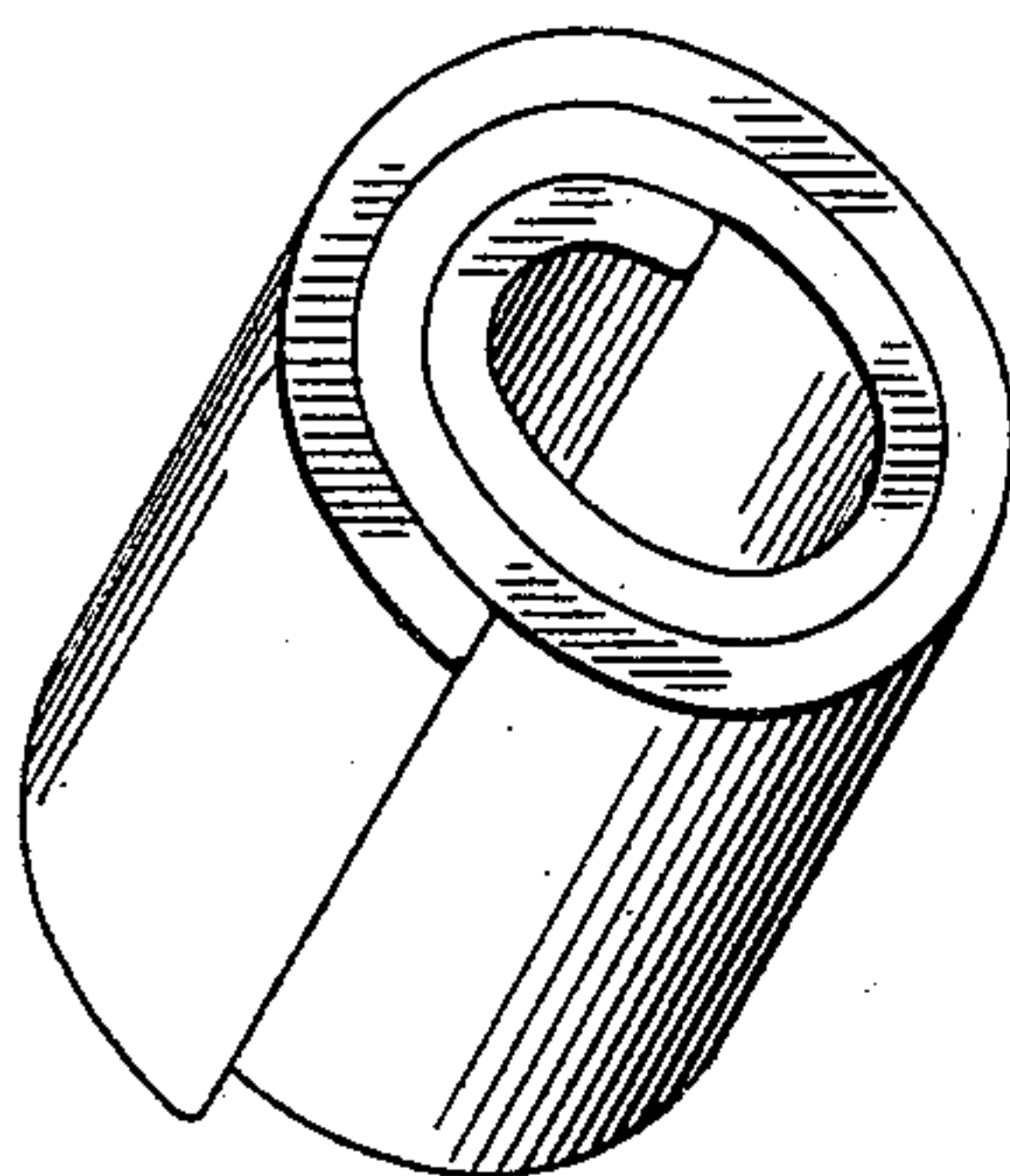
