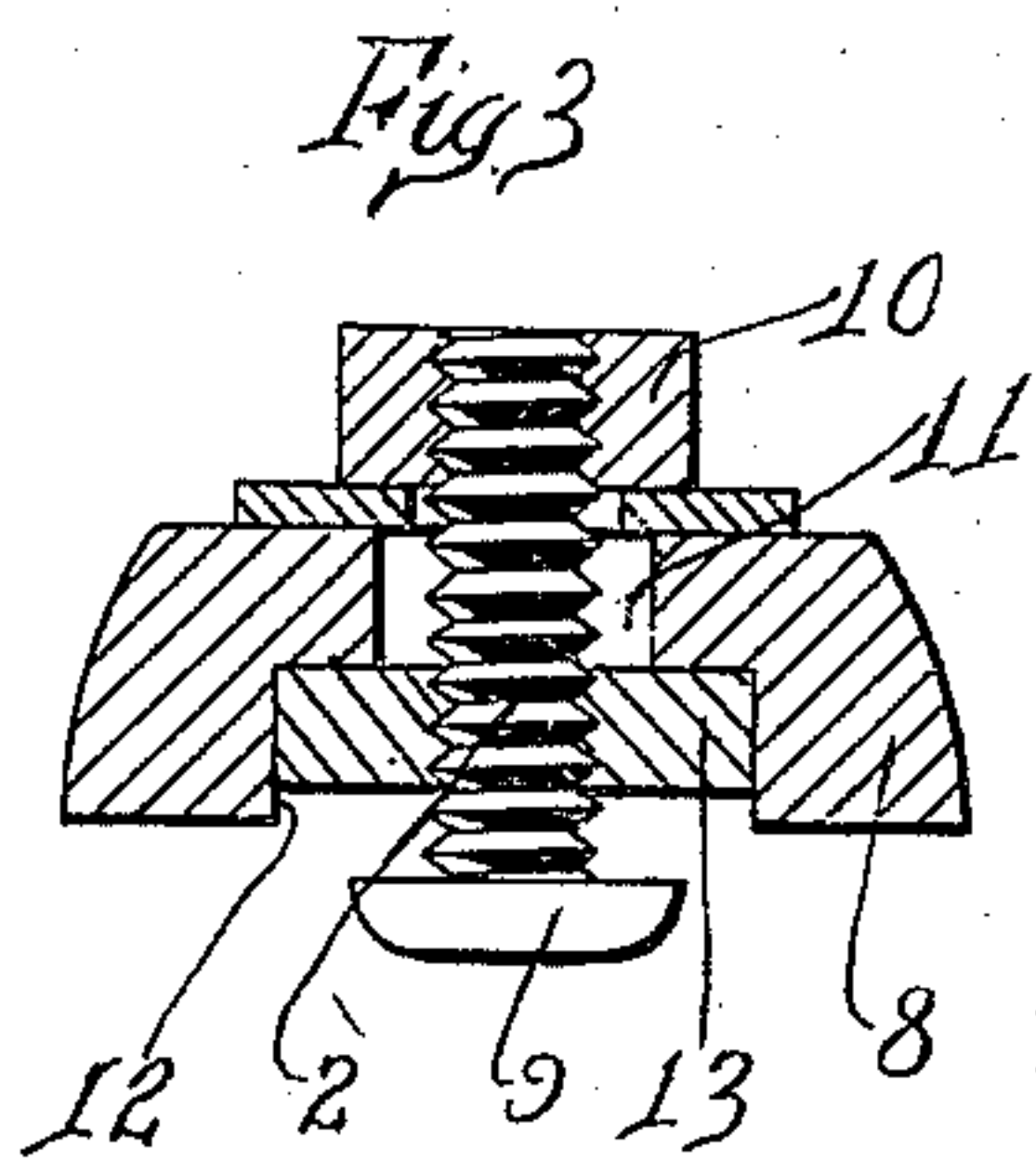
