

No. 670,876.

Patented Mar. 26, 1901.

H. F. HAMMOND.

COMBINED AUXILIARY GAGE AND CLAMP FOR PAPER CUTTERS.

(Application filed Jan. 13, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

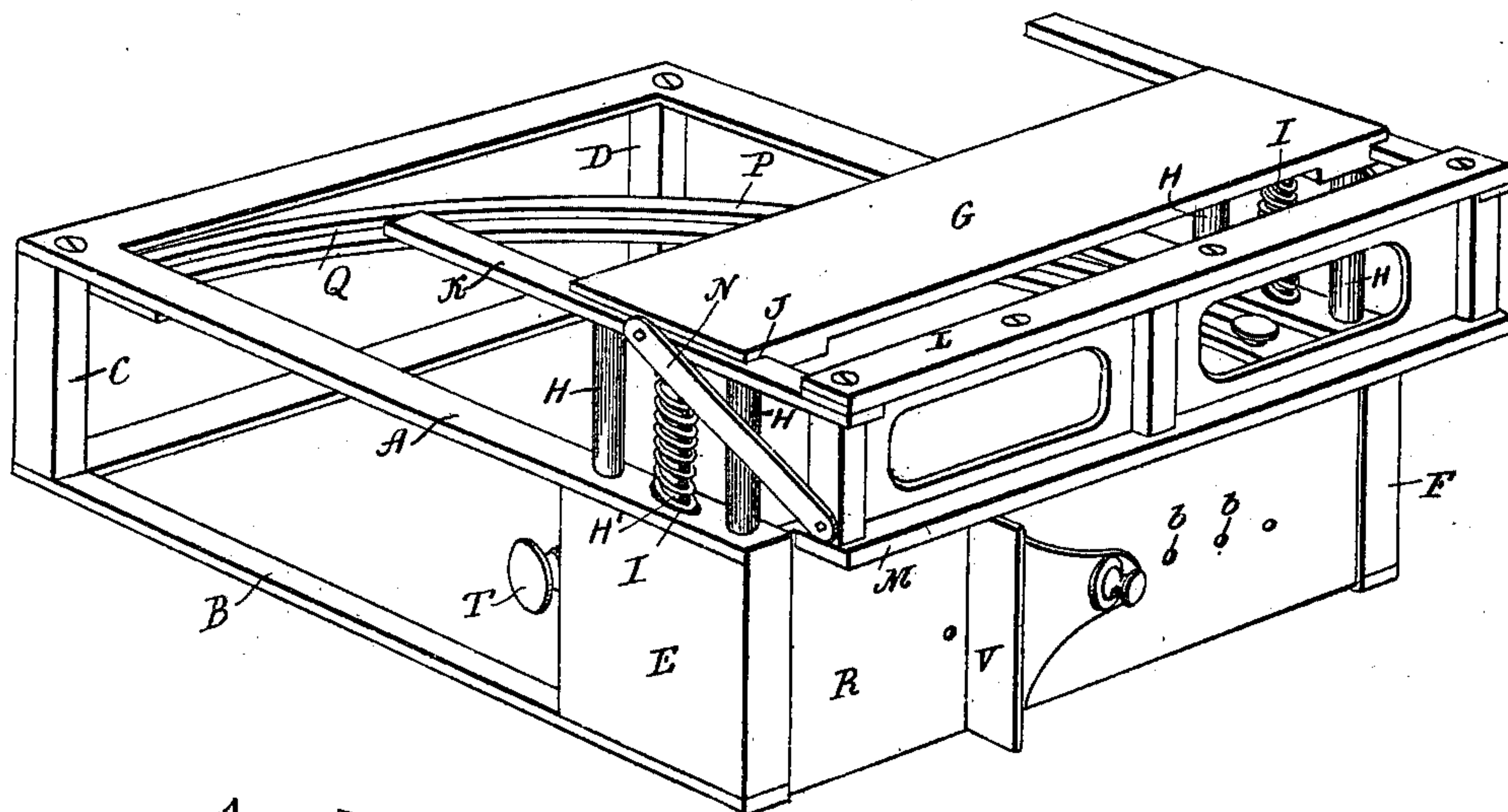
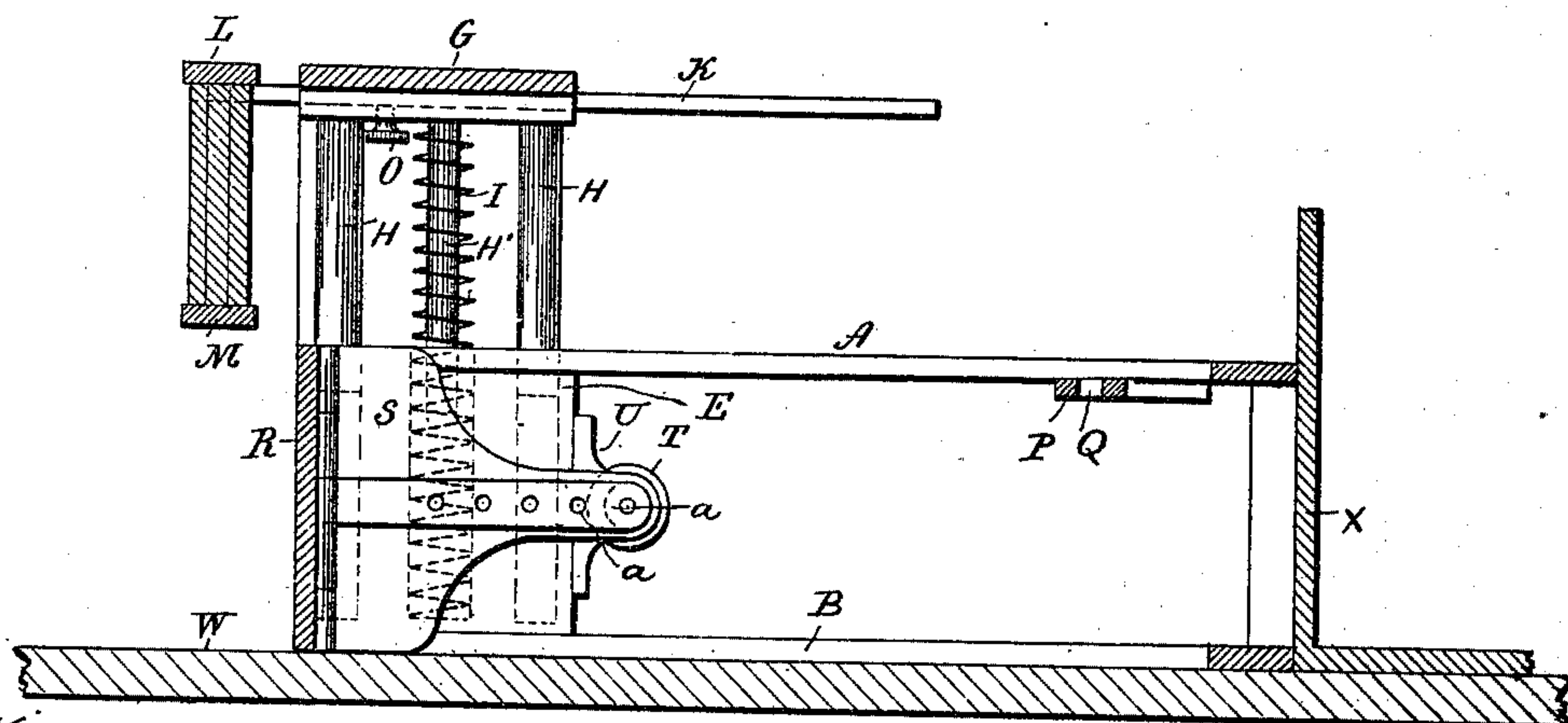


