

(No Model.)

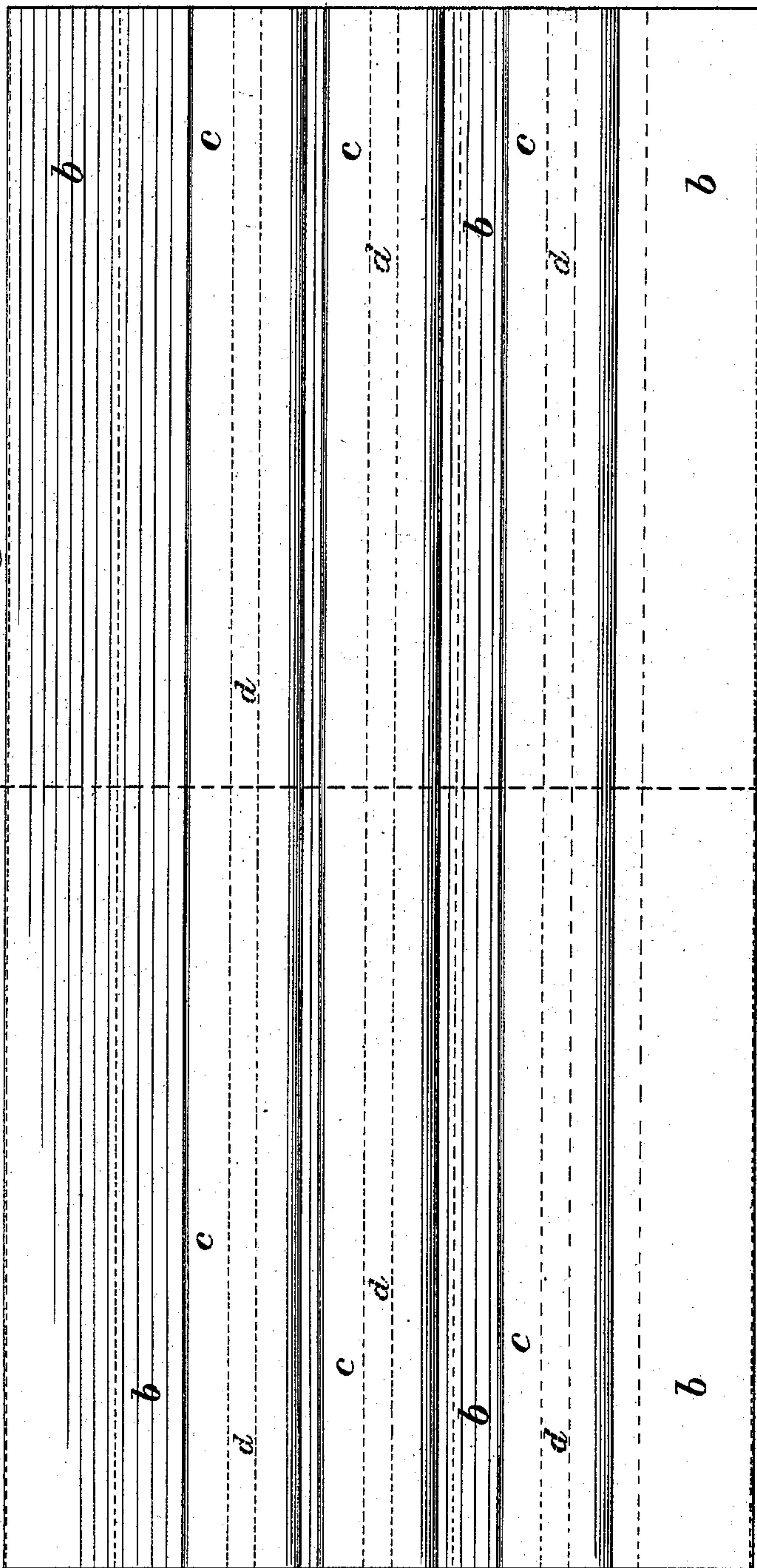
H. W. BORNTRAEGER.
METAL PILE OR FAGOT.

No. 410,134.

Patented Aug. 27 1889.

Fig. 1.