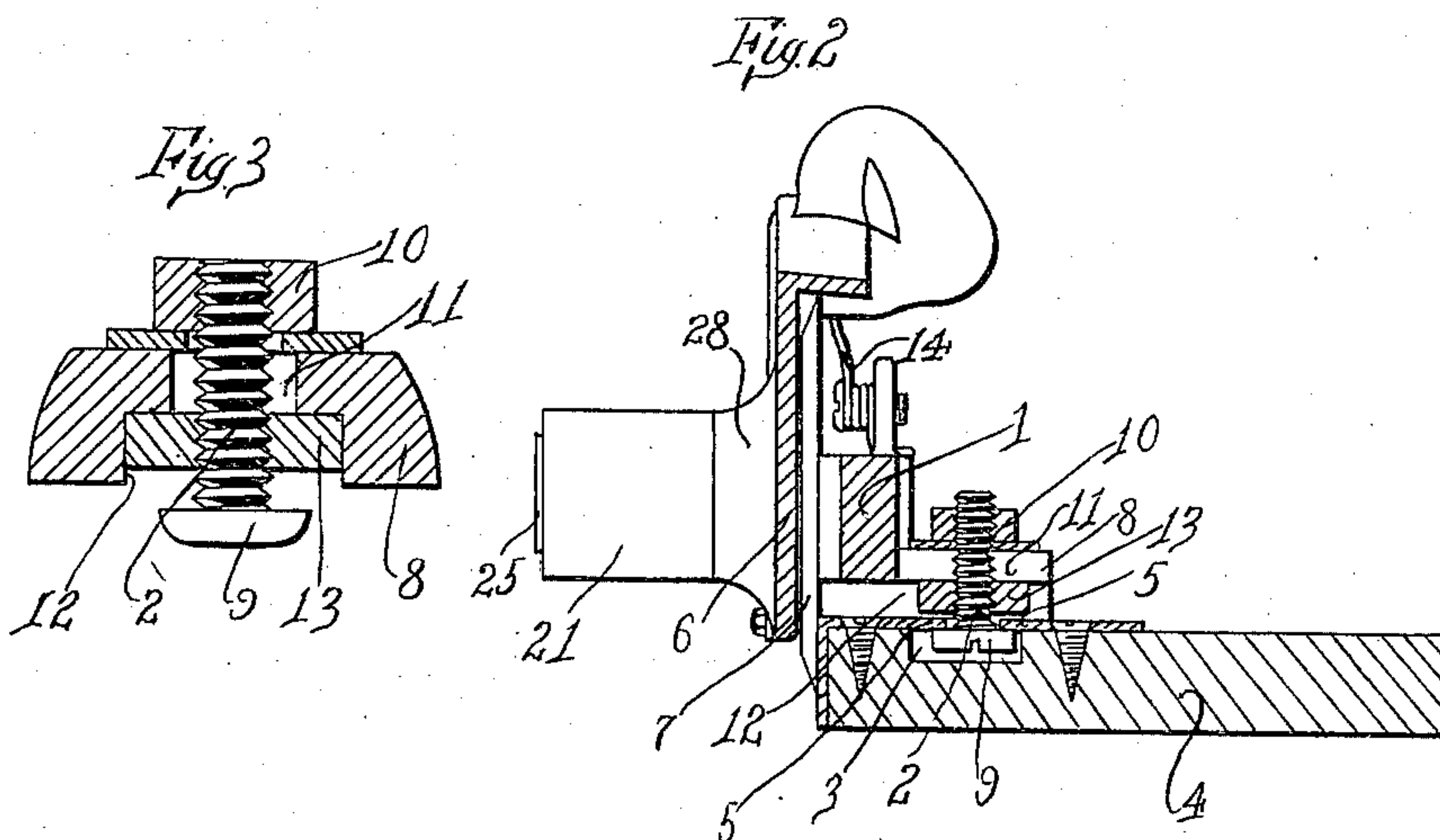
