

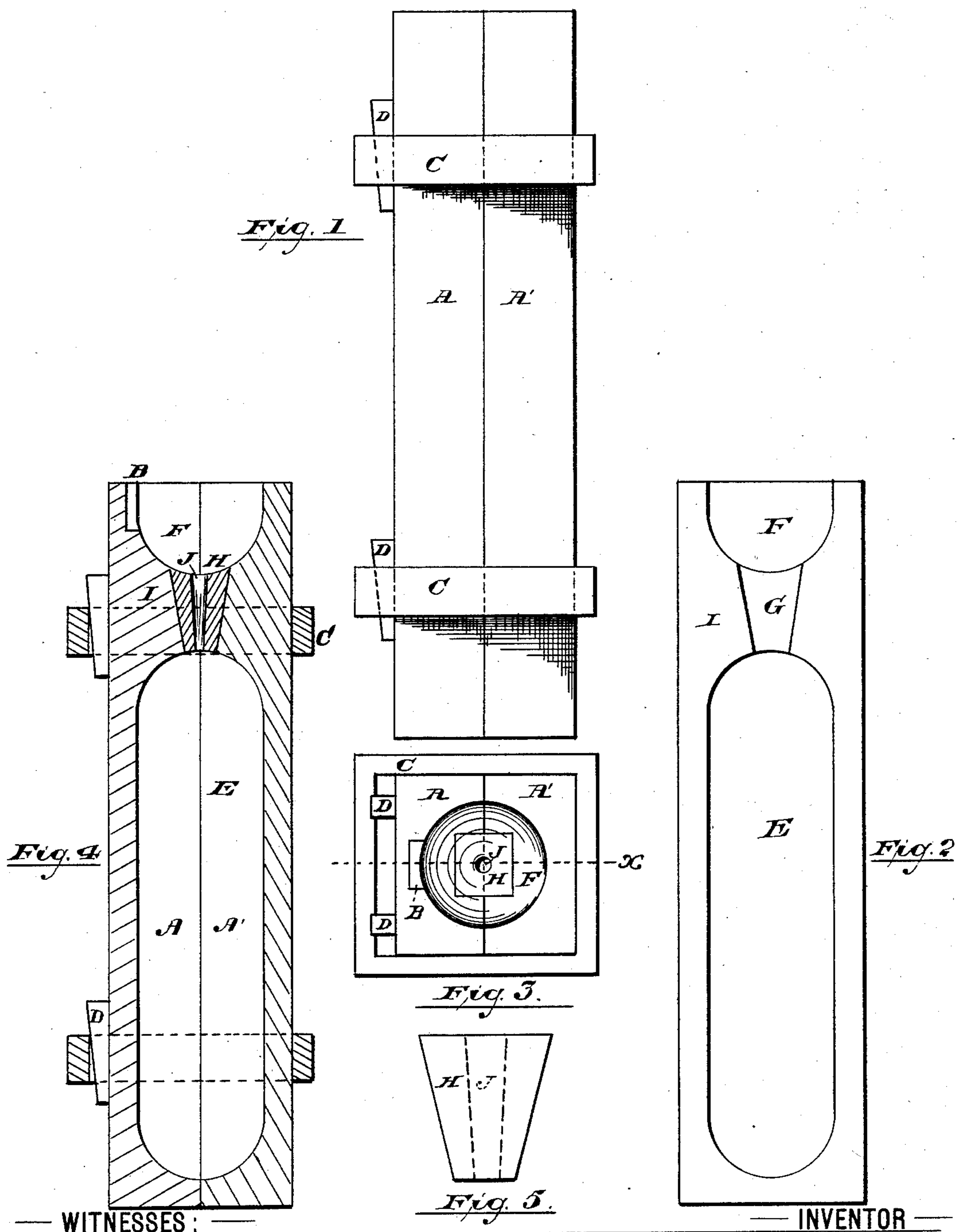
(No Model.)

H. WRIGHT.

INGOT MOLD.

No. 367,571.

Patented Aug. 2, 1887.



WITNESSES:

INVENTOR

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UNITED STATES PATENT OFFICE.

HUGH WRIGHT, OF NEWARK, NEW JERSEY.

INGOT-MOLD.

SPECIFICATION forming part of Letters Patent No. 367,571, dated August 2, 1887.

Application filed February 5, 1887. Serial No. 226,649. (No model.)

To all whom it may concern:

Be it known that I, HUGH WRIGHT, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Ingot-Molds; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a cheap, durable, and convenient ingot-mold, to facilitate removing the ingot when cast, and to prevent piping of the steel in said ingot.

The invention consists in an improved ingot-mold and in the arrangements and combinations of parts, substantially as will be hereinafter set forth, and finally embodied in the clauses of the claims.

Referring to the accompanying drawings, in which like letters indicate corresponding parts in each of the several figures, Figure 1 is a side elevation of the two sections of my improved mold held together ready for use. Fig. 2 is a side elevation of one of said sections, showing the form of the inside or mold proper. Fig. 3 is a top view of said mold. Fig. 4 is a vertical transverse section through line *x*, Fig. 3; and Fig. 5 is a detail, in side elevation, of a certain bushing used in connection with the upper portion of said mold.

In said drawings, A A' indicate the two sections of the improved mold. They may be held together as illustrated in Fig. 1 by bands, as C, or in any other suitable manner. Said bands, being a little larger than the outside dimensions of the mold, permit a wedge or key, as D, to be inserted between the mold and said band C, thus forcing the two sections firmly together, as will be understood. Said mold is provided on the inside with a lower chamber, as E, (illustrated in Figs. 2 and 4,) adapted to receive and mold the molten metal, and is of the form desired in the finished ingot, as herein shown, of a cylindrical form. Said mold is also provided with an upper chamber, F, or chamber adapted to hold a surplus of molten metal to supply the ingot proper with the same when shrinkage occurs, as in cooling, which in the ordinary ingot forms the defect that is techni-

cally known as a "pipe" or "piping." The partition or intermediate wall, I, between the two said chambers is provided with a perforation, G, which is preferably funnel-shaped, and may be large enough to receive a bushing, H, of clay or other fire-proof material adapted to withstand the high temperature of molten steel. Said bushing may be tapered correspondingly with the perforation G of said partition I, so that it will not slip into the chamber E, but be held firmly in place. Said bushing H is provided with a perforation, J, preferably tapered as in Fig. 5, but may be straight, or of any shape desired, to provide a passage for the molten metal from the chamber F into the mold-chamber E, as will be understood.

The feed-chamber F is provided with a depression, B, in the side thereof, which is adapted and designed to be filled with sand, which may be displaced when the metal has cooled. A pry inserted and the sections pulled apart after having removed the bands C, the top portion of the hardened metal, together with the bushing H, may be broken off, leaving the ingot ready for further process of manufacture.

I do not wish to be understood as limiting myself to the exact form of mold-chamber herein described, as it is evident that changes may be made in that particular without departing from the spirit or scope of my invention.

Having thus fully described my invention, what I claim as new is—

1. In a sectional ingot-mold, the combination of a mold-chamber, as E, a feed-chamber, as F, having depressions, as B, a partition, as I, between said chambers provided with a perforation, as G, and a bushing, as H, having a perforation, as J, substantially as and for the purposes set forth.

2. A sectional ingot-mold, substantially as herein described, provided with a depression, as B, near the top thereof, adapted to be filled with sand, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of January, 1887.

HUGH WRIGHT.

Witnesses:

OLIVER DRAKE,
WM. S. CORWIN.