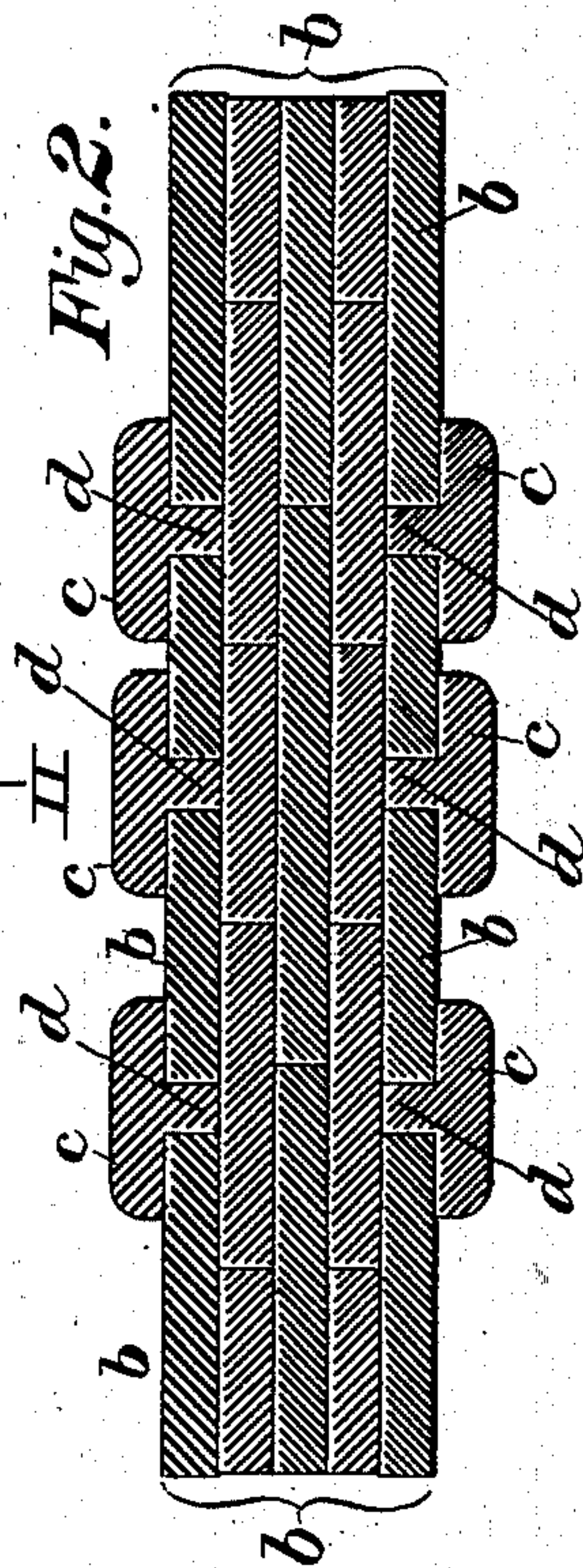
II



WITNESSES.

H. L. Gill
W. B. Convin

Fig. 2.



INVENTOR.

Henry W. Borntraeger
by W. Baxewell & Sons
his Attorneys

UNITED STATES PATENT OFFICE.

HENRY W. BORNTAEGER, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO
CARNEGIE, PHIPPS & CO., (LIMITED,) OF SAME PLACE.

METAL PILE OR FAGOT.

SPECIFICATION forming part of Letters Patent No. 410,134, dated August 27, 1889.

Application filed May 3, 1889. Serial No. 309,460. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. BORNTAEGER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Metal Piles or Fagots, of which the following is a full, clear, and exact description.

Heretofore in fagoting or piling iron for the manufacture of bars, plates, &c., it has been the common practice to pile together in parallel positions a number of bars of muck-iron, arranged in layers, so that the bars of alternate layers shall break joint with each other, and at the top and bottom of the pile there have been employed flat plates of iron, known as "cover-plates." When it has been attempted to form the pile without such plates, it has been found that a defective product is made, because the vertical joints between the bars of the outside layers exist in the form of more or less defined surface-seams in the rolled article, and thus detract both from the appearance and merchantable quality thereof. The objection to the use of the cover-plates is that they are much more costly than the muck-bars used in the interior of the pile, and therefore increase considerably the cost of manufacture. For the purpose of avoiding this expense I have devised my present improvement, which consists, first, in a fagot the parallel joints on the exterior of which are covered by plates having beveled edges, which prevent the existence of seams on the rolled product; and, second, in a fagot having cover strips or bars provided with tongues or ribs adapted to fit in the exterior joints in the pile, whereby not only are the seams covered, but the finished product is made much stronger and more compact than is possible when fagots of other forms are employed.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a plan view of my improved fagot or pile. Fig. 2 is a vertical cross-section on the line II II of Fig. 1.

Like symbols of reference indicate like parts in each.

In the drawings, *b b* represent the bars of which the fagot or pile is constructed, which bars may consist of pieces of muck-bar, as shown in the drawings, or of any other form of iron. The joints or spaces between the adjacent edges of the outer layers of bars are

covered by strips, preferably made of common muck-bar, having portions *c*, which fit over the joints and are preferably provided with scarfed, beveled, or rounded edges and tongues or ribs *d*, which fit within such joints or spaces, and extend, preferably, to the bases thereof, so as to abut against the sides of the next inner layer, though, if desired, these tongues may be made shorter, but not with such good results. The fagot so constituted is heated in the usual way, and when rolled the cover-strips *c* are reduced so as to lie flush with the surface of the metal pile, and all the parts of the pile are firmly compacted and welded together, thus producing a finished rolled article of great strength and without apparent seams or joints. The tongues of the cover-strips serve not only to hold them in place during the heating operation, but also form a firm bond connecting the surface of the pile with the interior layers thereof.

The advantages of my invention will be appreciated by those skilled in the art. The cover-strips of the pile or fagot are simple and inexpensive in construction and effect the production of a finished product of great strength and fine quality. My invention thus works a very material saving in cost of production to the manufacturer.

I claim—

1. A fagot or pile consisting in the combination, with the layers of bars, of separate strips having scarfed or beveled edges and covering the exterior joints, substantially as and for the purposes described.

2. A fagot or pile consisting in the combination, with the inner layers, of separate strips covering the exterior joints and having tongues or ribs fitting within the same, substantially as and for the purposes described.

3. A fagot or pile consisting in the combination, with the inner layers, of separate strips covering the exterior joints and having tongues or ribs fitting within the same and extending to the bases thereof, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 1st day of May, A. D. 1889.

HENRY W. BORNTAEGER.

Witnesses:

THOMAS W. BAKEWELL,
W. B. CORWIN.