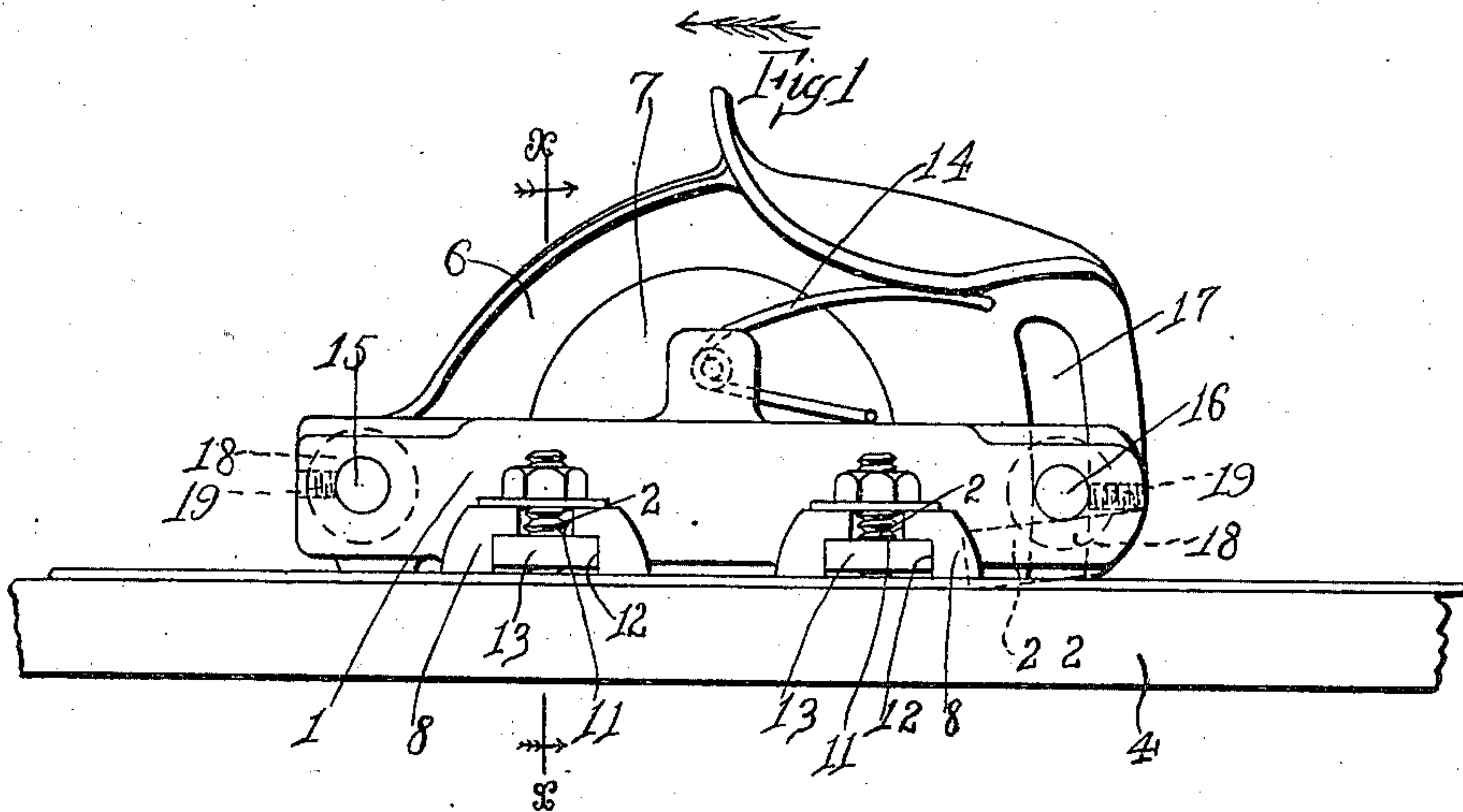


