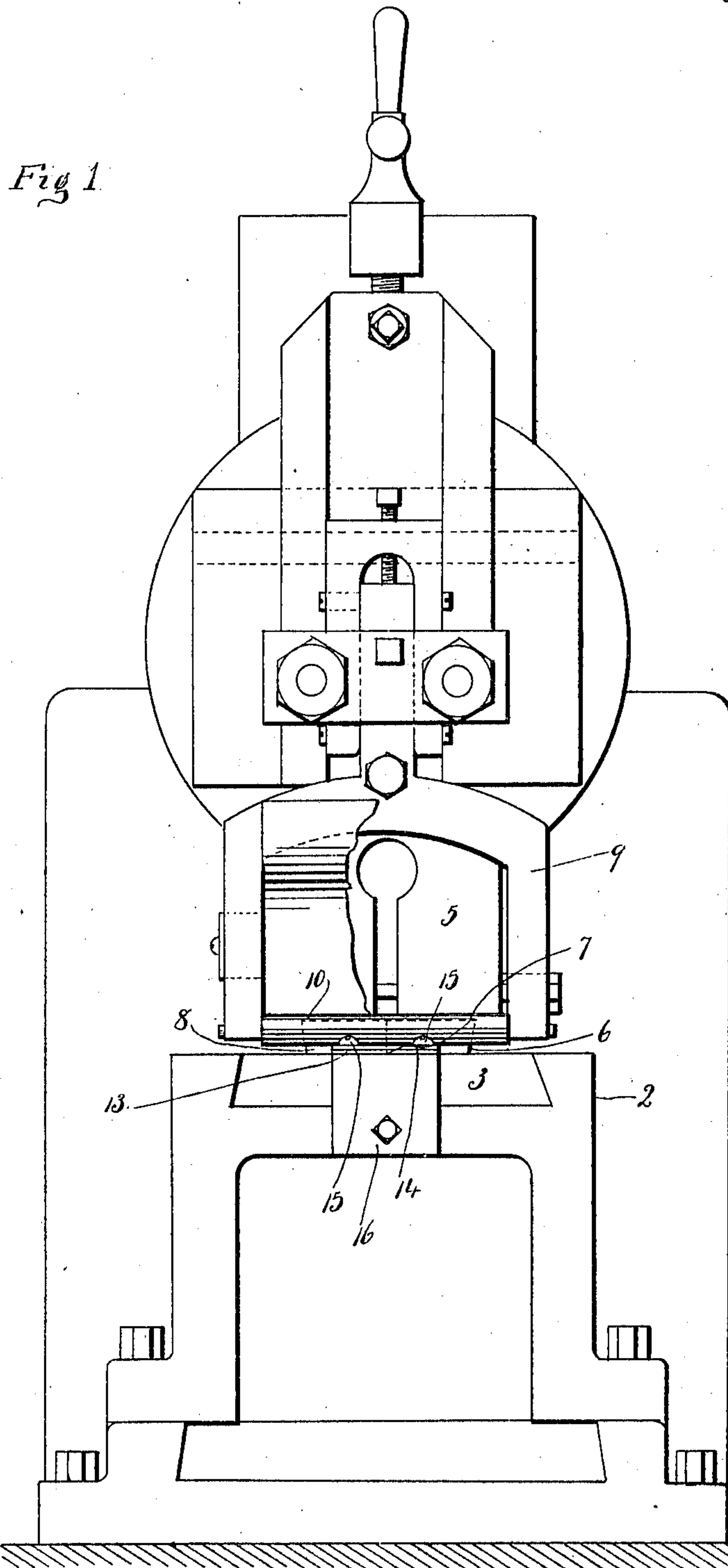


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APPLICATION FILED APR. 26, 1909.

945,347.

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3 SHEETS—SHEET 1.



