

No. 855,033.

PATENTED MAY 28, 1907.

A. WOLLENSAK.
LOOSE LEAF BINDER.
APPLICATION FILED DEC. 18, 1905.

FIG. 1.

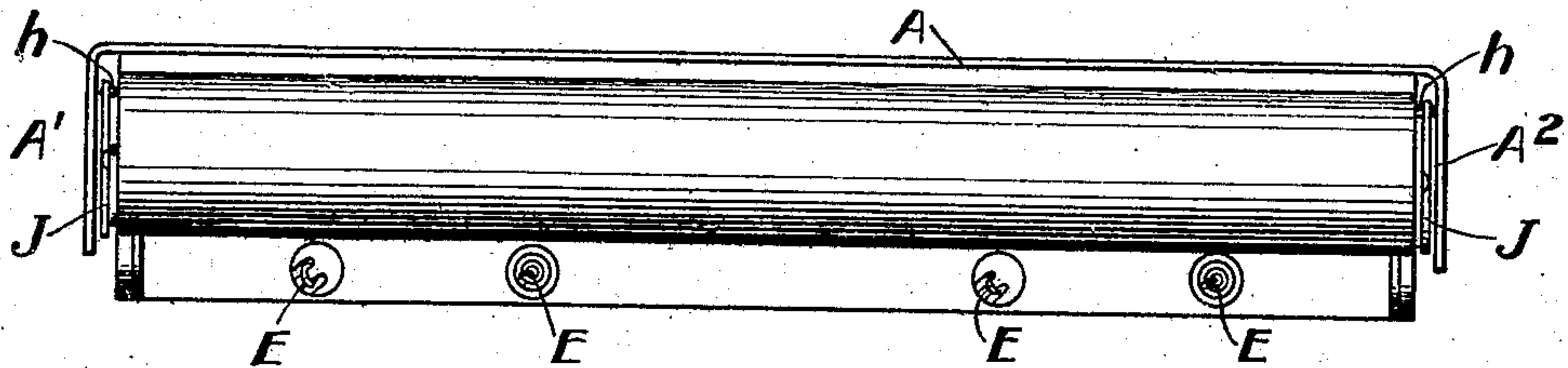


FIG. 2.