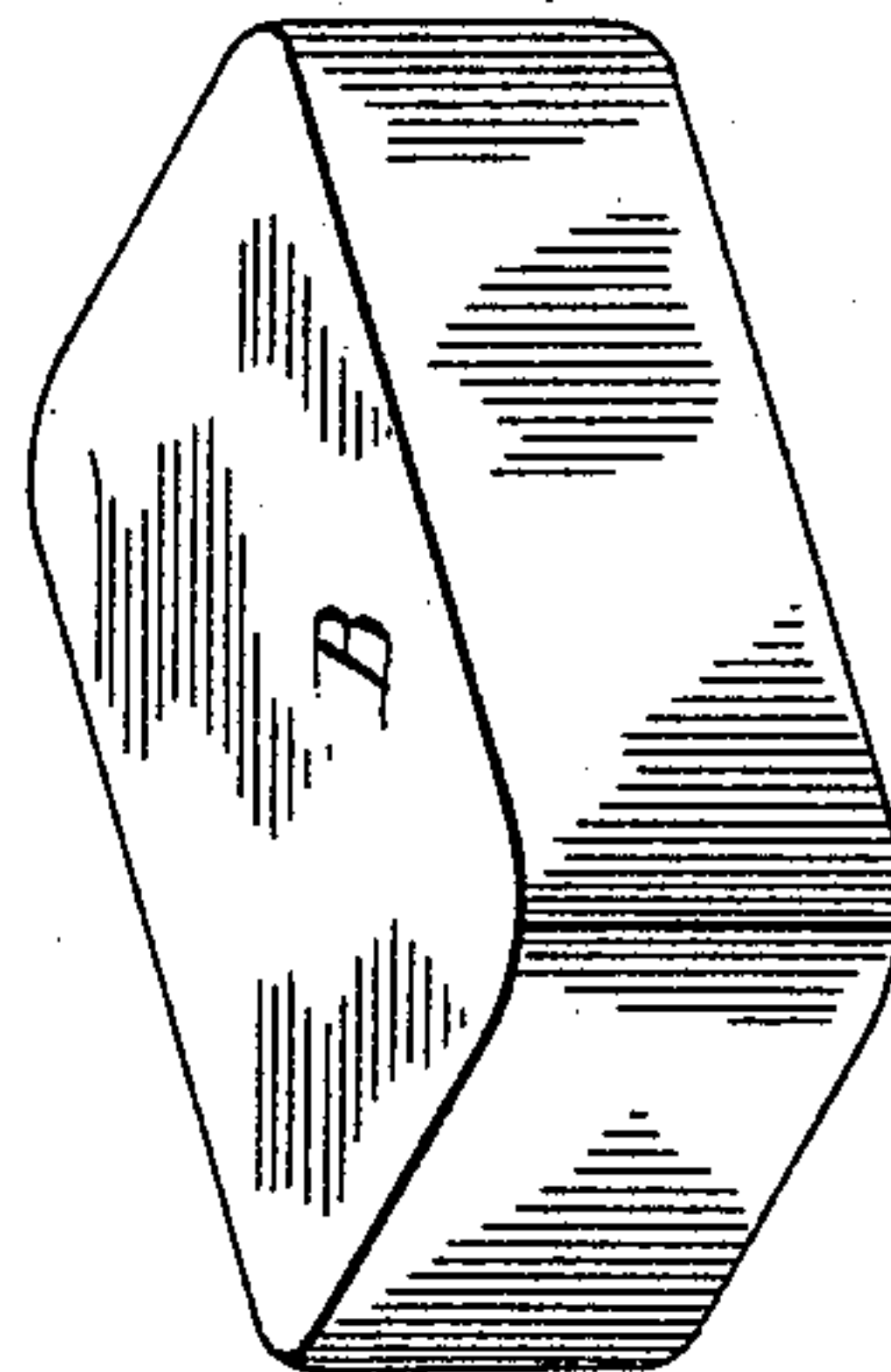
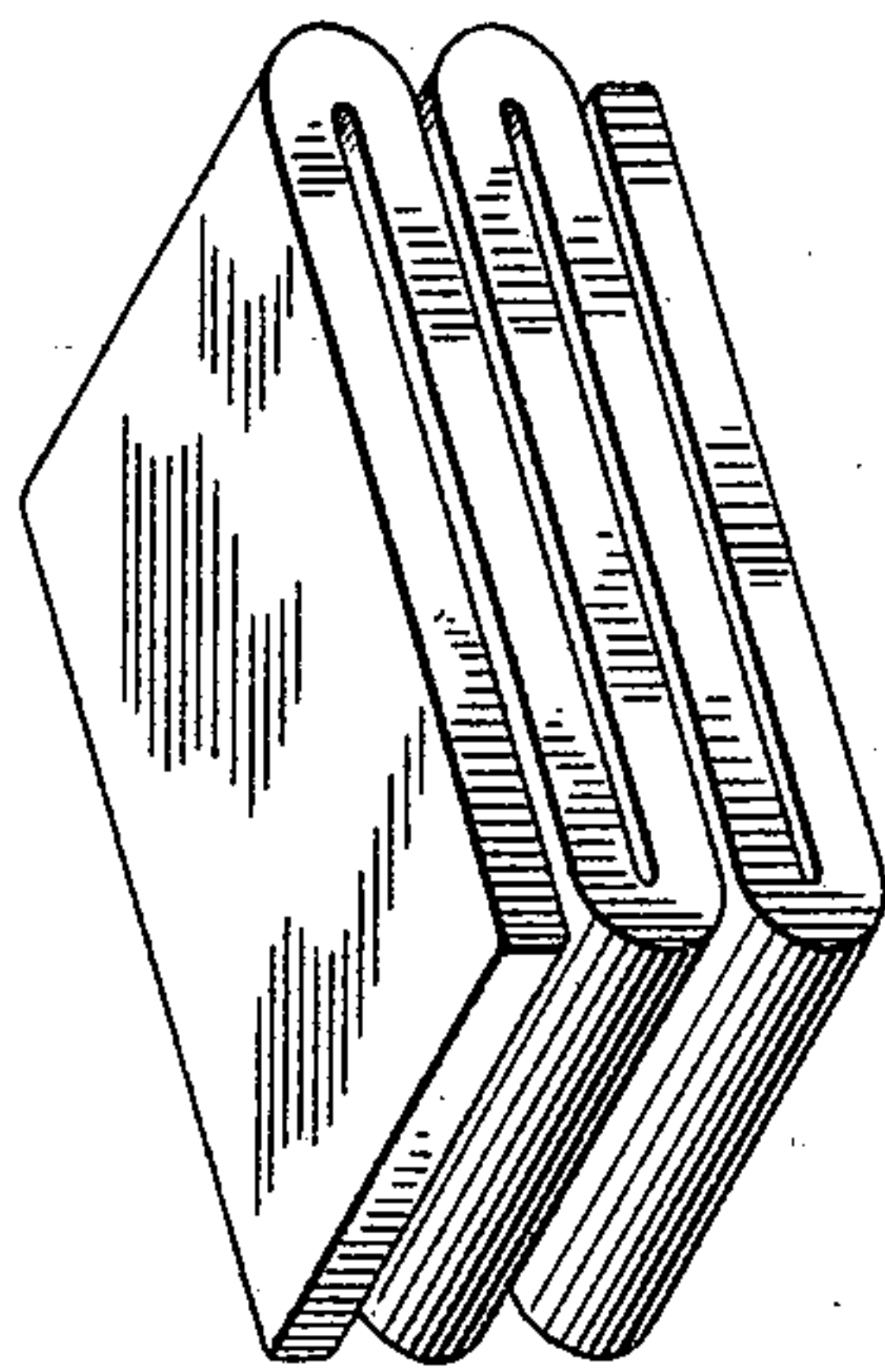