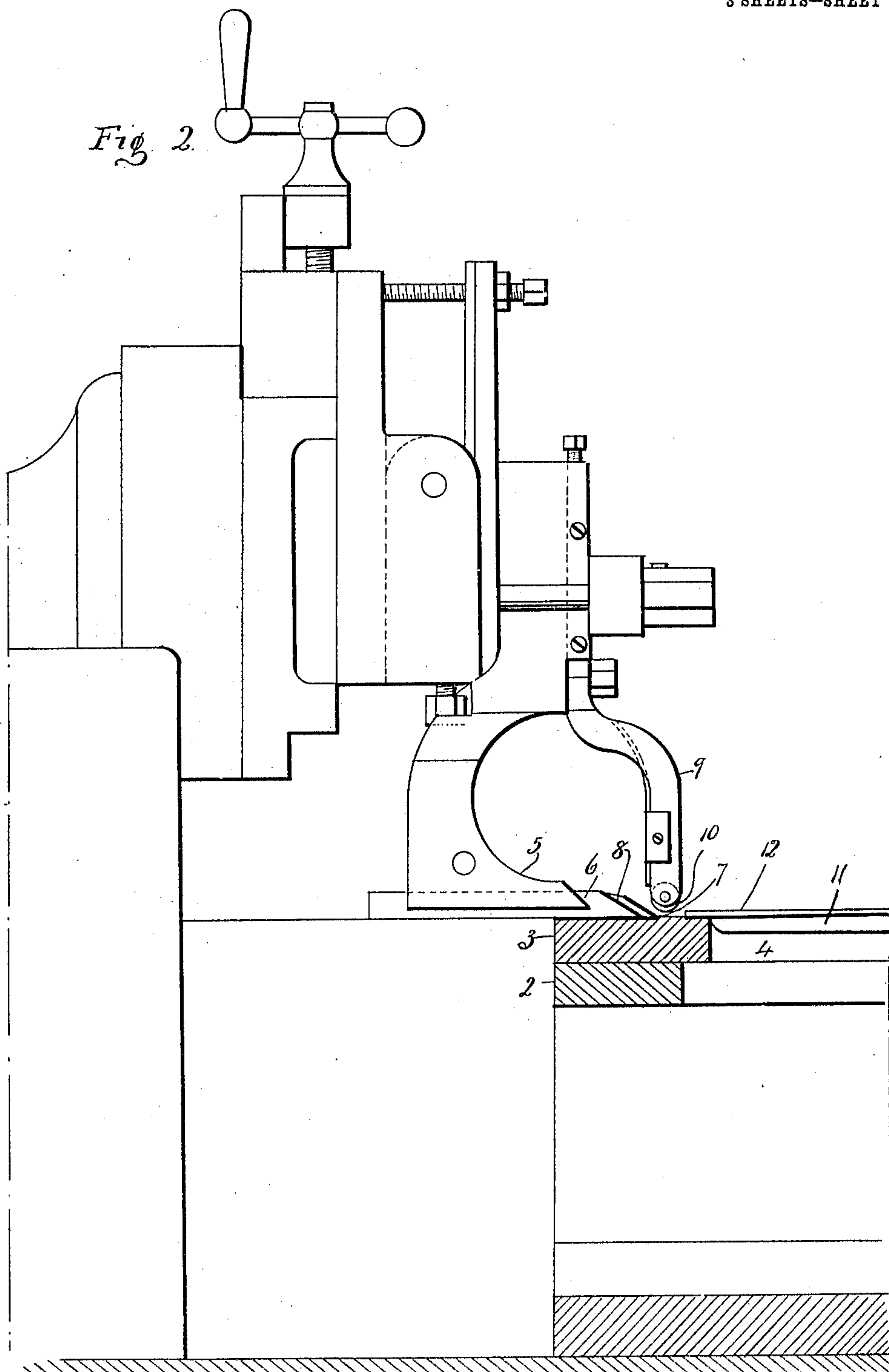
Witnesses  
C. J. Reed  
C. L. Reed

John H. Shields  
Inventor  
by Seymour & Co. atty.

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3 SHEETS—SHEET 2.



*Witnesses*  
*C. J. Reed*  
*C. L. Weed*

*John H. Shields*  
*Inventor*  
*by Seymour T. Carey*  
*att'y*

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3 SHEETS—SHEET 3.