O. M. POLLOCK.  
CUTTING TOOL.  
APPLICATION FILED MAR. 3, 1910.

966,356.

Patented Aug. 2, 1910.  
2 SHEETS—SHEET 1.



Witnesses  
Ludwig C. Collier.  
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Oliver M. Pollock.

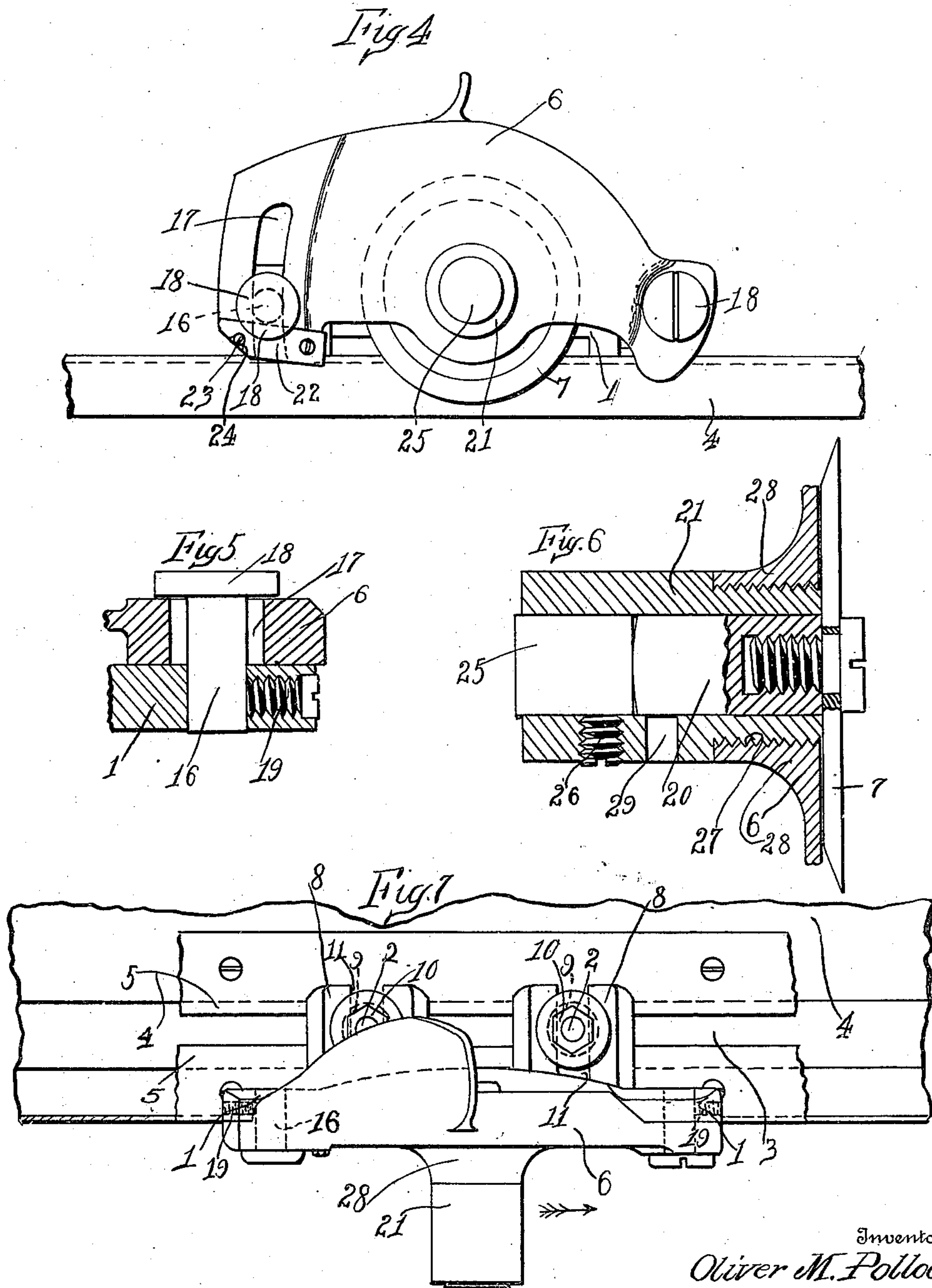
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Witnesses

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# UNITED STATES PATENT OFFICE.

