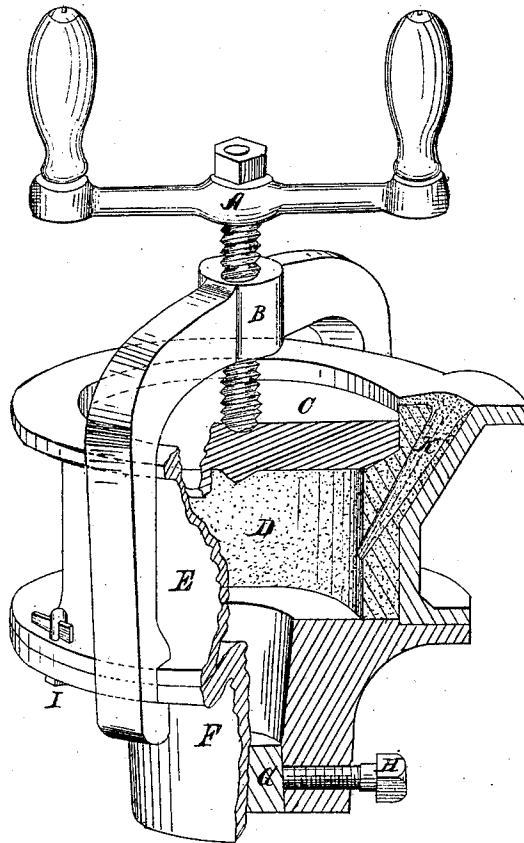


*H. Balthoff,*

*Shoe Flask.*

*No. 108,556.*

*Patented Oct. 25. 1870.*



Witnesses

*John H. Ginn*

*L. G. Folger*

Inventor

*Henry Balthoff*

# United States Patent Office.

HENRY BOLTHOFF, OF CENTRAL CITY, COLORADO TERRITORY.

Letters Patent No. 108,556, dated October 25, 1870.

## IMPROVEMENT IN FLASKS FOR CASTING STAMP-SHOES FOR CRUSHING-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern :*

Be it known that I, HENRY BOLTHOFF, of Central City, Gilpin County, Colorado Territory, have invented a new and Improved Molding-Flask for the Manufacture of Stamp-Shoes and Dies for Stamps or Crushing-Mills, by means of Screw-Pressure; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in exerting screw-pressure upon the iron when in a molten state, by means of a screw, as shown at A in the accompanying drawings. This pressure is continued until the iron becomes chilled or hard.

By means of this pressure, the iron of the shoe or die is rendered much more dense and durable than by the ordinary mode of casting.

The screw is held in position by means of the clasp B, which clasp may be made so as to be adjusted to either the upper or lower rim of the molding-flask.

The lower end of the screw is adjusted in a concave in the upper service of the upper "chill" or cover to the flask at C. The inside of the flask E is packed with sand, represented by D, which sand serves the double purpose of supporting the cover C when the pattern is withdrawn, and also for facilitating the removal of the shoe or die when cast.

The upper portion, E, of the flask is secured to the

lower portion or chill, F, of the flask, by means of the key at I.

G is a movable plug, which can be easily raised or lowered for the purpose of lengthening or shortening the neck of the shoe, to any length required. This plug is fastened at any given point, by means of a thumb-screw, H.

The iron is poured into the flask through the groove or spout at K.

On the under side of the cover C, and at D, by reference to the drawings, is a teat, or prominence, which is designed to produce a concave on the bottom of the shoe, which will prevent the shoe from wearing to a point when placed on an old die having an irregular surface.

A shoe manufactured in this flask will be perfectly smooth and regular in form, making it easily and perfectly adjustable to the stem, thus diminishing the liability of breaking on account of imperfect adjustment. Besides, these shoes and dies will wear nearly twice as long as the ordinary shoes and dies on account of the greater density given to the iron by screw-pressure exerted in the manner above described.

What I claim as my invention, and desire to secure by Letters Patent, is—

A flask, constructed and arranged as described.

Witness: HENRY BOLTHOFF.

WESLEY CRITCHEL,

JOSEPH W. KENNEDY.