Fig 3

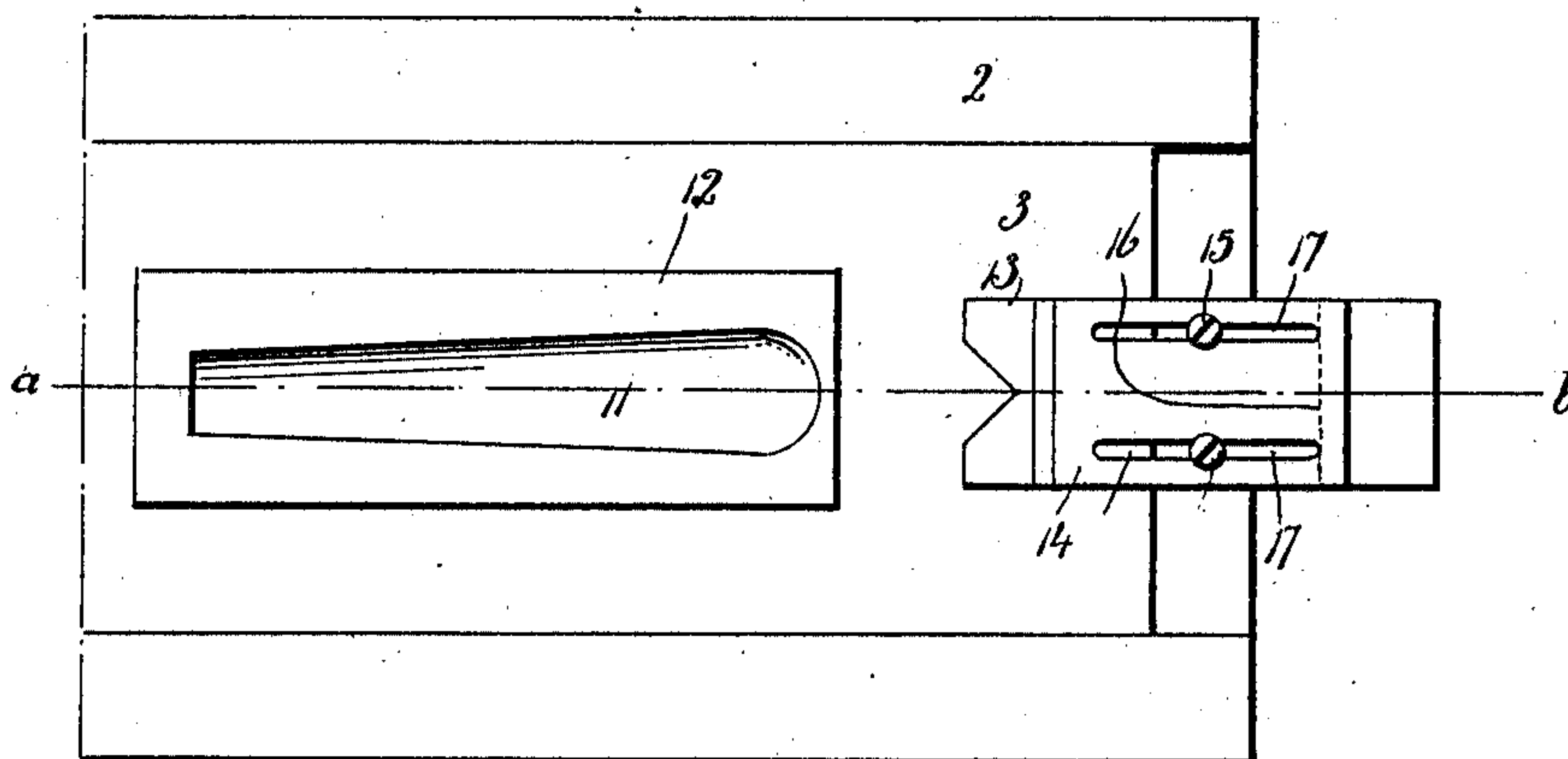


Fig 6

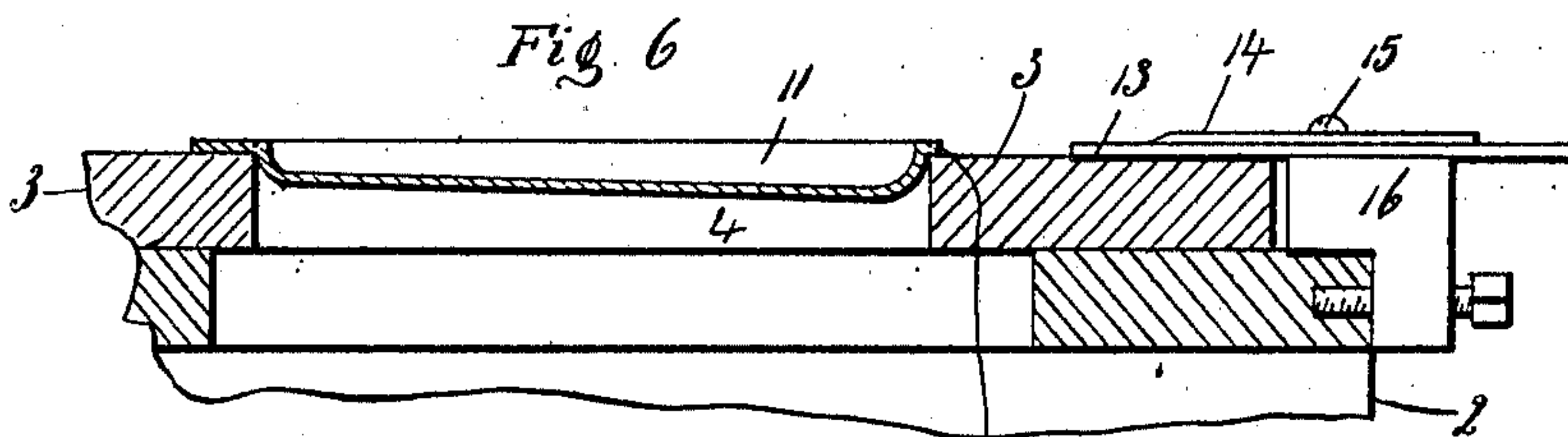