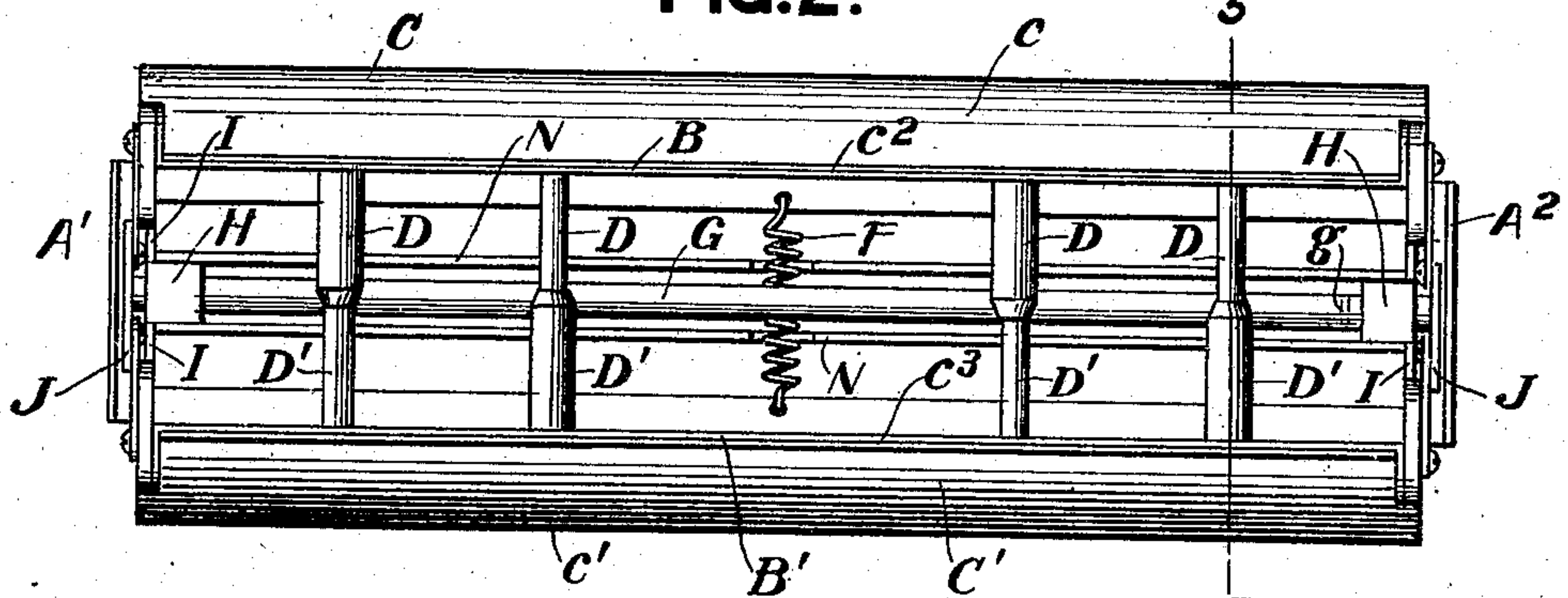


FIG. 3.