Fig. 2



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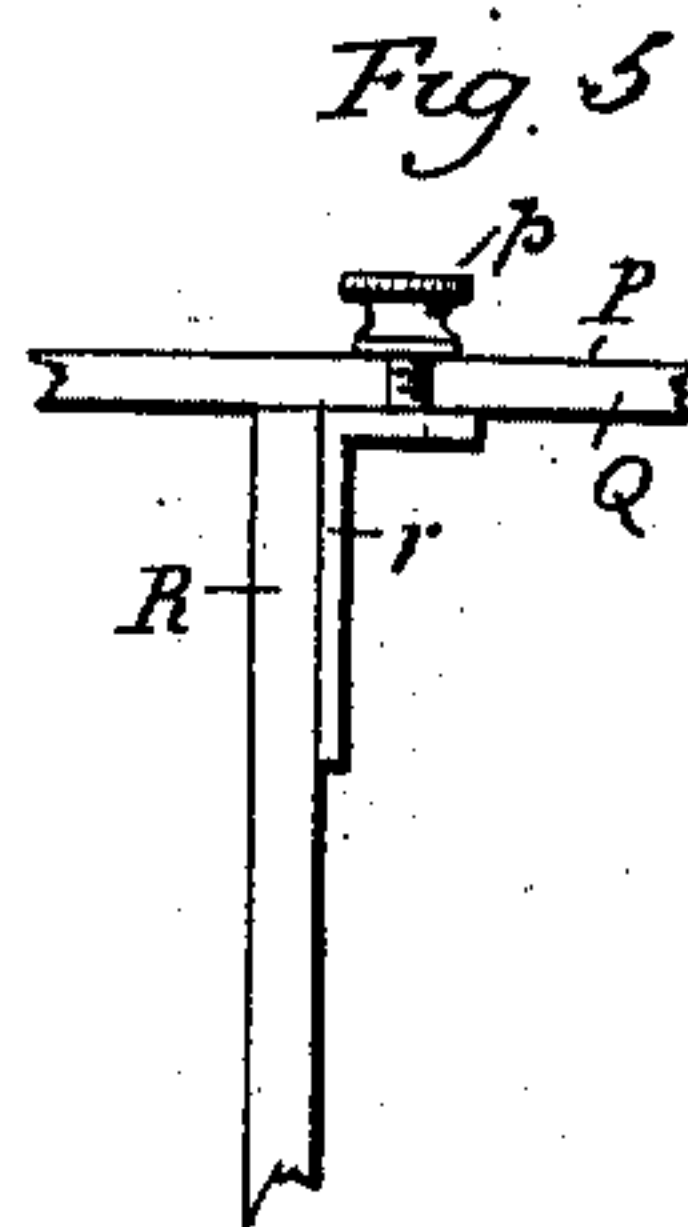
