

J. B. ASTON.

Patterns for Molding Pipes.

No. 151,343.

Patented May 26, 1874.

Fig 1

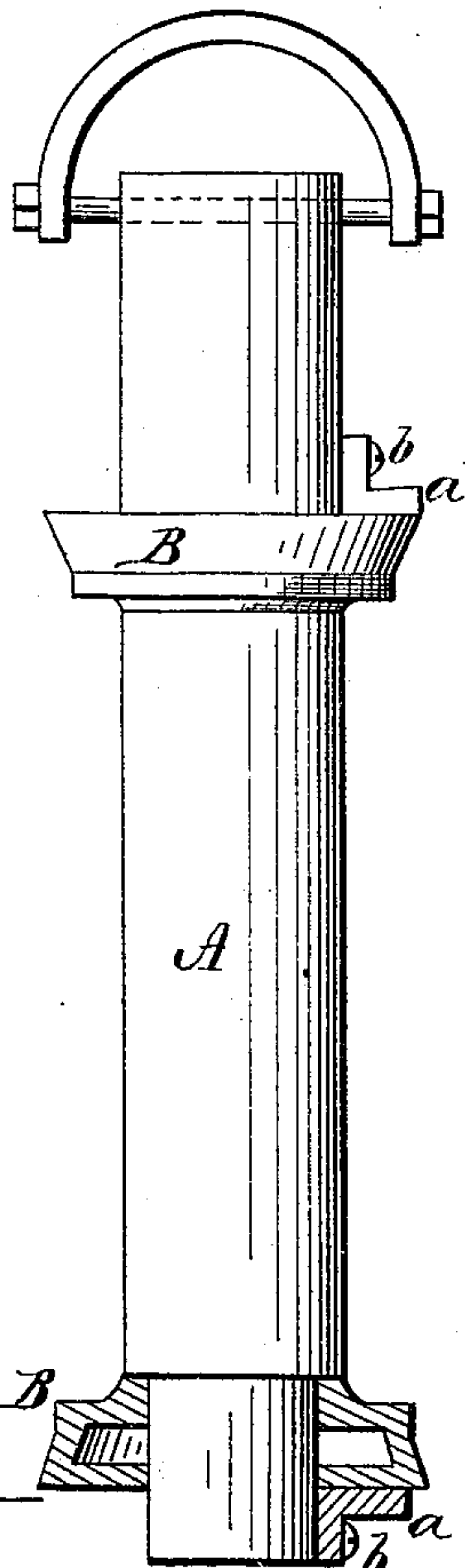


