

No. 682,068.

Patented Sept. 3, 1901.

G. W. HAMBLET.
PAPER SLITTING MACHINE.

(Application filed June 20, 1901.)

(No Model.)

Fig. 1.

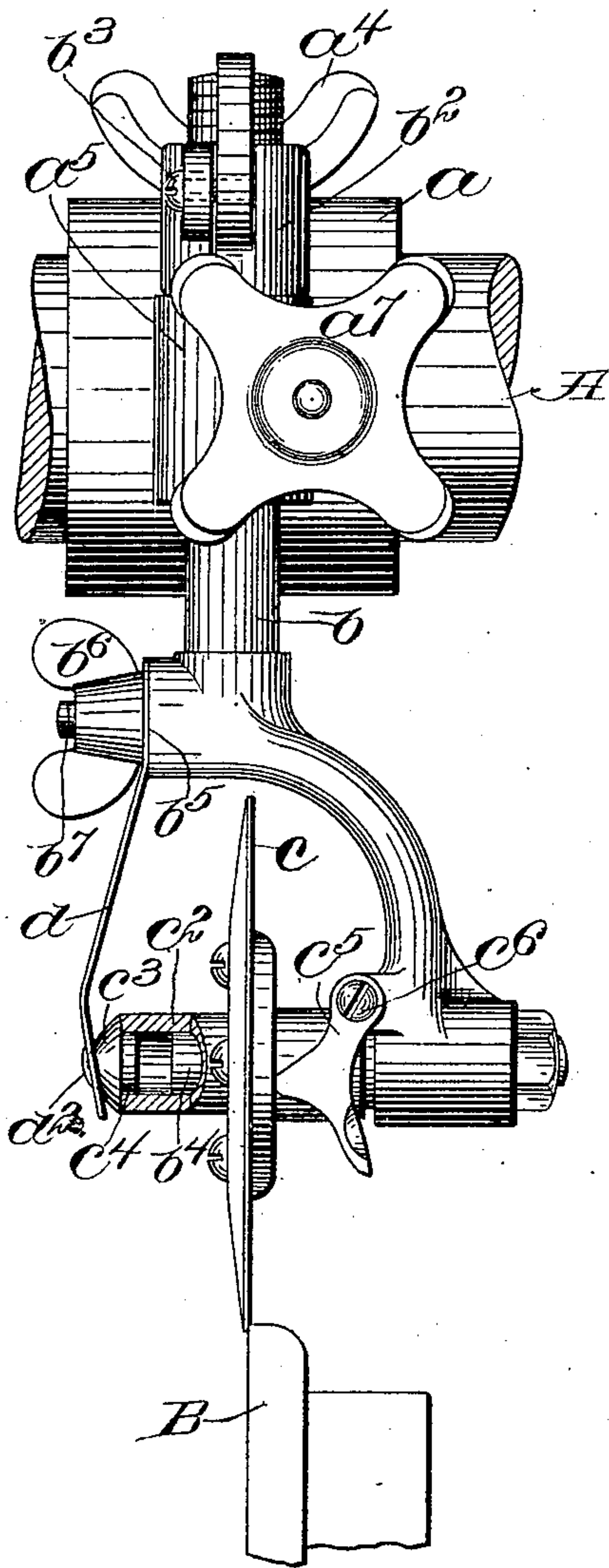


Fig. 2.