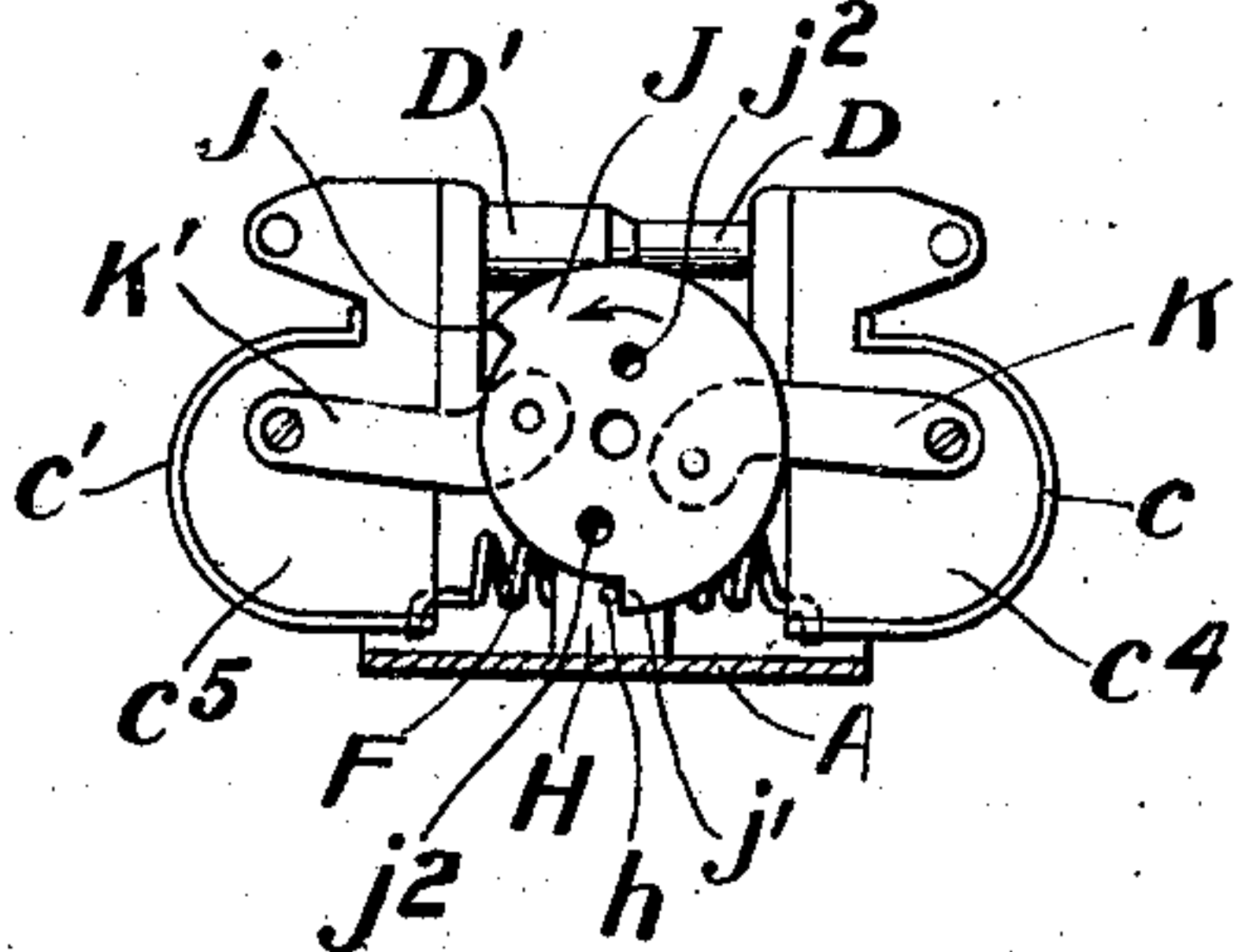


FIG. 4.