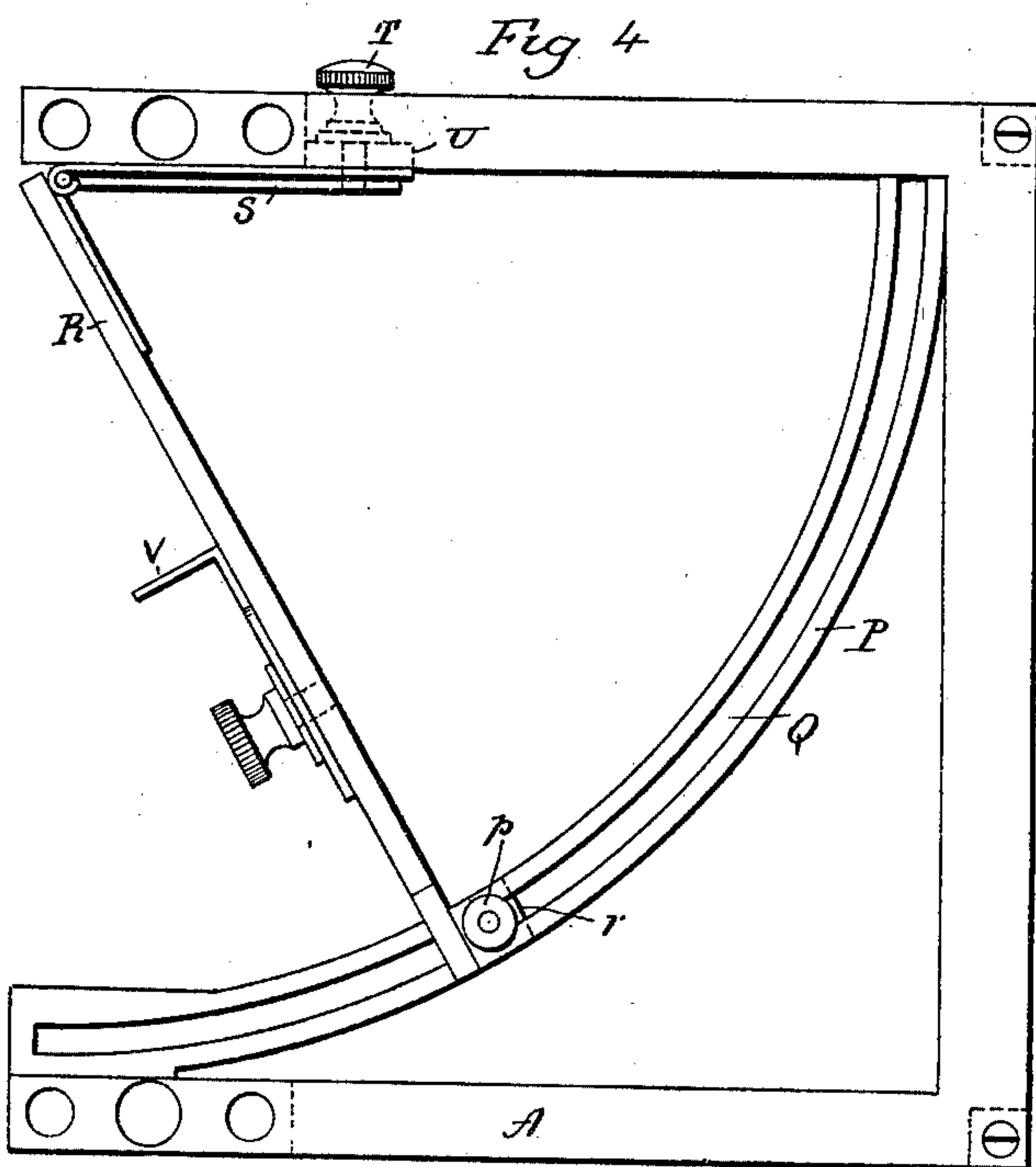
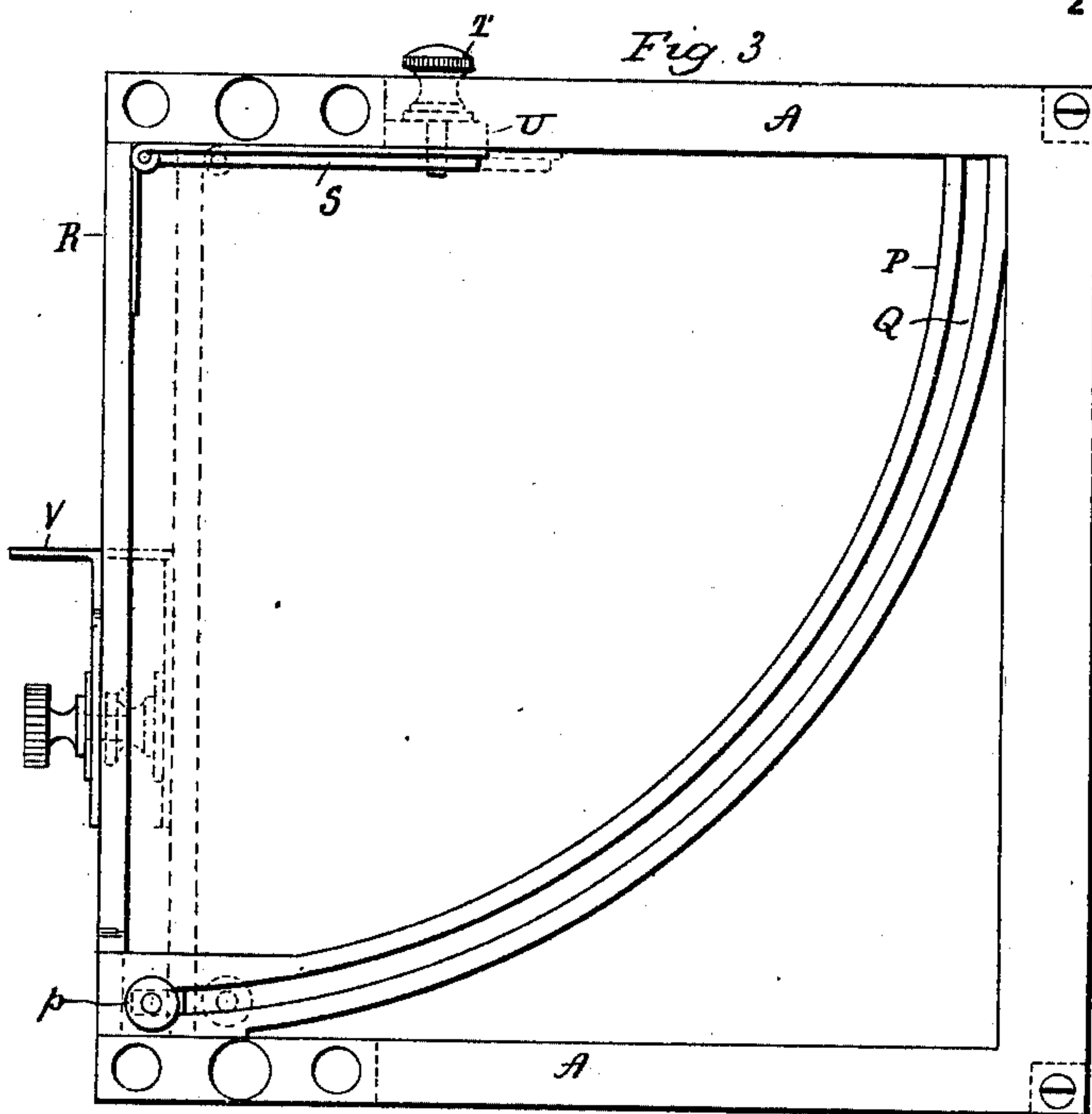
H. F. HAMMOND.