Fig 4

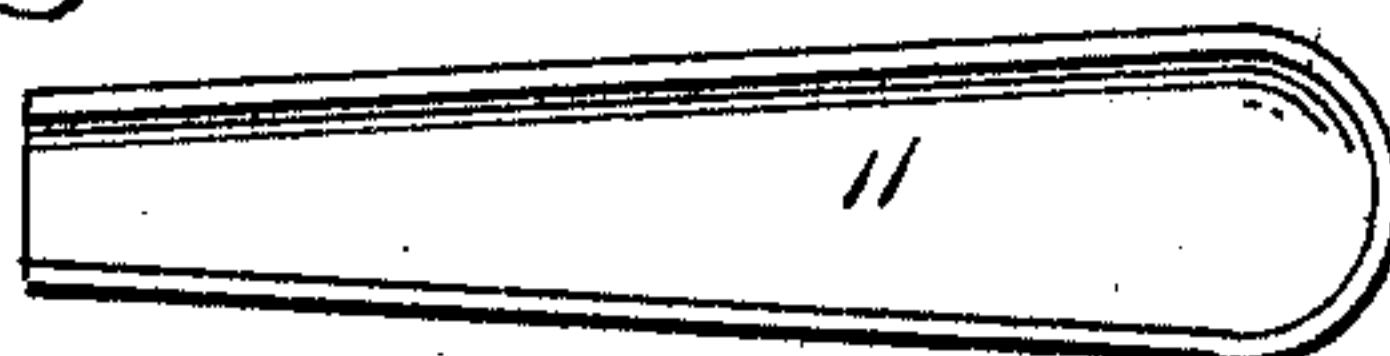


Fig 5

