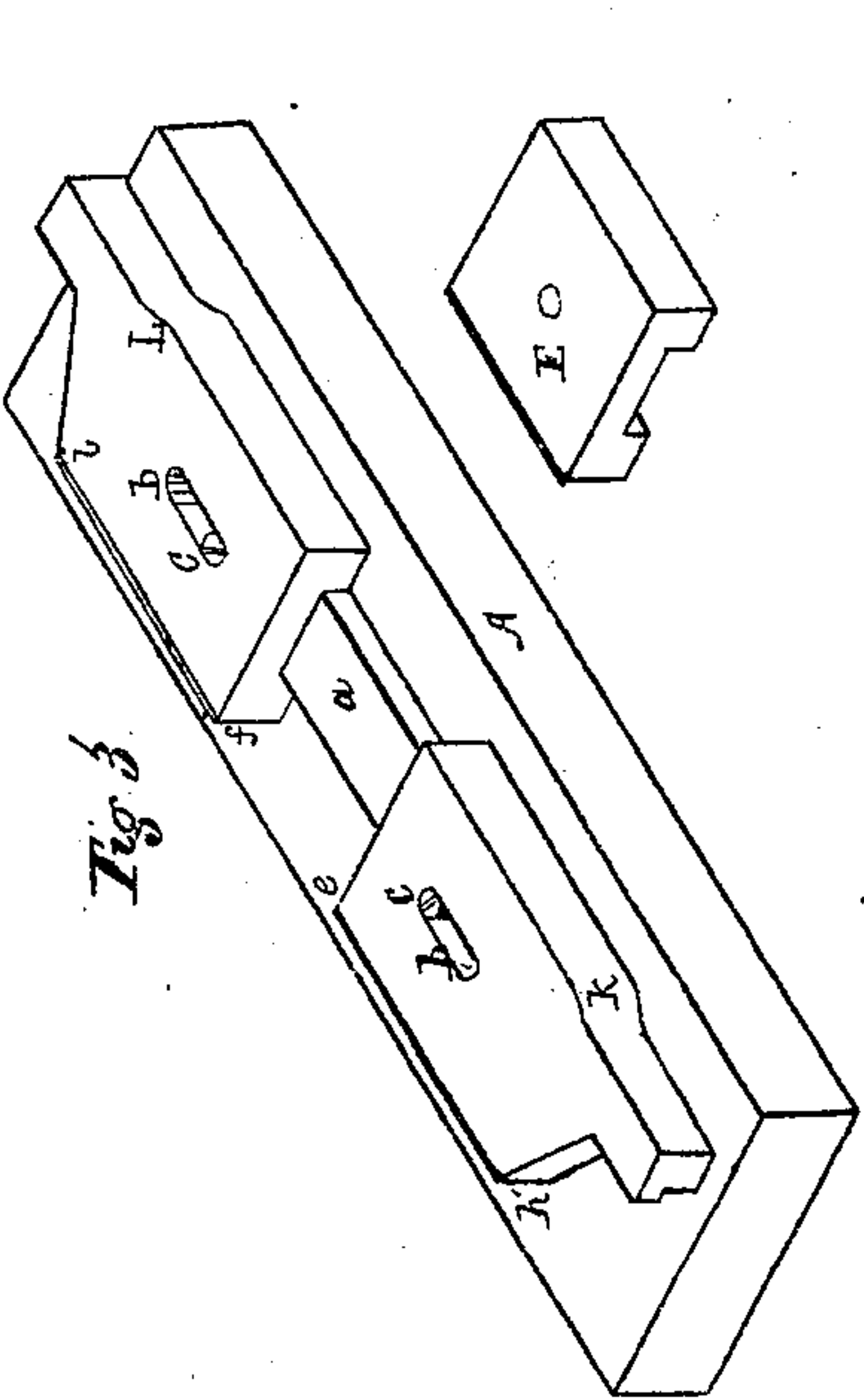


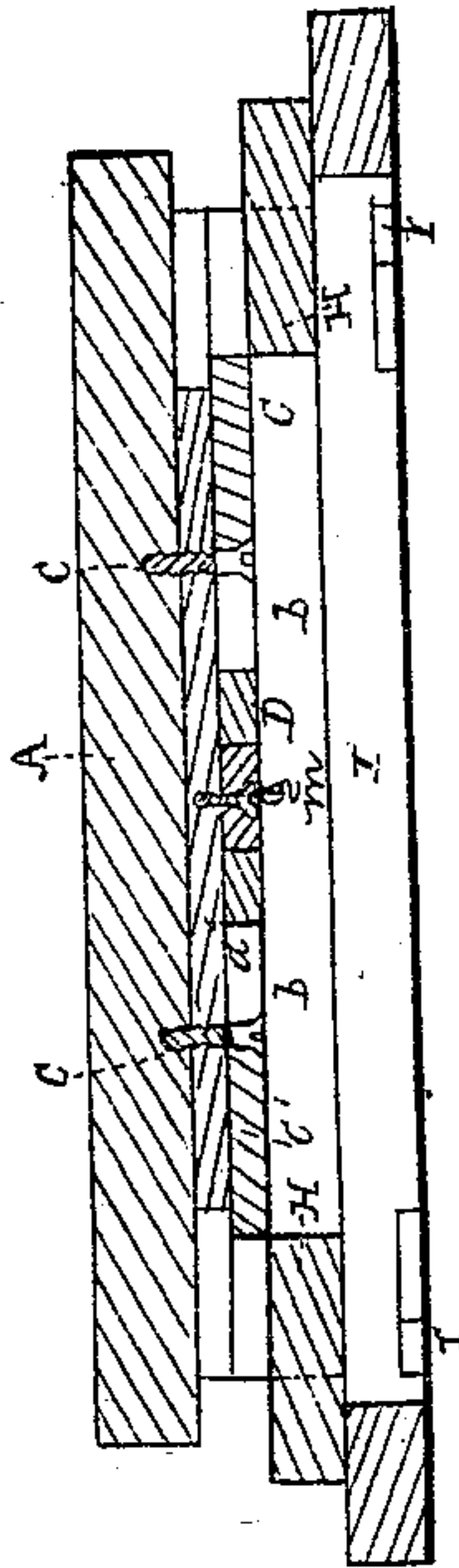
