

(No Model.)

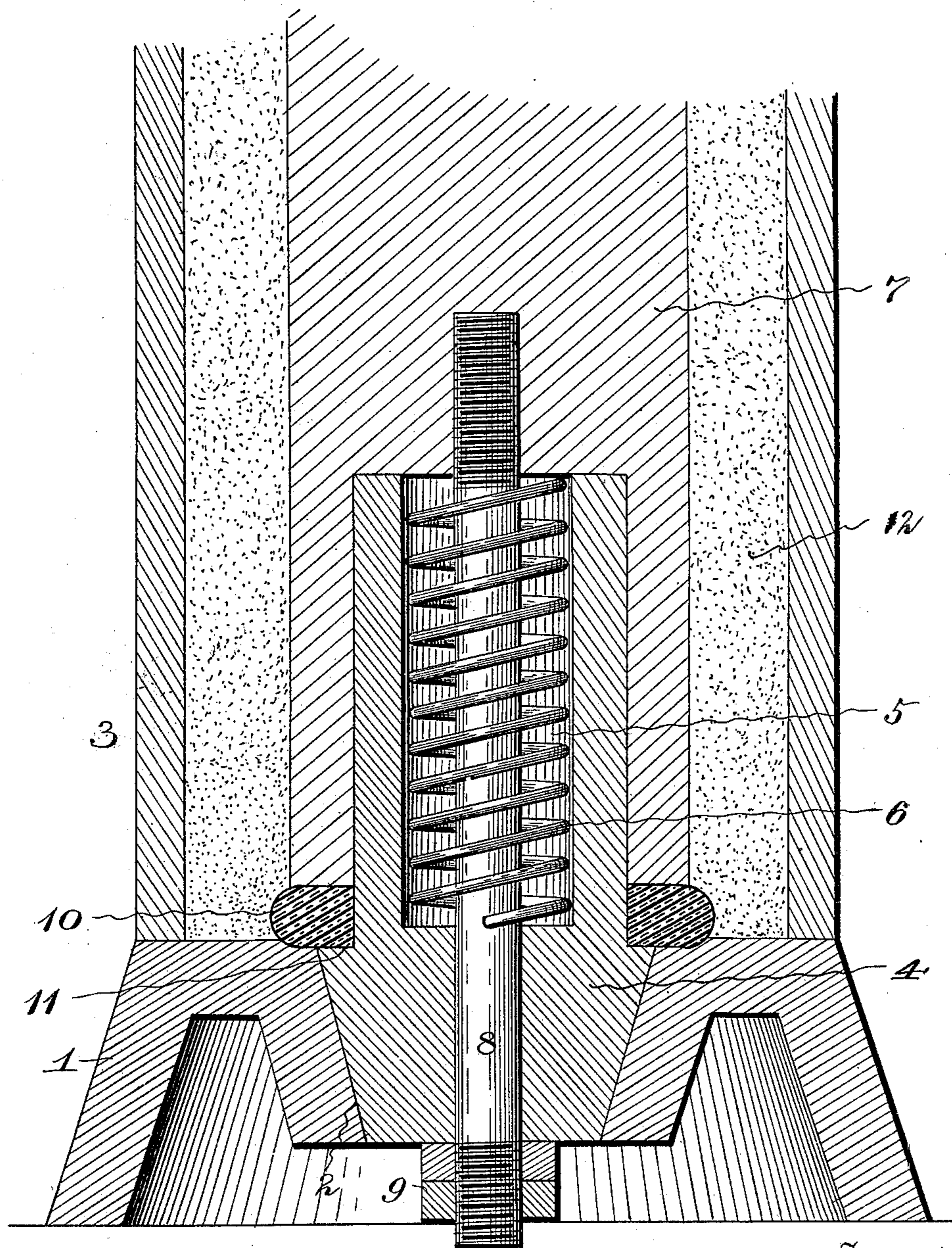
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W. H. SMETHERS.
MOLD FOR CASTING METAL.

No. 554,380.

Patented Feb. 11, 1896.

Fig. 1.



Witnesses
F. L. Ourand.
A. C. Smith.