Fig 2

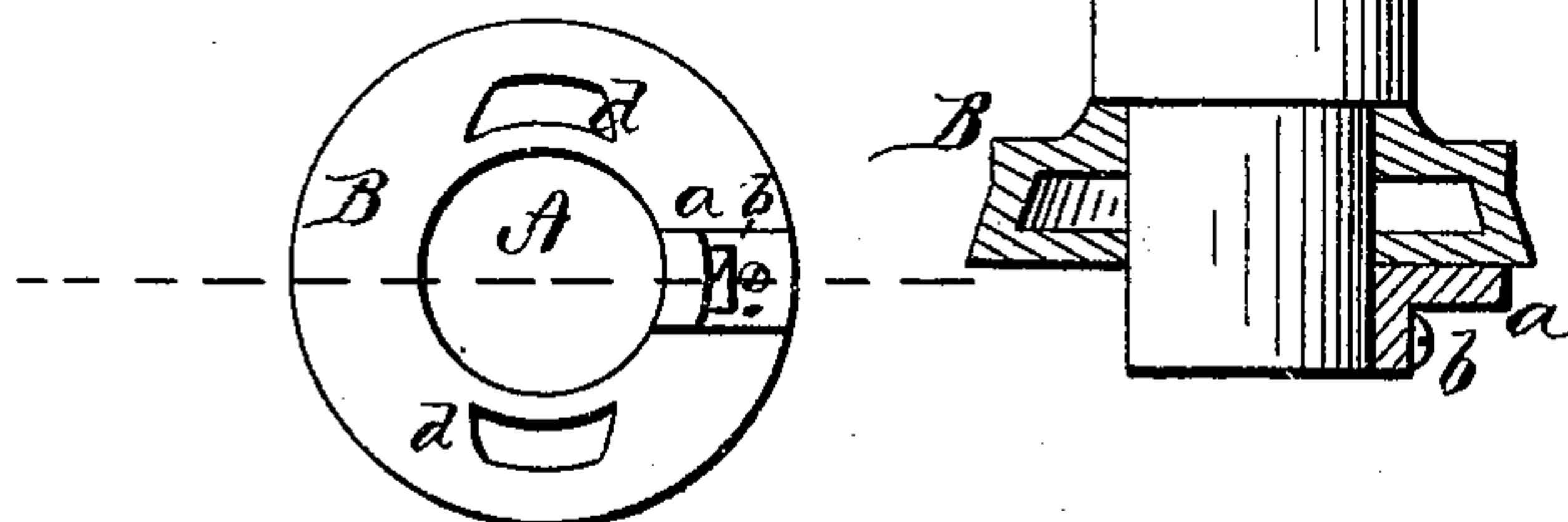
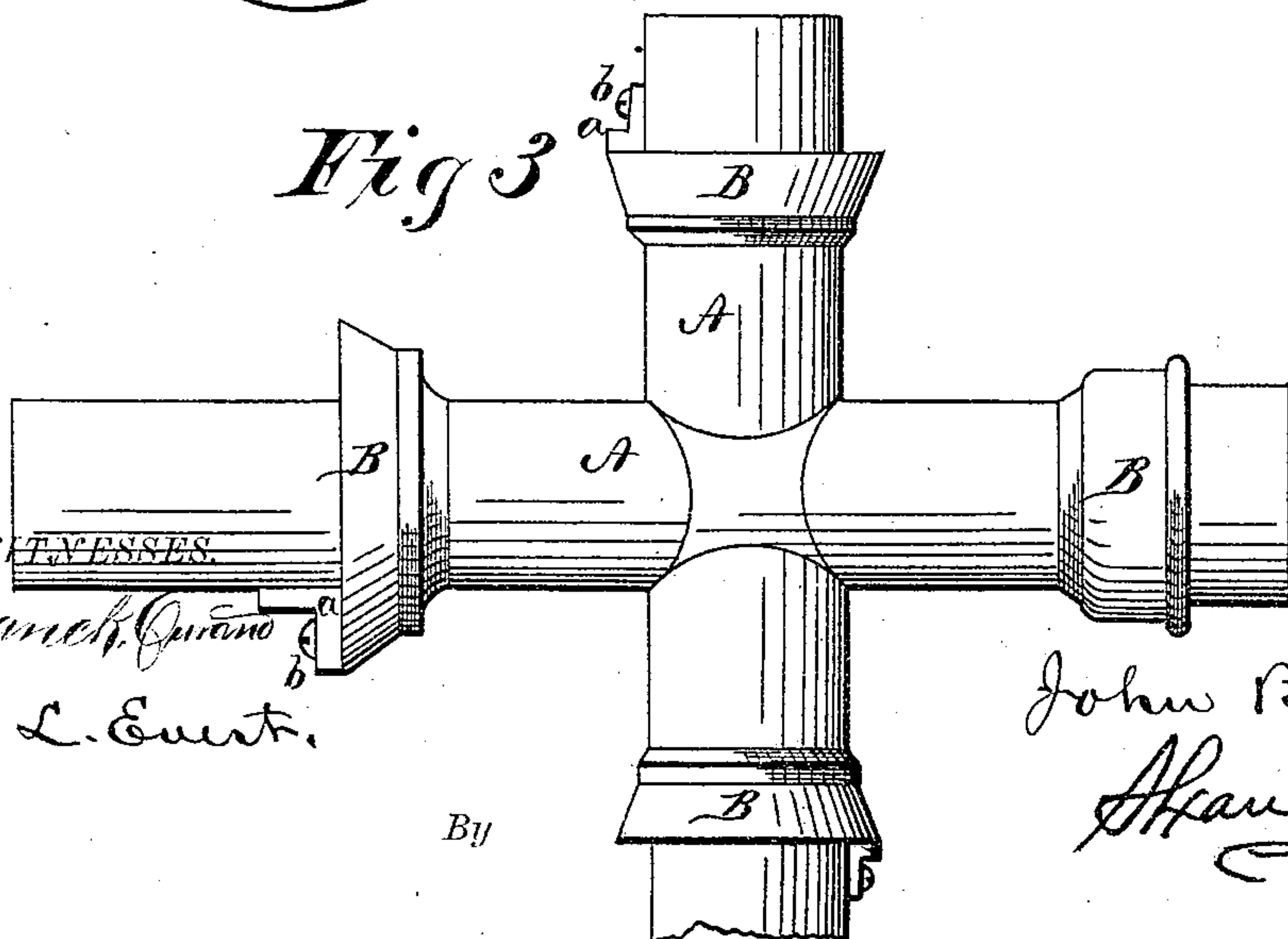


