

(No Model.)

G. BOLE.

DIE FOR UPSETTING GIMLET BIT SHANKS.

No. 264,233.

Patented Sept. 12, 1882.

Fig. 1.

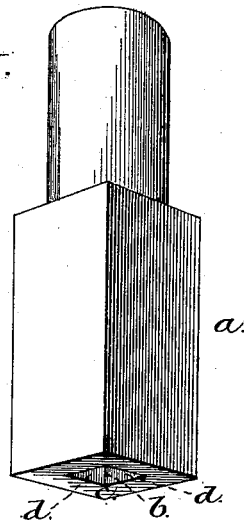
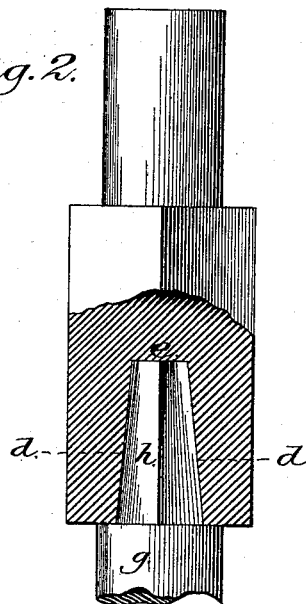


Fig. 2.



WITNESSES

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GEORGE BOLE, OF CHESTER, CONNECTICUT.

DIE FOR UPSETTING GIMLET BIT-SHANKS.

SPECIFICATION forming part of Letters Patent No. 264,233, dated September 12, 1882.

Application filed January 7, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE BOLE, a subject of the Queen of Great Britain, residing at Chester, in the county of Middlesex and State of Connecticut, have invented a new and valuable Improvement in Dies for Upsetting Gimlet Bit-Shanks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective of my device, and Fig. 2 is an elevation, partly in section.

This invention has relation to the manufacture of gimlets and bits; and it consists in the construction and novel arrangement of the squared and deep recess, tapering on all sides from its mouth to its bottom, formed in a steel die, and serving to upset a squared and tapering seat on the end of a round wire shank, as hereinafter set forth.

In the accompanying drawings, the letter *a* designates the die, which is made of steel, and is formed with a deep squared recess, *b*, tapering from its mouth *c*, on each side *d*, to its bot-

tom *e*, the axial line of the recess being at right angles to the face of the die, as shown. That portion of the upsetting-recess *b* which is nearest its mouth is of greater diameter than the wire *g*, on which the seat *h* is to be upset, this part of the recess gradually becoming smaller in diameter than the wire.

The die is designed to be used in a power-press, and serves to upset the squared and tapering seat required on the end of the shank, crowding the metal outward at the mouth of the die-recess in such a manner as to form a strong shoulder.

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

The upsetting-die for bit-shanks, having the deep squared recess *b*, tapering on all sides from its mouth *c* to its bottom *e*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE BOLE.

Witnesses:

FREDERICK C. DANIELLS,
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