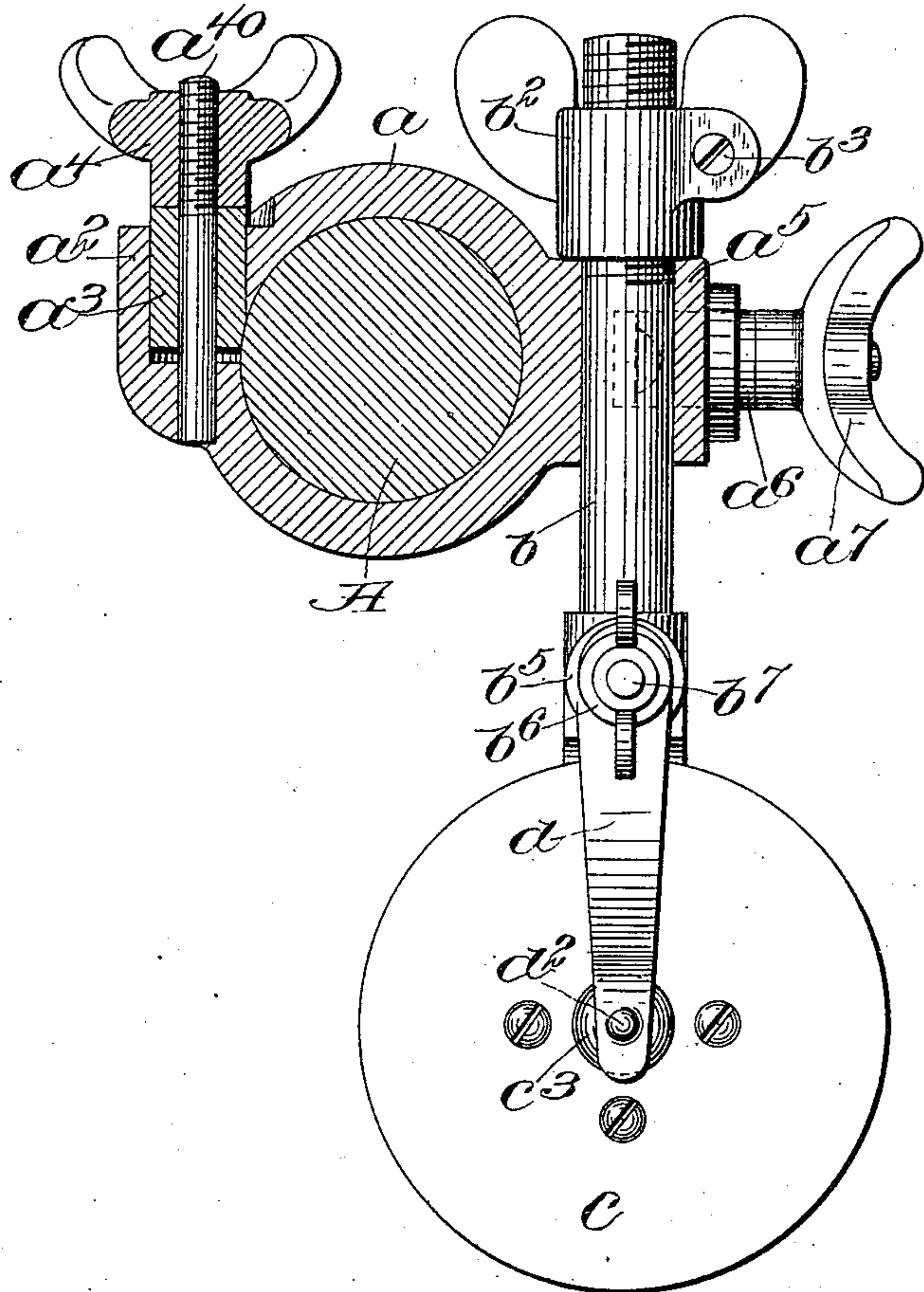