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## CUTTING-TOOL.

966,356.

Specification of Letters Patent.

Patented Aug. 2, 1910.

Application filed March 3, 1910. Serial No. 547,006.

*To all whom it may concern:*

Be it known that I, OLIVER M. POLLOCK, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Cutting-Tools, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to cutting tools, and more particularly to that type of cutting tool known as a paper trimmer and designed especially for trimming wall paper. In paper trimmers of this character the moving parts are subjected to a very considerable amount of friction, and, for this reason, often become so worn as to render the trimmer practically worthless long before the other parts thereof are worn out.

The object of the invention is to render the several parts which are subjected to such wear adjustable so that they may be adjusted to compensate for the wear. For this purpose that portion of the depending lug carried by the gage and entering the groove in the straight-edge is made adjustable; the connections between the gage and the head are adjustable and the bearing for the cutter shaft is both adjustable and renewable.

A further object of the invention is to so construct the trimmer that the head and gage may be readily separated to permit the renewal of the cutter.

In the accompanying drawings, Figure 1 is a side elevation of a trimmer embodying my invention; Fig. 2 is a transverse, sectional view of such a trimmer, taken on the line  $x-x$  of Fig. 1 and looking in the direction of the arrows; Fig. 3 is a vertical, sectional view taken transversely of one of the laterally extending portions of the gage; Fig. 4 is an elevation of that side of the trimmer opposite the side shown in Fig. 1; Fig. 5 is a detail view of the adjustable guide pin; Fig. 6 is a sectional view of the adjustable and removable bearing; and Fig. 7 is a top plan view of the trimmer.

In these drawings I have illustrated one embodiment of my invention and have shown the same as comprising a gage 1 carrying one or more depending lugs 2 adapted to enter a longitudinal groove 3 formed in a straight-edge 4 and to engage the flange 5 which extends beyond the edge of the groove

3. A head 6 is movably mounted on the gage and supports a rotary cutter 7. In that particular form of the device here illustrated the gage 1 has two laterally extending portions 8 which rest upon the adjacent portion of the straight-edge 4 and extend across the groove 3 therein. The straight-edge here shown has a flange 5 extending beyond each side of the groove and each lug 2 is in the form of a screw-threaded shank or bolt having laterally extending projections, here formed by the head 9, adapted to extend beneath each flange 5 and thus provide a firm non-tipping connection between the gage and the straight-edge. In order that the projections or head 9 of the lug 2 may be adjusted toward and away from the flanges 5 of the straight-edge this lug or bolt is extended upwardly through the laterally extending portion 8 of the gage and is provided on its upper end with a nut 10. The lug or bolt 2 is also adjustable toward and away from the side of the straight-edge. This is accomplished by forming a slot 11 in the laterally extending portion 8 of a greater width than the diameter of the lug. The lower portion of this slot is enlarged, as shown at 12, and has arranged therein a nut 13 mounted upon the bolt or lug 2 and co-operating with the nut 10 mounted on the bolt above the laterally extending portion 8 of the gage to clamp the bolt or lug in its adjusted position. Thus, it will be apparent that the lug and its coöperating projections 9 are movable both vertically and laterally to adjust the same to compensate for any wear to which they may be subjected or to accommodate the same to different straight-edges.

In the form of trimmer here shown the head 6 is pivotally connected at one end to the gage 1 and has its opposite end slidably connected thereto, while the cutter 7 is mounted between the two points of connection between the gage and the head. A spring 14, mounted on the gage and bearing against an overhanging portion of the head, serves to maintain the head and the cutter carried thereby normally in an elevated position. The pivotal connection between the head and the gage is preferably formed by a pivot pin 15 which is similar in construction to a guide pin 16 which extends through a slot 17 formed in the vertically movable end of the head. The detail construction of the