*C. Shofford.*  
*Collar Machine.*

*No. 71,076.*

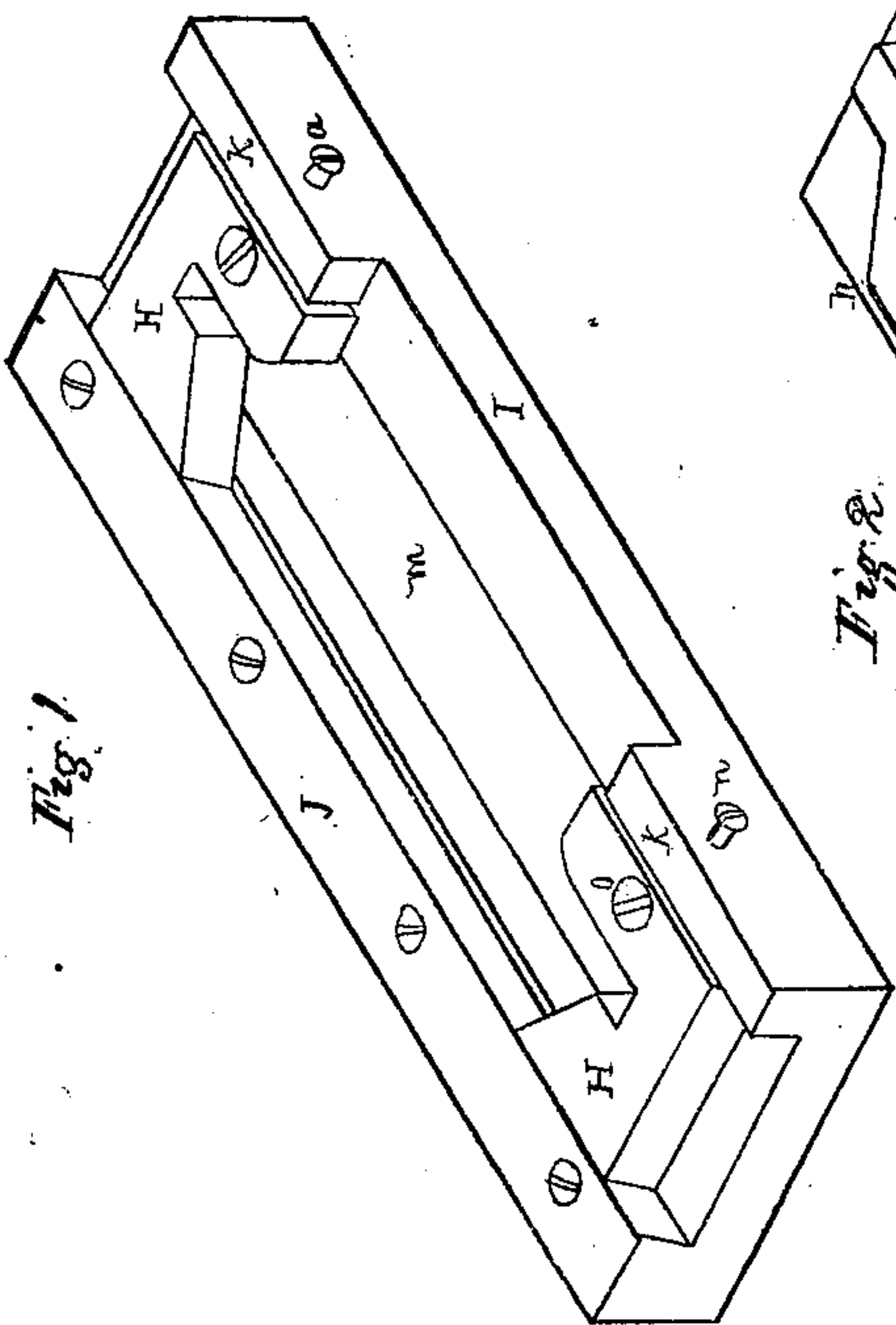