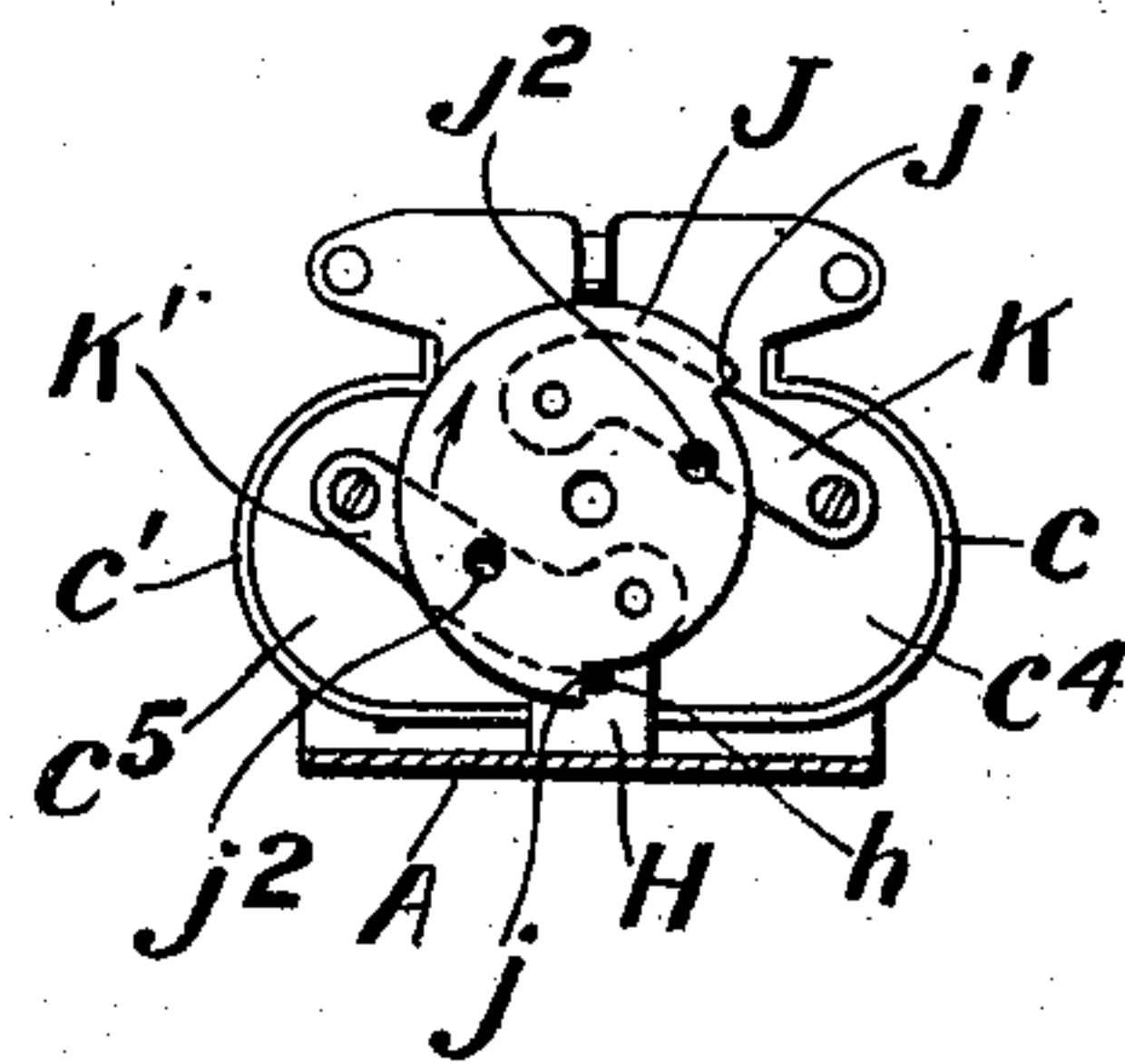


FIG. 5.