pivot pin and guide pin is shown in Fig. 5. As here shown the pin comprises a straight, smooth shank portion which extends, in the one instance, through the slot 17, and, in the other instance, through a bearing opening 5 formed in the adjacent portion of the head and is provided on that end adjacent to the head with an enlarged portion or bolt head 18 which bears against the trimmer head on the opposite sides of the slot or bearing opening, as the case may be. The slot or bearing opening is smooth while that portion of the shank which extends through the gage may be of any suitable construction 15 and is engaged by a set screw 19 extending through the end of the gage and serving to lock the pin in its adjusted position. In this manner the connection between the gage and straight-edge may be readily tightened 20 to take up wear. These trimmers are, for the most part, employed for cutting wall paper to which the paste has been applied and it is desirable that access should be had to the cutter to enable the same to be cleaned 25 after it has been used. In the present device the cutter 7 is mounted on the end of a short shaft 20 which is loosely mounted in a laterally extending bearing sleeve or bushing 21 carried by the head 6. The slot 17 30 in the movable end of the head is shown as extending through the lower edge of the head. The lower end of this slot is normally closed by means of a stop of any suitable character and here shown as a finger 22 pivotally connected to the head at one side of the slot, adapted to be swung across the lower end thereof and to be retained in position by means of a stud 23 carried by the head on the opposite side of the slot and 40 adapted to enter a recess 24 in the inner wall of the finger 22, the finger having sufficient resiliency to permit it to be moved over the stud and thereby enable the latter to enter the recess. By moving the stop arm 22 into 45 its open position the head and gage can be moved apart to permit the cutter and its shaft to be withdrawn without further disturbing any of the parts of the trimmer. The shaft 20 carrying the cutter 7 is also adjustable, and, for this purpose, the end of the bearing or bushing 21 is closed by means of a plug 25 which fits snugly within the outer end thereof and is retained in its adjusted position by a set screw 26. Thus, the outer 55 thrust of the shaft 20 is limited and the cutter 7 may be adjusted relatively to the side of the straight-edge. The bushing or bearing 21 is subjected to a great deal of wear and is one of the first parts of the device to become worn out. For this reason it is desirable that this bushing should be renewable, and we have shown the inner end of the bushing 21 as reduced and provided with a screw-thread, as indicated at 27. This 65 screw-threaded portion of the bushing is

adapted to enter a screw-threaded boss 28 extending laterally from the head 6. The bushing has an opening 29 therein to receive the end of a suitable implement for inserting or removing the bushing from the screw-threaded boss on the head. The bushing in addition to forming a bearing for the shaft coöperates with the boss to form a handle which the operator grips with his fingers when using the tool. 75

The operation of the several parts of the device has been clearly described and it will be apparent that each part thereof, which is subjected to friction or wear, can be adjusted to compensate for that wear; and that these adjustments are of such a character that they do not complicate or in any way detract from the desirable features of the construction of the trimmer. 80

It will be understood that while I have shown the invention as applied to a trimmer of one type, it is equally applicable to trimmers or cutting tools of other types and that the details of construction can be modified to accommodate the invention to cutting tools of other types or for any other reason. I, therefore, wish it to be understood that I do not desire to be limited to the details of construction shown and described, for obvious modifications will occur to a person skilled in the art. 95

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a cutting tool of the character described, the combination, with a straight-edge having a longitudinal groove, and a flange extending beyond the edge of said groove, of a gage, a lug adjustably mounted on said gage, adapted to enter said groove and having a part arranged to engage said flange, a head movably connected to said gage, and a cutter carried by said head. 100

2. In a cutting tool of the character described, the combination, with a straight-edge having a longitudinal groove, and a flange extending beyond the edge of said groove, of a gage, a lug mounted on said gage, adapted to enter said groove and having a part arranged to engage said flange, means for adjusting said lug both laterally and vertically relatively to said gage, a head movably connected to said gage, and a cutter carried by said head. 110

3. In a cutting tool of the character described, the combination, with a straight-edge having a longitudinal groove, and a flange extending beyond the edge of said groove, of a gage having a laterally extending portion, a screw-threaded lug extending through said gage, into the groove in said straight-edge and having a laterally extending projection adapted to engage said flange, means for securing said screw-threaded lug in its adjusted position, a head movably con- 120 125 130



nected to said gage, and a cutter carried by said head.