COMBINED AUXILIARY GAGE AND CLAMP FOR PAPER CUTTERS.

(Application filed Jan. 15, 1901.)

(No Model.)

2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

HOEL F. HAMMOND, OF WATERBURY, CONNECTICUT.

COMBINED AUXILIARY GAGE AND CLAMP FOR PAPER-CUTTERS.

SPECIFICATION forming part of Letters Patent No. 670,876, dated March 26, 1901.

Application filed January 15, 1901. Serial No. 43,355. (No model.)

To all whom it may concern:

Be it known that I, HOEL F. HAMMOND, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in a Combined Auxiliary Gage and Clamp for Paper-Cutters; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters 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 perspective view of my improved auxiliary gage and clamp for paper-cutters; Fig. 2, a broken sectional view showing the relation of the clamp to the usual gage, clamp, and cutting-blade of a paper-cutting machine; Fig. 3, a top or plan view with the auxiliary clamp removed; Fig. 4, a similar view illustrating the adjustment of the face-plate; Fig. 5, a broken sectional view illustrating the connection of the end of the facing-plate with the arc.

This invention relates to an improvement in a combined gage and clamp for paper-cutters, and is an auxiliary gage adapted to be used in connection with the usual gage arranged on the beds of paper-cutting machines of usual construction.

As generally arranged, the clamp for holding the paper or material to be cut is arranged directly in rear of the cutting-blade, while the gage is arranged upon the bed of the machine and adapted to be moved toward or from the cutter to regulate the width of the material to be cut; but in order to prevent the gage being moved so far forward as to stand beneath the clamp when the clamp is lowered a stop is arranged to arrest the forward movement of the gage, and hence if it is desired to cut strips narrower than the width of the clamp they will not be properly guided.

One object of this invention is to arrange an auxiliary gage adapted to be used in connection with the usual gage, which may be moved directly beneath the clamp and which carries a part adapted to be depressed by the clamp and hold the material in position beneath the cutting-blade and so that very narrow strips may be cut.

A further object of the invention is to so construct such an auxiliary gage that angular or other shaped pieces may be readily cut; and it consists in the construction, as hereinafter described, and particularly recited in the claims.

In carrying out my invention I employ a rectangular frame, which may consist, as herein shown, of a top plate A and a bottom plate B, the central portions of which are cut away to form an open frame. These frames are connected at their rear ends by posts C D and at their forward ends by wide posts or blocks E F. It is apparent that the sides and rear end of the frame and posts may be cast integral, or the plates might be formed from strips of metal. Above the frame is a clamp-plate G, provided at opposite ends with depending pins H H', which extend downward into openings formed for them in the blocks E F, whereby the clamp-plate G is guided for vertical movement toward or from the frame, and around the pin H' is a spring I, the tendency of which is to normally hold the plate in its raised position. In opposite ends of the plate are grooves J, in which slides K are arranged, the said slides carrying at their outer end an auxiliary clamp, the said clamp comprising a top bar L and a lower bar M, the top bar being secured to the slides K and the lower ends thereof connected with the slides by braces N. This auxiliary clamp may be formed in a single casting and is so arranged that when it is pressed backward against the clamp-plate G its lower end will just clear the forward ends of the frame. This auxiliary clamp is adapted to be drawn out, as indicated in Figs. 1 and 2, and may be fixed in position with relation to the plate G by set-screws O. Between the upper and lower plates of the frame is an arc P, in which there is a slot Q. The forward end of the frame is adapted to be closed by a facing-plate R, which is hinged to a leaf S, which is adapted to be secured against the inner face of the block E by means of a thumb-screw T, extending through a lug U at the rear edge of the block E into engagement with the leaf S, which is provided with threaded openings a to receive the screw and so that the leaf