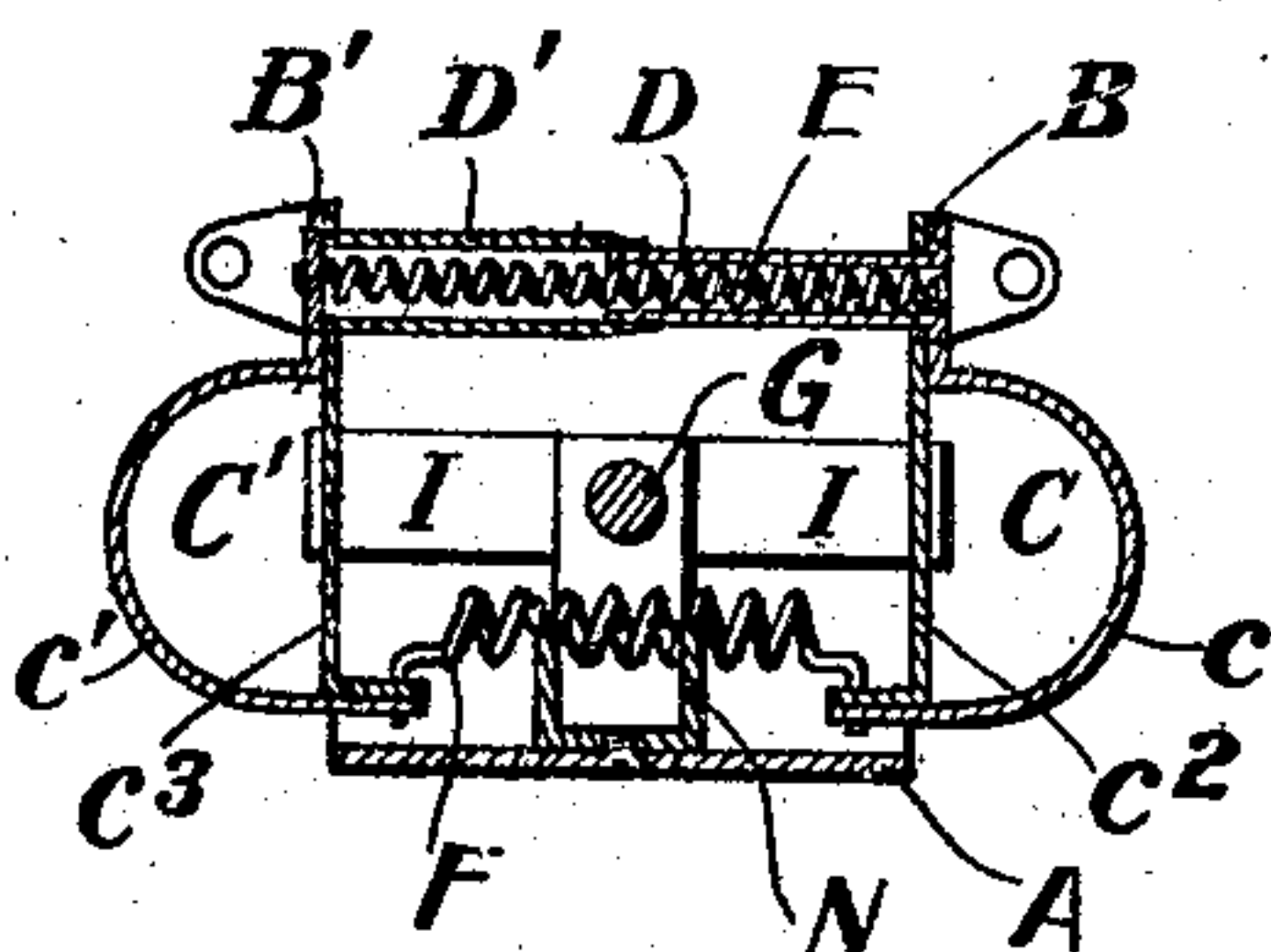
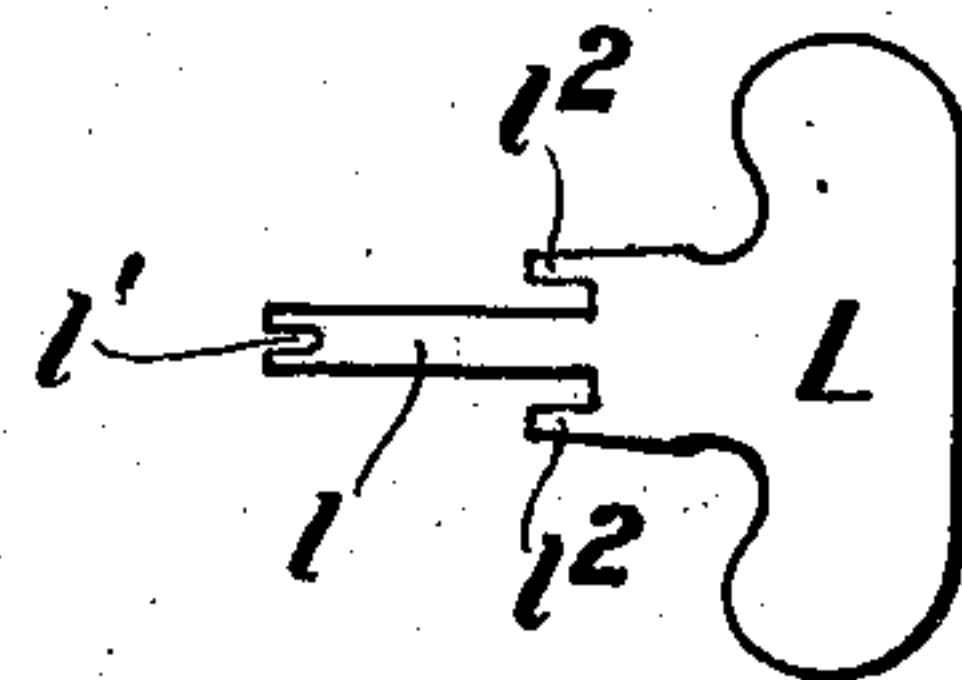


FIG. 6.



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LOOSE-LEAF BINDER.

No. 855,033.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed December 18, 1905. Serial No. 292,207.

To all whom it may concern:

Be it known that I, ANDREW WOLLENSAK, a citizen of the United States, and a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

This invention relates to loose leaf binders, and has for its object to provide a binder that is simple and strong, and that is automatically adjustable.

In the drawings:—Figure 1 is a side view of the binder, with the back uppermost; Fig. 2 is a top view; Fig. 3 is an end view from the right, the end plate being removed, which shows the binder fully open; Fig. 4 is the same view showing the binder closed; Fig. 5 is a cross-section on the line 5—5 of Fig. 1; and Fig. 6 shows the operating key.