4. In a cutting tool of the character described, the combination, with a straight-edge having a longitudinal groove, and a flange extending beyond the edge of said groove, of a gage having a laterally extending portion provided with a slot arranged transversely to said gage, said slot having the lower portion thereof enlarged, a screw-threaded lug extending through said slot into the groove in said straight-edge and having a part arranged to engage said flange, a nut mounted on said bolt within the enlarged portion of said slot, a second nut mounted on said lug above said laterally extending portion, a head movably connected to said gage, and a cutter carried by said head.

5. In a cutting tool of the character described, the combination, with a straight-edge having a longitudinal groove and flanges extending beyond both edges of said groove, of a gage having two laterally extending portions, each of said portions having a slot extending transversely to said gage, each of said slots have an enlarged lower portion, a screw-threaded lug extending through the slot in each of said laterally extending portions and into the groove in said straight-edge, a head secured to the lower end of said lug and projecting from both sides thereof beneath both of said flanges, a nut mounted upon each of said lugs within the enlarged portion of the respective slot, a second nut mounted upon said lug above the laterally extending portion of said gage, a head movably mounted on said gage, and a cutter carried by said head.

6. In a cutting tool of the character described, the combination, with a gage, a head having a bearing opening therein, a pin extending through said bearing opening and into said gage, and means for securing said pin in adjusted positions within said gage.

7. In a cutting tool of the character described, the combination, with a gage, a head having a bearing opening therein, a pin extending through said bearing opening and into said gage, and a set screw for securing said pin in adjusted positions within said gage.

8. In a cutting tool of the character described, the combination, with a gage, a head having a bearing opening arranged at one end thereof and a slot at the other end thereof, pins extending through said bearing opening and said slot, respectively, and into the adjacent portion of said straight-edge,

and set screws for securing the respective pins in adjusted positions in said gage.

9. In a cutting tool of the character described, the combination, with a gage, a head pivotally connected at one end to said gage and having a vertically arranged slot in the opposite end thereof, and a pin rigidly secured to said gage and extending through said slot, of a movable closure for the lower end of said slot.

10. In a cutting tool of the character described, the combination, with a gage, a head pivotally connected at one end to said gage and having a vertically arranged slot in the opposite end thereof, and a pin rigidly secured to said gage and extending through said slot, of a finger pivotally connected to said head and adapted to extend across said slot to form a stop.

11. In a cutting tool of the character described, the combination, with a gage and a head movably mounted thereon, of a laterally extending bushing detachably secured to said head, a shaft mounted in said bushing, a cutter head carried by said shaft, a bearing block adjustably mounted on the outer end of said bushing to form a thrust bearing for said shaft and to limit the outward movement thereof, said bearing block being removable with said bushing and adjustable independently thereof.

12. In a cutting tool of the character described, the combination, with a gage, and a head movably mounted on said gage and having a laterally extending screw-threaded boss, of a bushing having its inner portion screw-threaded, adapted to enter said screw-threaded boss and having its outer portion cooperating with said boss to form a handle, a shaft removably mounted in said bushing, and a cutter carried by said shaft.

13. In a cutting tool of the character described, the combination, with a gage, a head movably mounted upon said gage and having a laterally extending screw-threaded boss, and a spring to retain said head normally in its elevated position, of a bushing having a screw-threaded portion adapted to enter said screw-threaded boss, a shaft mounted on said bushing, a cutter carried by said shaft, and an adjustable bearing block mounted in said bushing to form a thrust bearing for said shaft and to limit the outward movement thereof.

In testimony whereof, I affix my signature in presence of two witnesses.

OLIVER M. POLLOCK.

Witnesses:

EDWARD S. REED,  
ELZA F. MCKEE.