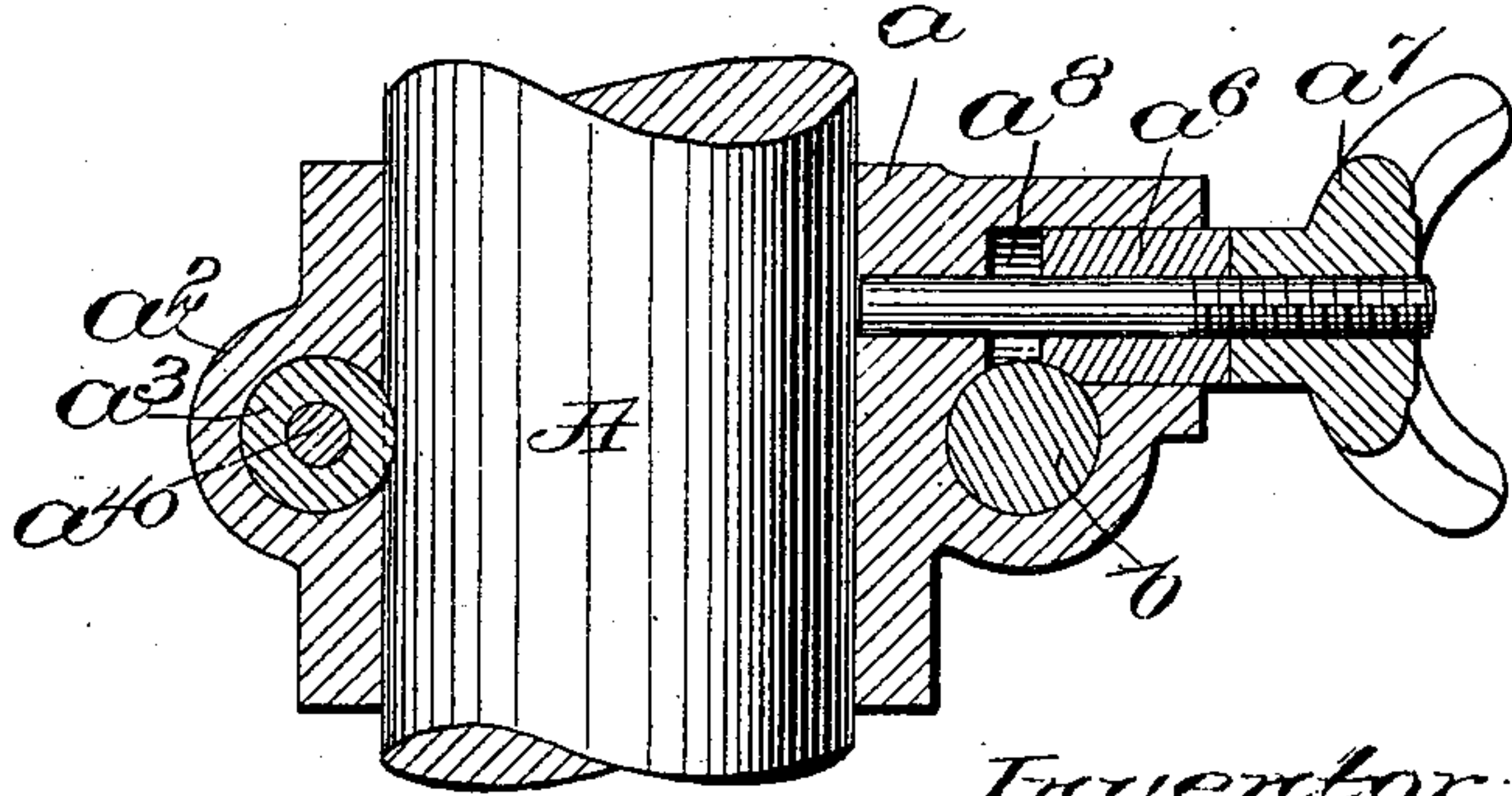