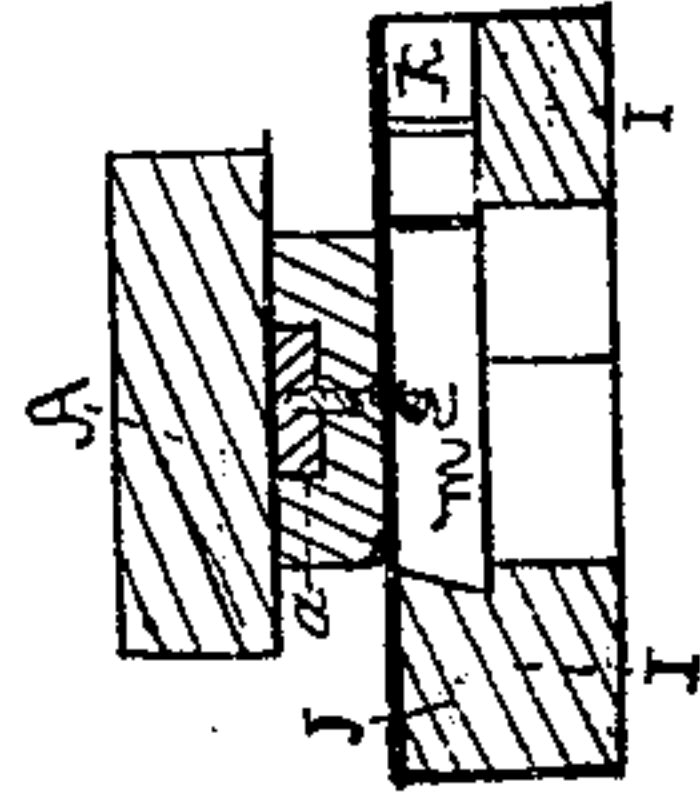
*Patented Nov. 19, 1867.*