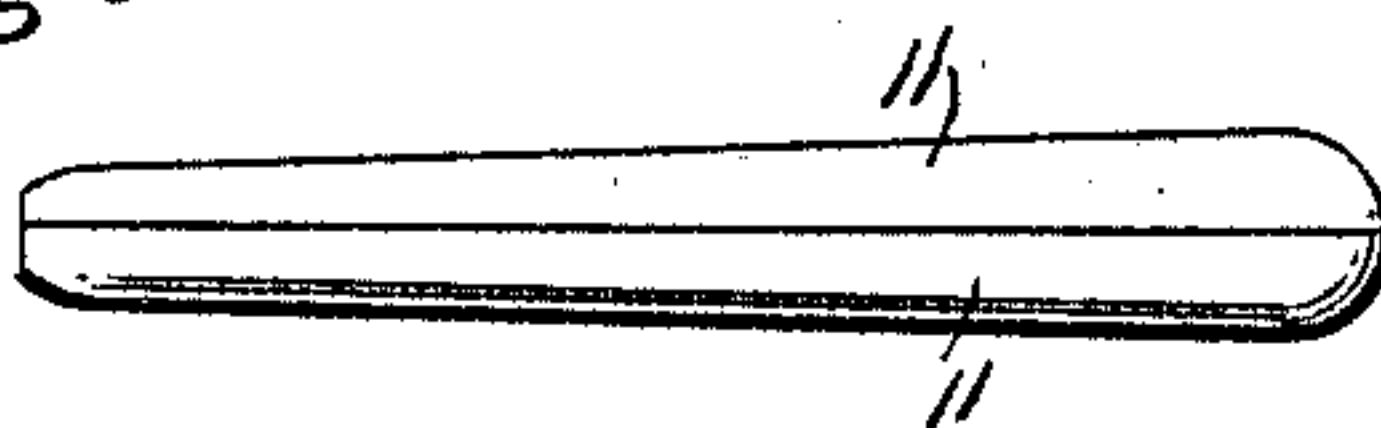
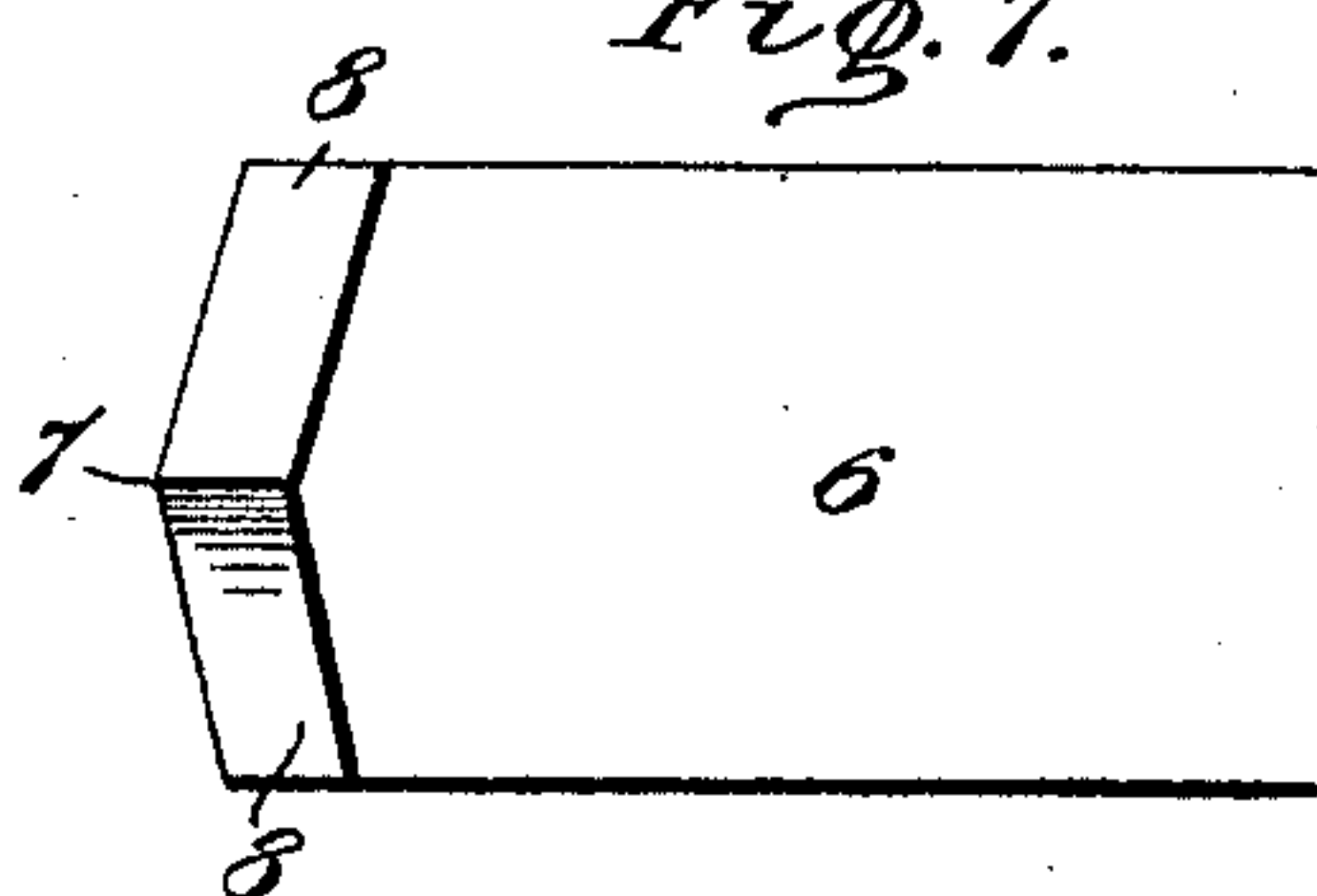


Fig. 7.