Fig 3



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN B. ASTON, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN PATTERNS FOR MOLDING PIPE.

Specification forming part of Letters Patent No. 151,343, dated May 26, 1874; application filed September 8, 1873.

To all whom it may concern:

Be it known that I, JOHN B. ASTON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Patterns for the Manufacture of Cast-Iron Pipes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention relates particularly to that class of pipes which have flanges on one or both ends, provided with holes, by which they are joined together, though it may with equal advantage be used in making bowl-pipes; and the nature of my invention consists in providing the pattern for making the molds for manufacturing cast-iron pipes with adjustable collars or prints, to form the flanges or bowls, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view, and Fig. 2 an end view, of a straight pattern embodying my invention. Fig. 3 represents a pattern for making a cross-pipe, also embodying my invention.

A represents a pattern arranged for the making of straight pieces of pipe, made either in halves or solid, as desired. This pattern is provided with movable collars B B, which are made in circular form, and slip easily over the outside part of the pattern, so as to allow of their being adjusted to any length of casting desired to be made. These collars form the flange, and also a core-print, for the reception of a core, which forms the joining-face of said flange. The collars B B are also provided with lugs *a* and set-screws *b*, by which they are firmly secured to the pattern when adjusted. They have, also, on their outside surfaces, hand-holds *d d*, for convenience in withdrawing the same when required.

The object of this invention is to procure a perfectly true and square-faced flange, as the broad bearing had by the collar and print-rings B upon the pattern brings the flange to an exact square with the center. Another great advantage is the fact that, with one pattern and set of flanges, constructed as herein described, any number of varying lengths of pipe may be made without the cost, annoyance, and delay of having patterns made of the different lengths; all that is required in my mode being to shift the flange and print B the required distance, and secure it by the set-screw *b*.

In making all kinds of jobbing flanged pipe, such as elbows, T's, cross, or angular pipe, this method is of great advantage, as it brings the flange surely to a square with the angle of the center of the pipe.

In Fig. 3 I have shown a cross-pipe embodying my invention.

The same principle can also be applied in the making of bowl-pipe; as, by having the bowl part of the pattern movable and adjustable, like the print B, it can be set at any point on the pattern desired, and, the core being properly arranged, the bowl will be produced upon the pipe.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In the manufacture of cast-iron pipe, one or more movable and adjustable collars or prints, B, arranged upon the pattern A, substantially as and for the purposes herein set forth.

2. The combination of a pattern, A, collar or print B, with lug *a* and set-screw *b*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of August, 1873.

JOHN B. ASTON.

Witnesses:

JOHN B. GEYSER,
RICHARD ALLEN.