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE W. HAMBLET, OF LAWRENCE, MASSACHUSETTS.

PAPER-SLITTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 682,068, dated September 3, 1901.

Application filed June 20, 1901. Serial No. 65,294. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HAMBLET, of Lawrence, county of Essex, and State of Massachusetts, have invented an Improvement in Paper-Slitting Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The present invention relates to a paper-slitting machine, and is mainly embodied in novel means for securing and adjusting the hanger which carries the slitter-disk, the invention further relating to the means for yieldingly pressing the slitter-disk against the other cutting member, whereby the construction is simplified and the disk more readily removed, if necessary.

Figure 1 is a front elevation, partly in section, of a slitter embodying the invention. Fig. 2 is a transverse section through the hanger; and Fig. 3 a horizontal section of the same, showing the means for vertical adjustment of the slitter-disk.

In accordance with the invention the hanger a is formed in a single piece, having a bore or opening to fit over the stationary shaft A , the said hanger being provided with a projecting portion a^2 , having a bore transverse to the main bore for the reception of a clamping piece a^3 , which fits in the said bore and is longitudinally movable therein, as by means of a clamping-nut a^4 , threaded on a stem a^5 , which is secured in the hanger in any suitable way. The said bore, which contains the clamping-piece a^3 , intercepts the main bore, through which the shaft A passes, so that when the clamping-nut a^4 is turned the clamping member a^3 will be forced into contact with the shaft A , thus firmly clamping the hanger thereto. This construction admits of any desired adjustment of the hanger, which also can be easily loosened and thrown back out of the way when not in use, the hanger, however, being much stronger than is the case when it is split and the parts drawn together by means of a clamping-screw. The rod b , which carries the slitter-disk c , is held in a projection a^5 , having a bore to fit the said rod b , in which bore the said rod can be turned or vertically adjusted, as may be desired, and clamped in position by means of a clamp-

ing member a^6 and clamping-nut a^7 , (best shown in Fig. 3,) the construction being substantially the same as that of the other clamp described, the member a^6 being longitudinally movable in the bore a^8 . The said rod b is shown as provided at the top with a split nut b^2 , screw-threaded on the end of the rod, the said nut serving as an adjustable gage to determine the vertical position of the rod b by its engagement with the projection a^5 , being clamped in any desired position by means of a screw b^3 . The slitter-disk c is provided with a hollow hub c^2 , having a suitable bearing, such as a stud b^4 , which extends laterally from the lower portion of the rod b , said disk being capable of rotating upon said stud and also being longitudinally movable thereon, so that it can be held against the face of the coöperating cutting member B by a yielding device, such as a spring. In accordance with the invention the slitter is held in position by means of a flat spring d , secured to a face b^5 by means of a suitable clamping or fastening device such as a thumb-nut b^6 on a screw b^7 , which projects from the face b^5 , the spring having an opening for said screw. To remove the slitter, therefore, it is necessary merely to loosen the thumb-nut b^6 and swing the spring d to one side, when the slitter can be taken off its bearing. To prevent the tendency of the spring to slip out of contact with the hub c^2 when the thumb-nut is turned, the said spring is provided with a recess at the end, which is formed by indenting the spring, as shown at d^2 , the said recess fitting over the rounded end of a bearing member c^3 , which may be of any suitable material and is provided with a boss c^4 , which fits into the hollow hub c^2 . The body of the slitter-disk c is arranged to be acted upon by a member c^5 , pivoted at c^6 , which is employed to move the slitter against the stress of its spring d and hold the same while the slitter is being moved into its operative position, the said member then being restored to permit the slitter-disk to be pressed into engagement with the member B .

I claim—

1. In a paper-slitting machine, a solid hanger having a bore to fit the shaft and a bore transverse thereto to contain a clamping member, the bore for the clamping member

intersecting with the main bore; and a clamping member in said bore adapted to engage the shaft, as set forth.

2. In a paper-slitting machine, a solid hanger having a bore to fit the shaft, and bores transverse thereto to contain respectively the rod for the slitter-disk and a clamping member, the bore for the clamping member intersecting with the main bore; a clamping member in said bore adapted to engage the shaft upon which the hanger is mounted; means for forcing said clamping member into position; and means for clamping the rod which supports the slitter-disk in the bore therefor, substantially as described.

3. In a paper-slitting machine, a slitter-disk provided with a hub; a bearing for the said hub; a support for the said bearing; and

a spring clamped to said support and bearing against the said hub to exert a pressure near the axis thereof, the said hub being held in position mainly by said spring, as set forth.

4. In a paper-slitting machine, the combination with the slitter-disk *c* provided with the hub *c*² and bearing member *c*³; of the bearing *b*⁴; the spring *d*; and the clamping member *b*⁶ to hold said spring in position, substantially as described.

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

GEORGE W. HAMBLET.

Witnesses:

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