C. FISHER.

CAST-IRON ANVIL.

No. 189,892. Patented April 24, 1877.

FIG. I.

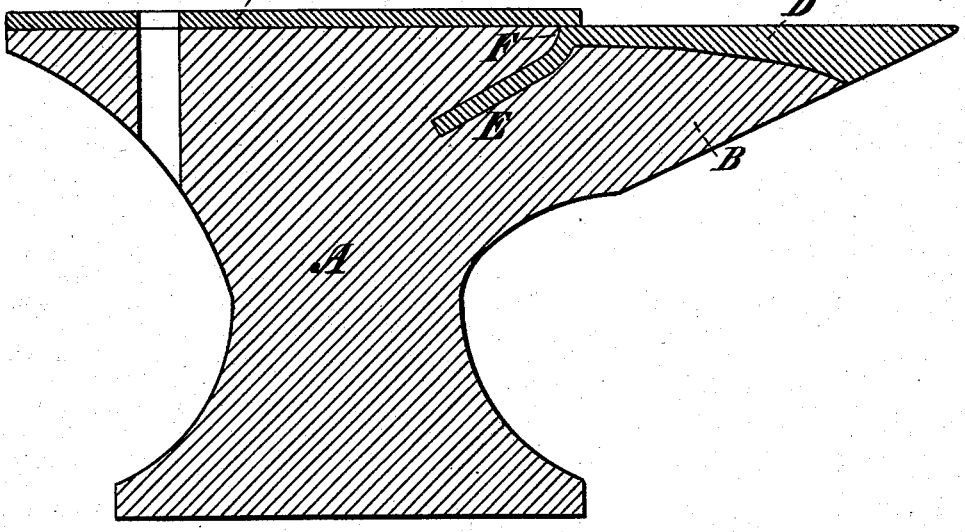


FIG. II.

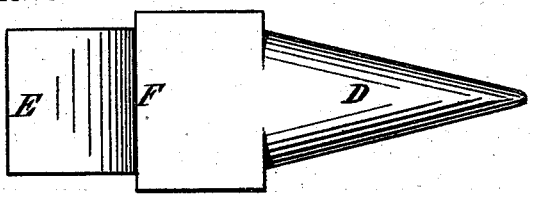
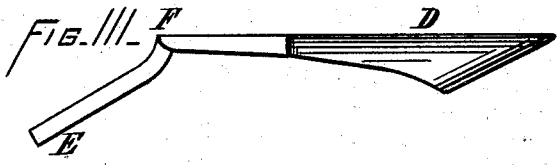


FIG. III.



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CLARK FISHER, OF TRENTON, NEW JERSEY.

IMPROVEMENT IN CAST-IRON ANVILS.

Specification forming part of Letters Patent No. **189,892**, dated April 24, 1877; application filed March 21, 1877.

To all whom it may concern:

Be it known that I, CLARK FISHER, of Trenton, in the State of New Jersey, have invented a new and useful Improvement in Cast-Iron Anvils, of which I do hereby declare the following specification to be a full, clear, and precise description.

My invention relates to the class of steel-faced cast-iron anvils, and aims to remedy the defects existing in and resulting from the present methods of affixing the steel-face plate of the horn or beak, and to produce a strong anvil not liable to fracture between horn and body, to which ends it consists in a face-plate for the beak or horn of an anvil provided with an inwardly-projecting tongue adapted to extend from the base of the beak down into the body proper or web of the anvil, so as to permit the molten cast metal to not only come into contact with every portion of the under surface of the face-plate of the body, but also to completely surround and embed the tongue of the horn face-plate, and thereby form an anchorage for the plate-horn, whereby it is rendered difficult to fracture the horn.

Heretofore in anvils of the class recited it has been usual to lap and weld or lap the face-plates of horn and body, whereby it will be readily understood the strain on the horn-plate was largely transferred to the body-plate while the cast metal was prevented from uniting with the entire under surface of the body-plate, the result being decided weakness in and tendency to fracture across the area of juncture of horn with body.

In the accompanying drawings, Figure 1 represents, in sectional elevations, an anvil constructed according to my invention. Fig. 2 is a top view of the horn plate and its tongue, and Fig. 3 a side view of the same.

A represents the web or body proper; B, the horn or beak; C, the body face-plate; and D, the horn face-plate, E representing its tongue or embedded portion. The tongue is preferably formed with a ridge or shoulder, F, which, while providing an accurate means of fitting against the body-plate, also prevents the pulling out or removal of the horn-plate.

It is obvious that my improvement is inexpensive and easily applied in the manufacture of the anvil, while it greatly increases its strength and value.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. For a cast-iron anvil a face-plate for the horn or beak, provided with an internally-projecting tongue adapted to be embedded in the cast metal of the body, substantially as and for the purposes set forth.

2. As a new article of manufacture, the cast-iron anvil, the horn of which is provided with and anchored by a face-plate projected into the body of the anvil, substantially as shown and described.

CLARK FISHER.

Witnesses:
WILLIAM L. DAYTON,
JOHN JOLLEY, Jr.