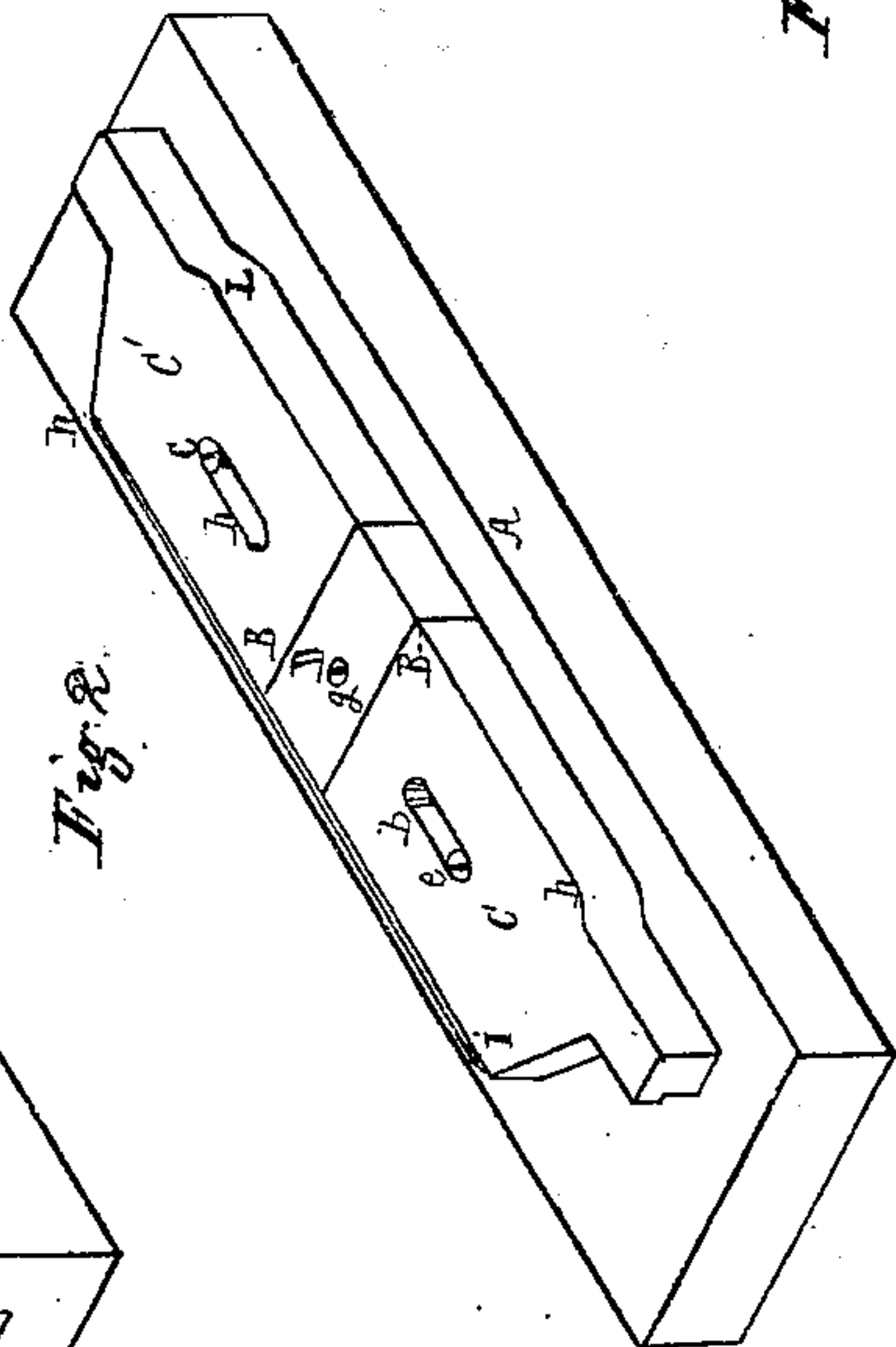
*Fig. 3.*



*Fig. 4.*



*Fig. 1.*



*Fig. 2.*

*Witnesses,*  
*N. W. Stearns*  
*P. E. Stearns*

*Inventor,*  
*Chas. Shofford*



# United States Patent Office.

CHARLES SPOFFORD, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF  
AND SAMUEL T. LAMB, OF SAME PLACE.

