C. H. THOMPSON.

DIES FOR MAKING PLOW-BRACES.

No. 174,456. Patented March 7, 1876.

Fig. 1.

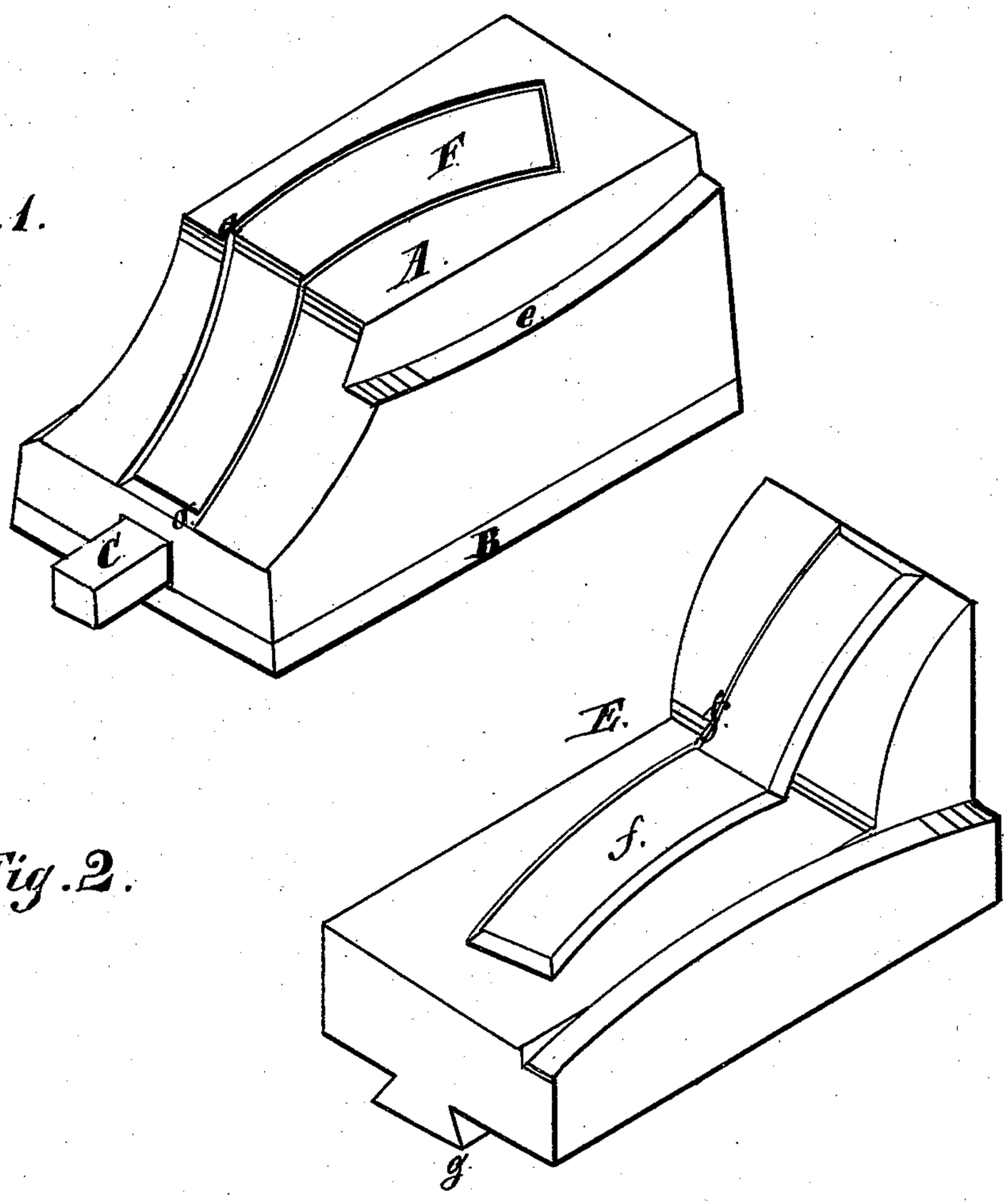

Fig. 2.