Inventor
Wm. H. Smethers.
By H. Russell
Attorney

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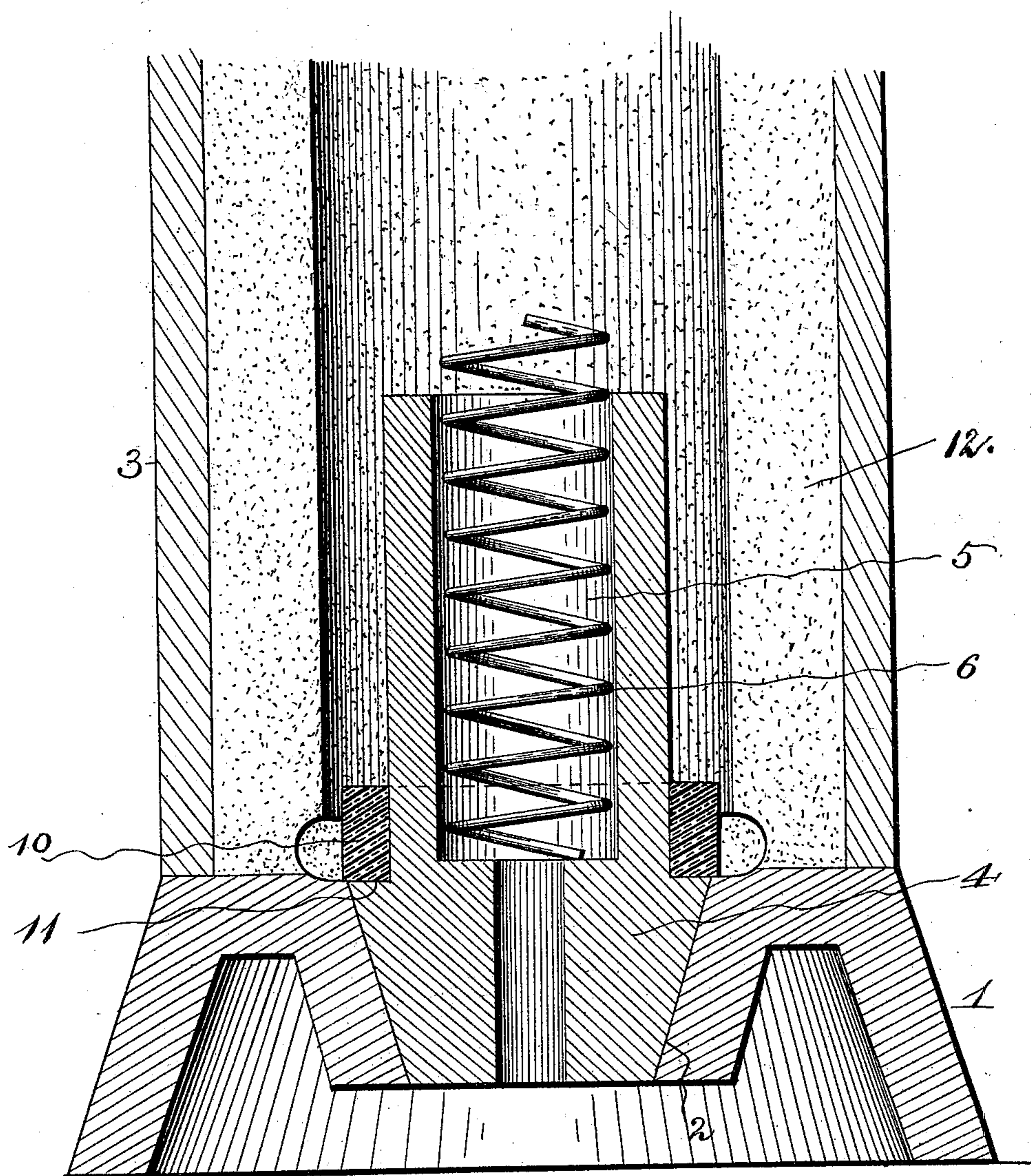
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Fig. 2.



Witnesses
F. L. O'Rand
A. B. Smit

Inventor
Wm H. Smethers.
By *H. B. Winsor*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM H. SMETHERS, OF BERWICK, ASSIGNOR OF ONE-HALF TO FREEMAN S. VOUGHT, OF SILVER BROOK, PENNSYLVANIA.

MOLD FOR CASTING METAL.

SPECIFICATION forming part of Letters Patent No. 554,380, dated February 11, 1896.

Application filed October 18, 1895. Serial No. 566,084. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SMETHERS, a citizen of the United States, residing at Berwick, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Molds for Casting Metal; and I do 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.

My invention relates to metal-workers' molds.

The object of the invention is to provide a mold for holding cast-iron pipe in an upright position, and, furthermore, to provide a mold which shall be simple of construction, durable in use, and comparatively inexpensive of production.

With these objects in view the invention consists of certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a vertical sectional view of my mold, showing the parts assembled; and Fig. 2 is a similar view after the pattern has been removed.

In the drawings, 1 denotes the supporting-base, provided with a central tapering aperture 2, and upon which the flask 3 is supported.

4 denotes the core-print, having a tapering end which is adapted to fit the tapering aperture in the base and provided with a hollow tubular portion 5, in which is located a stiff coil-spring 6.

7 denotes the pattern, which embraces the tubular portion of the core-print, and 8 denotes a rod which extends through the core-print into the pattern and is secured thereto. The lower end of this rod is provided with a nut 9, by means of which the pattern may be drawn down tightly upon the tubular end of the core-print against the action of the coil-spring.

10 denotes an elastic band, which is seated on an annular shoulder 11 of the core-print, and which has a normal diameter greater than that of the core-print and less than the diameter of the pattern.

12 denotes the sand mold.

In operation, when pressure is applied to the pattern it will be forced down upon the elastic band and expand the same, as shown in Fig. 1, thereby making a circular groove at the base of the sand mold, so that the pipe may be cast with a similar bead or flange. When pressure is removed from the pattern and it is elevated from the sand mold, the elastic band will contract, as shown in Fig. 2, thus leaving the annular groove at the base of the sand mold to be filled by the molten metal to form the bead or flange of the pipe. The pattern may be forced down in any suitable manner upon the elastic band—for instance, by screwing the nut 9 tightly upon the rod 8. When the nut is loosened, the energy of the spring will exert itself and the pattern will be raised sufficient to allow the rubber band to contract, when other means may then be employed for entirely removing it from the flask, the initial movement being slow, so as not to discharge or break the sand mold.

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

In a metal-worker's mold, the combination with the supporting-base, provided with a central tapering aperture and the flask resting thereon, of a core-print having a tapering end adapted to fit the aperture in said base, and provided with a hollow tubular portion having a stiff coil-spring located therein, the pattern, a rod extending through the core-print into the pattern, a nut on the projecting lower end of said rod and an elastic band seated on an annular shoulder of the core-print, and having a normal diameter greater than that of the core-print and less than the diameter of the pattern, as set forth.

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

WILLIAM H. SMETHERS.

Witnesses:

DAVID WALBER,
FREEMAN S. VOUGHT.