

W. RUSSELL.  
Die for Creasing Horseshoes.

No. 164,044.

Patented June 1, 1875.

Fig. 1

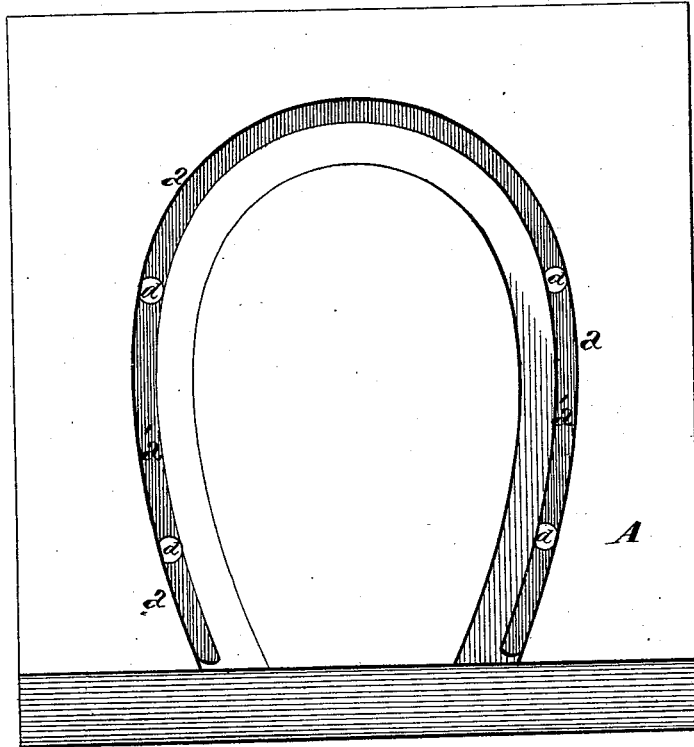


Fig. 3

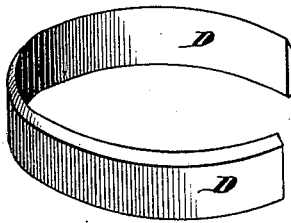
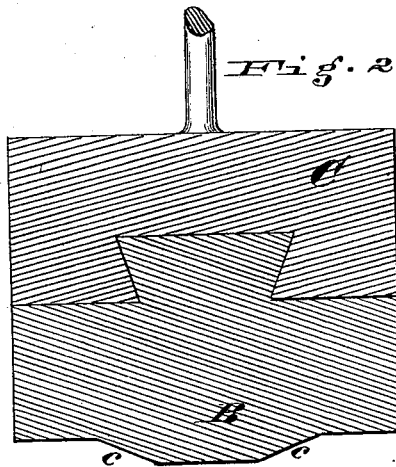
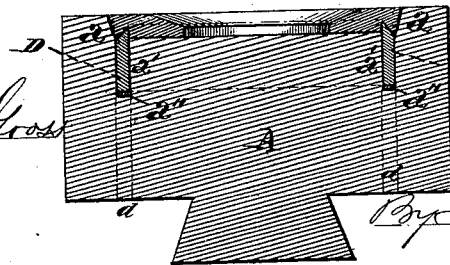


Fig. 2



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# UNITED STATES PATENT OFFICE.

WILLIAM RUSSELL, OF CINCINNATI, OHIO.

## IMPROVEMENT IN DIES FOR CREASING HORSESHOES.

Specification forming part of Letters Patent No. **164,044**, dated June 1, 1875; application filed May 26, 1875.

*To all whom it may concern:*

Be it known that I, WILLIAM RUSSELL, of Cincinnati, Hamilton county, State of Ohio, have invented an Improvement in Dies for Making Horseshoes, of which the following is a specification:

My invention is adapted to be used in connection with a drop-hammer operated by steam or otherwise, one of the dies remaining stationary and the other being attached to the head of the hammer; and my invention consists in such a construction of the dies and combination therewith of an adjustable creaser that while provision is made for preventing the escape of the metal either interiorly or exteriorly while being hammered, provision is also made for the adjustment of the creaser to take up what is lost in sharpening, and for the removal of the same to permit change of cresers to effect a change in depth or configuration of the shoe-crease.

Figure 1 is a plan of the lower die. Fig. 2 is a section of both dies in position. Fig. 3 is a perspective view of the creaser.

A is the stationary lower die; B, the upper die; and C, the hammer-head, to which the upper die is attached. The lower die is of the following construction: It has a rim, *a*, encircling, so far as the shoe extends, a recess, into which the shoe-blank to be hammered and creased is received. It is also constructed with a groove, *a'*, extending, as shown, around the sides and front of the die, and deep enough to receive the continuous bent piece D, which I term the creaser, and which is adapted to be sharpened, hardened, or otherwise operated upon when out of the die, and which is the only piece subjected to excessive wear in use.

The creaser D, when in place in die A, rests solidly upon the bottom of the groove *a'*, or upon an adjusting interposed liner, *a''*, of metal, so that it cannot be displaced by the violent action of the hammer, and below the creaser holes *d* are provided for the introduction of a drift to knock out the creaser when it is necessary either to adjust, sharpen, or change it. The creaser being, as shown, continuous, it can be made out of one piece of metal, sharpened evenly and hardened in one piece, and being in the form of the shoe, has a flexible characteristic, which enables it to retain its place in the die against the withdrawing tendency of the shoe when forced from the die.

The rim *a* of the die prevents the escape of metal outside of the creaser, and by confining it enables the creaser to tightly compress the rim of the shoe outside of the crease-line, and thus stiffen the shoe. To stiffen the shoe inside of the crease-line the chamfering projection *c* on the die B is sufficient. The creaser may be cut away slightly at the toe end to prevent creasing at the toe, if necessary.

I claim—

In combination with the grooved and rimmed die A *a a'*, the creaser D, constructed and operating substantially as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

WILLIAM RUSSELL.

Witnesses:

JOHN E. JONES,  
F. MILLWARD.