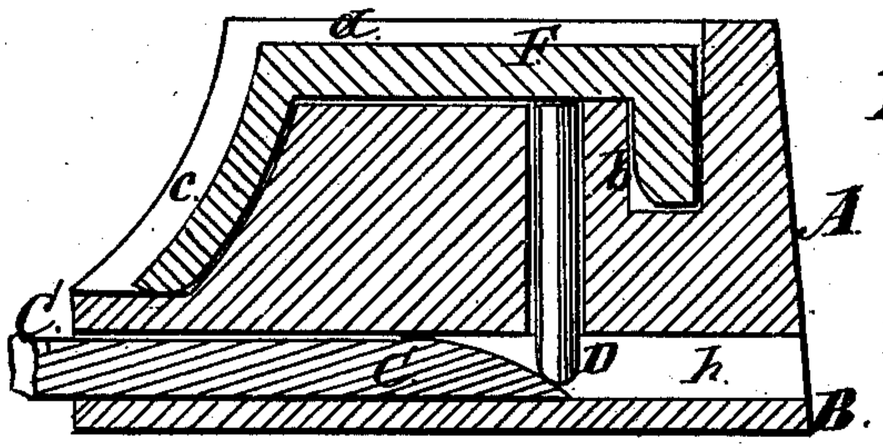

Fig. 3.

Witnesses:

L. A. Bunting.

Heinrich L. Bruns.

Inventor:

Chas H. Thompson

by L. L. Coburn atty

UNITED STATES PATENT OFFICE.

CHARLES H. THOMPSON, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO N. S. BOUTON, OF SAME PLACE.

IMPROVEMENT IN DIES FOR MAKING PLOW-BRACES.

Specification forming part of Letters Patent No. **174,456**, dated March 7, 1876; application filed August 25, 1875.

To all whom it may concern:

Be it known that I, CHARLES H. THOMPSON, of Chicago, county of Cook and State of Illinois, have invented Improvements in Dies for Making Plow-Braces, of which the following is a specification, reference being had to the accompanying drawings, which form a part thereof.

Plow-braces are made with their ends bent in such shape as to fit against and be fastened to different parts of the plow. It has been impracticable to form them in dies of the proper shape on account of the difficulty of removing the brace from the die after it is formed into shape.

The object of my invention is to remove the brace from the die with facility.

My invention consists of the combination of the wedge and pin with the bed-block of the die, as hereafter fully described, for the purpose of raising the brace from the bed-block, so that it can be removed.

In the accompanying drawings, Figure 1 represents the bed-block of the die resting upon the anvil. Fig. 2 represents the drop. Fig. 3 represents a longitudinal sectional view of the bed-block and face of the anvil upon which it rests.

A represents the bed-block, having an elongated recess, *a*, on its top, one end of which is vertical, at *b*, the other inclined, at *c*. *e* is a shoulder made in the bed-block A, which serves as a guide to the drop. B is the anvil, upon which the bed-plate A rests. C is a wedge-shaped slide, and D a pin, which plays loosely in the bed-plate A beneath the recess *a*. E is the drop, the under surface of which is made to fit upon the upper surface of the bed-plate A. It has also a die, *f*, which fits into the recess or female die *a*. *g* serves as a handle, by which the drop is lifted. F is the plow-brace, after it is stamped into shape in the die. This brace is made from a straight bar of metal, which is heated. One end is then placed in the vertical recess *b*, and the bar is bent down into the recess *a*. The drop E is then dropped upon the bed-block, and the die *f*, striking upon the top of the bar, forms it into the shape of the plow-brace F. When the drop is raised from the bed-plate it is necessary to remove the finished brace from the recess or female die *a*, which is done by sliding the wedge-shaped slide C in the recess *h*, beneath the pin D, which raises it and lifts the brace F out of the recess, or far enough out of the recess to be taken hold of and fully removed. The pin D is sufficiently near the vertical end of the brace to lift that end vertically.

It will be observed that the brace F cannot be readily taken hold of from above, on account of its shape and its position in the die, to remove it. I therefore reach it by means of the vertical pin D and slide C, by means of which I raise it sufficiently far out of the die to be grappled and removed.

I am aware that other devices might be used besides the slide C to raise the pin D, but I regard the slide simple and effective.

I claim—

1. The combination of the bed-block A, provided with the recess or female die *a*, and pin D, as specified.

2. The slide C, in combination with the pin D and recessed bed-block A, as specified.

CHARLES H. THOMPSON.

Witnesses:

HEINRICH F. BRUNS,

L. A. BUNTING.