may be secured in various positions with relation to the block to locate the plate R flush with its forward end or in rear thereof, for the purpose as will hereinafter appear. The free end of the plate R carries a finger *r*, by which that end of the plate may be clamped to the arc P by means of a set-screw *p*, as shown in Figs. 4 and 5, and so that the plate may be turned at any desired angle with relation to the forward end of the frame. In the face of the facing-plate R are screw-threaded openings *b*, by which a stop V may be secured thereto. This auxiliary gage is placed upon the bed W of a paper-cutting machine and against the usual gage X thereon and is located in position by moving the said gage X. The usual gage is moved forward to bring the forward end of the frame in proper relation to the cutting-blade Y, so as to cut the required width of material, and when thus located the usual clamp Z is brought down and, striking the clamping-plate G, depresses that plate and forces the auxiliary clamp down upon the material, it being understood that the auxiliary clamp will be drawn forward from the plate G, corresponding to the width of the strips to be cut. If the strips to be cut correspond nearly to the width of the usual clamp, it would be necessary to move the auxiliary clamp so far forward that the usual clamp would barely strike the plate G and so that the force would be exerted almost entirely upon the auxiliary clamp. To avoid this, the facing-plate R is made adjustable, as before described, and may be set back, as shown in Fig. 3, to give sufficient clearance for the strips and permit the usual clamp to bear upon the plate G, as well as upon the auxiliary clamp.

In case it is desired to cut angular papers the facing-plate R is turned upon the hinge-leaf S, as shown in Fig. 4, and clamped at the desired angle to the arc P, and it is in connection with the plate arranged at an angle that the stop V will be most generally used, although it will be found very convenient in straight cutting when there is sufficient space between the auxiliary clamp and the face-plate to permit it to be used, for if it should stand in the path of the auxiliary clamp it would arrest the movement thereof. For convenience the stop has been shown in Figs. 1 and 3 of the drawings.

It is evident, as before stated, that the exact details of construction of the frame may be varied, and it is also apparent that the form of the auxiliary clamp and the manner of adjusting it with relation to the plate G may be varied, also that the facing-plate might be hinged at either end and the arc arranged accordingly. I therefore do not wish to be understood as limiting the invention to the exact details of construction shown.

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

1. A combined auxiliary gage and clamp for paper-cutters, comprising an auxiliary-gage frame, a clamp-plate vertically movable with relation thereto, and an auxiliary clamp carried by the said plate, substantially as described.

2. A combined auxiliary gage and clamp for paper-cutters, consisting of a frame, a clamp-plate carried by the frame and vertically movable with relation thereto, an auxiliary clamp carried by said clamp-plate, and a face-plate at the forward end of the frame, substantially as described.

3. A combined auxiliary gage and clamp for paper-cutters, consisting of a frame, a clamp-plate arranged above the frame, and vertically movable with relation thereto, an auxiliary clamp carried by the said clamp-plate, a face-plate adjustably secured to the forward end of the frame, substantially as described.

4. A combined auxiliary gage and clamp for paper-cutters consisting of a frame, an arc carried thereby, a clamp-plate mounted in the said frame for vertical movement with relation thereto, an auxiliary clamp carried by said clamp-plate, a face-plate pivotally connected with the frame and adapted at one end for engagement with said arc, substantially as described.

5. A combined auxiliary gage and clamp for paper-cutters comprising a frame open at its forward end, a plate adapted to close said forward end, a clamp-plate arranged above said frame with which it is connected by pins vertically movable in the frame, an auxiliary clamp longitudinally adjustable with relation to the said clamp-plate, substantially as described.

6. A combined auxiliary gage and clamp for paper-cutters comprising a frame, an arc secured therein, blocks at the forward ends of said frame, a clamp-plate above the frame and in a plane parallel therewith and mounted upon pins which extend downward into said blocks, springs normally tending to raise said clamp-plate, an auxiliary clamp carried by said clamp-plate, a face-plate pivotally connected with one of said blocks and adapted to close the forward end of the frame or to be arranged at an angle thereto, substantially as described.

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

HOEL F. HAMMOND.

Witnesses:

F. B. HULL,
C. H. HART.