Witnesses  
C. J. Reed  
C. L. Head

John H. Shields  
Inventor  
by Seymour T. Eaves  
att'y



# UNITED STATES PATENT OFFICE.

JOHN H. SHIELS, OF WALLINGFORD, CONNECTICUT, ASSIGNOR TO INTERNATIONAL SILVER CO., OF MERIDEN, CONNECTICUT, A CORPORATION OF NEW JERSEY.

MACHINE FOR TRIMMING BLANKS FOR SHEET-METAL SHELLS.

945,347.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed April 26, 1909. Serial No. 492,364.

*To all whom it may concern:*

Be it known that I, JOHN H. SHIELS, a citizen of the United States, residing at Wallingford, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Machines for Trimming Blanks for Sheet-Metal Shells; and I do hereby declare the following, when taken in connection with the accompanying drawings and the numerals of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a front view of a trimming machine constructed in accordance with my invention. Fig. 2 a side view partially in section of the same, the work-holder being broken away. Fig. 3 a top or plan view of the work-holder showing the blank to be trimmed in position. Fig. 4 a plan view of a trimmed shell. Fig. 5 a side view of two parts of the handle with their edges abutted together. Fig. 6 a sectional view on line *a—b* of Fig. 3. Fig. 7 a top or plan view of the cutter, detached.

In the manufacture of sheet metal handles for knives and other articles of table cutlery and toilet articles, parts for casket hardware and metal mounts of shell-like character for various purposes, the shells are formed in two parts each struck up from a strip of metal and the edges of the parts united by soldering or otherwise. These parts are struck up in dies from a strip of metal wider than the shell so that a flange is formed around the edge. It is essential that the edges of the two parts of the shell should be accurately trimmed and faced so as to form a perfect joint; and the object of this invention is to provide a machine by which these blanks as they come from the die may be trimmed and faced; and the invention consists in the construction hereinafter described and particularly recited in the claim.

In carrying out my invention I employ a machine like a planer or shaper comprising an auxiliary bed 2 in which a work-holder 3 is mounted, the holder having an opening 4 corresponding to the outline of the shell. The machine also comprises a cutter-holder 5 carried by and longitudinally movable with the head of the machine which, as be-

fore stated, is of the planer or shaper type. This holder carries a cutter 6 which has a central point 7 and diverging sides 8 the cutter being wider than the greatest width of the shell to be trimmed. The cutter holder 5 is carried by the usual head, and secured to the head or to the cutter-holder is a yoke 9 supporting at its lower end a roller 10, this roller being arranged directly in front of the cutter and movable with it. The blank 11 with its flange 12 as it comes from the forming die, is placed in the opening 4 of the work-holder, the flange 12 resting upon the surface of the work-holder around the opening. The cutter and roller then advance, the roller first engaging with the flange 12 holds it closely in contact with the work-holder so that as the cutter advances it will shear the flange away from the shell making a perfectly straight cut and giving the section of the shell a finished edge. When the cut is complete, the blank 11 drops through the work-holder, and in order to clear the scrap from engaging between the roller and the cutter a stripper 13 is arranged to rest upon the work-holder in the path of the cutter. This stripper consists of a plate which is clamped upon the work-holder by a plate 14 which is secured by screws 15 to a block 16 secured to the auxiliary bed 2, the plate and stripper being provided with slots 17 through which the screws 15 pass so that the stripper may be adjusted back or forth according to the size of the flange to be cut away. This stripper, as shown in Fig. 3 of the drawings, is in the path of the roller and cutter and so that as the roller and cutter advance after the cutting is completed, the roll will pass on to the strip and the scrap abutting against the stripper 13 is forced upward between the roller and cutter and so as to free it therefrom. The advantage of the roller as before pointed out is to closely hold the work in contact with the work-holder so that a straight edge is formed on the shells, so that when two shells are brought together a perfect joining will result. The roller also performs the function of a safety device, for being arranged in advance of the cutter it will push away the operator's fingers so that danger of being caught by the cutter is avoided.

It will be understood without further de-

scription, that the roller may be adjusted vertically corresponding to the thickness of the work being trimmed.

I claim:—

- 5 In a machine for trimming blanks for sheet metal shells, the combination with a work-holder having an opening therein, of a longitudinally movable cutter adapted to pass across said opening, a transversely ar-  
10 ranged roller mounted in front of, and movable with said cutter over the work, and a

stripper over which the roller is adapted to pass at the completion of its forward excursion whereby the scrap is cleared from between the roller and cutter.

15

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

JOHN H. SHIELDS.

Witnesses:

HOWARD JAMES,  
B. L. LONDON.