A represents the back plate which is turned up at right angles at each end into the end plates A^1 and A^2 .

B, B' are the parallel clamping jaws, which are carried, respectively, by the transversely movable clamping members C, C'. The latter comprise, respectively, hollow convex plates c , c' , flat vertical plates c^2 , c^3 that close the open sides, and vertical plates c^4 , c^5 that close, respectively, the open ends.

The component members D and D' of a plurality of pairs of hollow telescoping binding posts are attached, respectively, to the jaws B and B'. Each pair of binding posts D and D' contains a coiled spring E, that tends to close together the jaws B and B'. A coiled spring F is also shown for this same purpose, connecting the inwardly projecting lower edges of the convex plates c and c' .

The centrally located operating rod G is rotatively supported at its end by posts H, H. Transverse plates I, I upon the posts H, H, respectively, lie in grooves (not shown) in the end plates c^4 , c^5 , and serve both to support the clamping members, and to guide them through their transverse movements.

The operating rod G carries at each end, outside the posts H, H, a disk J, and the clamping members c , c' , are separated against the resistance of the springs E and F, by means of a pair of links K, K', at each end of the binder, the links of each pair being at-

tached at one end to a disk J, and at their other ends to the end plates c^4 , c^5 , respectively.

When the binder is closed, as shown in Fig. 4, stops h , h , on one end of the posts H, H, engages, respectively, shoulders j , j , on the disks J, J, respectively; and when the binder is wide open, as shown in Fig. 3, the same stops engage, respectively, other shoulders j' , j' , on said disks J, J, respectively, in both cases arresting the rotation of the disk and operating rod.

A key L shown in Fig. 6, is employed to operate the binder. The stem l enters the operating rod G, the recess l' in its end engaging a pin g therein, while the prongs l^2 , l^2 enter perforations j^2 , j^2 in that disk J that is carried on that end of the operating rod. The key L with the operating rod G and disks J, J, constitute levers, which by means of the links K, K' separate the clamping members against tension of the springs. The clamping members must be forced apart by rotating the disks J, J in the direction of the arrow shown in Fig. 4 against the resistance of the springs, but the parts spring together as soon as they are released from the stops h , h , by rotating the disk J, J, in the direction of the arrow in Fig. 3, and are drawn by the springs in upon any papers that may be upon the binding posts.

What I claim is:—

1. In a temporary binder, the combination with two parallel, transversely-movable, spring actuated, clamping members, of a lever pivotally supported between said clamping members; link connections between said lever and said clamping members whereby the latter are opened; and means coöperating with the operating member for holding said clamping members open against the action of the spring.

2. In a temporary binder, the combination with two parallel, transversely movable, clamping members, of disks rotatively supported between said members at right angles thereto; links connecting said disks with the ends of said members, respectively; and means for rotating said disks in unison.

3. In a temporary binder, the combination with two parallel, transversely-movable, spring actuated, clamping members, of a suitable support for said members; a disk rotatively supported at right angles to said

clamping members; links pivotally attached to said disk and said clamping members, respectively; means for rotating said disk; and a stop adapted to engage said disk after
5 the links have passed the rotary center of said disk.

4. In a temporary binder, the combination with the two parallel, transversely-movable clamping members B, B', of the operating
10 rod G, rotatively supported between said members; the disks J, J, carried by said rod; and the links K, K', K, K', connecting said disks with said clamping members, respectively, at their ends; substantially as shown
15 and described.

5. In a temporary binder, the combination

with the two parallel, transversely-movable clamping members B, B', of the operating rod G, rotatively supported between said members; the disks J, J, carried by said rod, 20 and having the shoulders j', j' ; links K, K', and K, K' connecting said disks with said clamping members, respectively, at their ends; and stops adapted to engage said shoulders on said disks after said links have 25 passed the rotary center of said disks, respectively; substantially as shown and described.

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Witnesses:

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