ends by means of channel-bars, which are applied thereto substantially as set forth.

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

WILLIAM G. HOWELL.

Witnesses:

F. A. LEHMANN,
L. L. BURKET.