*Letters Patent No. 71,076, dated November 19, 1867.*

## IMPROVED ADJUSTABLE DIE FOR CUTTING PAPER COLLARS AND OTHER ARTICLES.

*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, CHARLES SPOFFORD, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an improved Adjustable Cutting-Die, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figures 1, 2, and 3 are perspective views, representing the male and female portions of my adjustable die for cutting paper collars.

Figure 4 is a longitudinal section, and

Figure 5 a transverse section, representing the two dies in a position for cutting out the collar.

My invention relates particularly to certain improvements in a die for cutting paper collars, for which Letters Patent of the United States were granted to George K. Snow, on the 28th day of November, A. D. 1865. His said invention consisted in a pair of dies, the adjustments of which, to adapt them to cut collars of varying sizes, were performed with difficulty, and consumed much time, owing to their complicated construction and their position in the machine, while the outer ends only of the collars were cut by them, the division of one collar from another on the line forming the lower edge of one and the upper edge of the other, being performed by another die or cutter at a separate and subsequent operation.

My invention consists in a single die, which cuts out the entire collar, or other article of paper, or other material at a single operation, the male portion of the die being composed of sections, which are secured to the plunger, the outer sections being moved and adjusted longitudinally to and from each other, and the space between them being occupied by a block of the size required to form the collar of the right length, while the female portion of the die is also formed in sections, so that its size may be varied to correspond with that of the male portion of the die, by which construction I avoid the expense incurred in making separate dies for each size of article to be cut, in a more simple and convenient manner than by the employment of the dies referred to in the above-mentioned patent.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the head of the plunger, to which is screwed the male portion B of a die for cutting paper collars, composed of three pieces or sections, C C' D, a longitudinal strip, *a*, serving as a guide, being interposed between the sections and the plunger, to admit of the outer sections C C' being slid thereon to obtain the length of collar required, suitable slots, *b*, and screws *c*, being provided to enable the workman to secure the sections immovably in place when adjusted, the space *e f* between them being filled by a block, D, fig. 2, which is fastened to the guide *a* by a screw, *g*, and is readily removed therefrom to allow a block, E, of a different size being substituted therefor. (See fig. 3.) The upper and lower lines *h i* and *k l* of the die, corresponding to the upper and lower edges of the collar, are made straight, and parallel to each other, and the construction of the guide on which they slide is made to correspond thereto, but when a collar is required whose upper and lower edges are curved, it is simply necessary to employ a curved guide. The female portion of the die consists of two end pieces, H, resting on a bed-piece, I, provided with an opening, *m*, whose width is equal to the width of the male portion B of the die, and consequently that of the collar to be cut. Steel strips J K are screwed firmly to the bed-piece, and serve as ways, within which the end pieces H are made to slide longitudinally, so that they may be fitted snugly to the male portion B, after it has been adjusted to a given size of collar, the female portion, when fitted, being pressed against the strip J by set-screws *n*, thus preventing any lateral displacement, and being held down immovably upon the bed-piece by bolts *o* passing through slots and tightened by screw-nuts *r*. The edge *h i* of the several sections composing the male portion of the die is slightly bevelled, as shown in figs. 2, 3, and 5, to insure a shearing cut.

Instead of constructing the male portion B of the die in sections, it may be made in one piece, and a die of a different size be employed, whenever a collar of different size is required, the female portion only of the die being made adjustable.

I have referred in the above description to a die for cutting paper collars, but it may be constructed in any form to adapt it for cutting out a variety of articles, either in metal, cloth, or other material.

### Claim.

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

The within-described adjustable die, constructed substantially as and for the purpose set forth.

CHAS. SPOFFORD.

Witnesses:

N. W. STEARNS,

P. E. TESCHEMACHER.