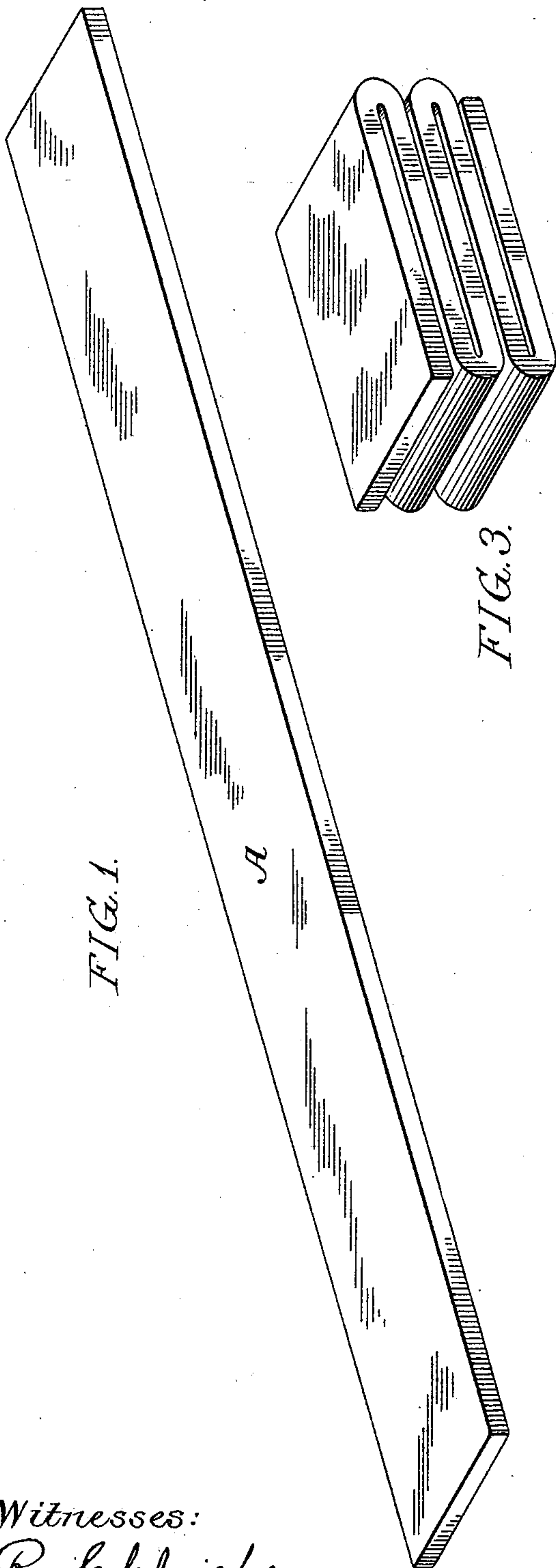


(No Model.)

W. EYNON & W. SEAMAN.
MANUFACTURE OF BLOOMS.

No. 441,474.

Patented Nov. 25, 1890.



Witnesses:
R. Schleicher.
Alex. Barkoff

Inventors:
William Eynon &
William Seaman
by their Attorneys
Howson & Howson

UNITED STATES PATENT OFFICE.

WILLIAM EYNON AND WILLIAM SEAMAN, OF WILMINGTON, DELAWARE.

MANUFACTURE OF BLOOMS.

SPECIFICATION forming part of Letters Patent No. 441,474, dated November 25, 1890.

Application filed September 29, 1890. Serial No. 366,515. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM EYNON and WILLIAM SEAMAN, both citizens of the United States, and residents of Wilmington, New Castle county, Delaware, have invented certain Improvements in the Manufacture of Piles or Billets for Rolling-Mills, of which the following is a specification.

The object of our invention is to provide for the economical manufacture of piles or billets for being subsequently reduced into bars or other forms by a rolling-mill, and this object we attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a muck or puddle bar representing the first stage in the preparation of the improved pile or billet. Figs. 2 and 3 are perspective views representing different embodiments of the second stage of the process, and Fig. 4 is a perspective view of the completed pile or billet.

It is now the usual practice in rolling-mills to cut into short pieces the bar delivered by the muck or puddle rolls, and then to pile and confine these pieces in the form of a rectangular block, which is charged into the furnace and reheated prior to being subjected to the action of the finishing-rolls, whereby the manufacture of the bar or other form of rolled iron is effected. The cutting and piling of the bar necessarily imply either the complete or partial cooling of the same and the consequent loss due to the necessity of subsequently reheating the pile.

In carrying out our invention, therefore, we take the muck or puddle bar A—such, for instance, as is shown in Fig. 1—and either coil the same, as shown in Fig. 2, or fold it, as

shown in Fig. 3, so as to form a tube or block approximating in size to the required size of the finished pile. The coiled or folded bar is then subjected to the action of a steam-hammer, a hydraulic press, or other equivalent pressing or squeezing device, whereby it is solidified and compacted into the form of a homogeneous slab or billet B, as shown, for instance, in Fig. 4. These operations can be performed without the loss of a large percentage of heat by the bar. Hence when the billet is charged into the reheating-furnace it can in a short time be brought up to the proper heat for rerolling, thus saving both time and expense not only in the preparation of the pile or billet, but also in the reheating of the same.

We are aware that rolled bars have been coiled or folded to form a finished article of manufacture, and hence do not broadly claim such coiling or folding of a finished bar; but

We claim as our invention and desire to secure by Letters Patent—

The mode herein described of preparing a pile or billet for subsequent conversion, said mode consisting in coiling or folding the muck or puddle bar while it is hot into billet form, and then while still hot hammering or compressing said coiled or folded bar into a solid billet, substantially as specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WM. EYNON.
WM. SEAMAN.

Witnesses:

WM. D. CONNER,
HARRY SMITH.