

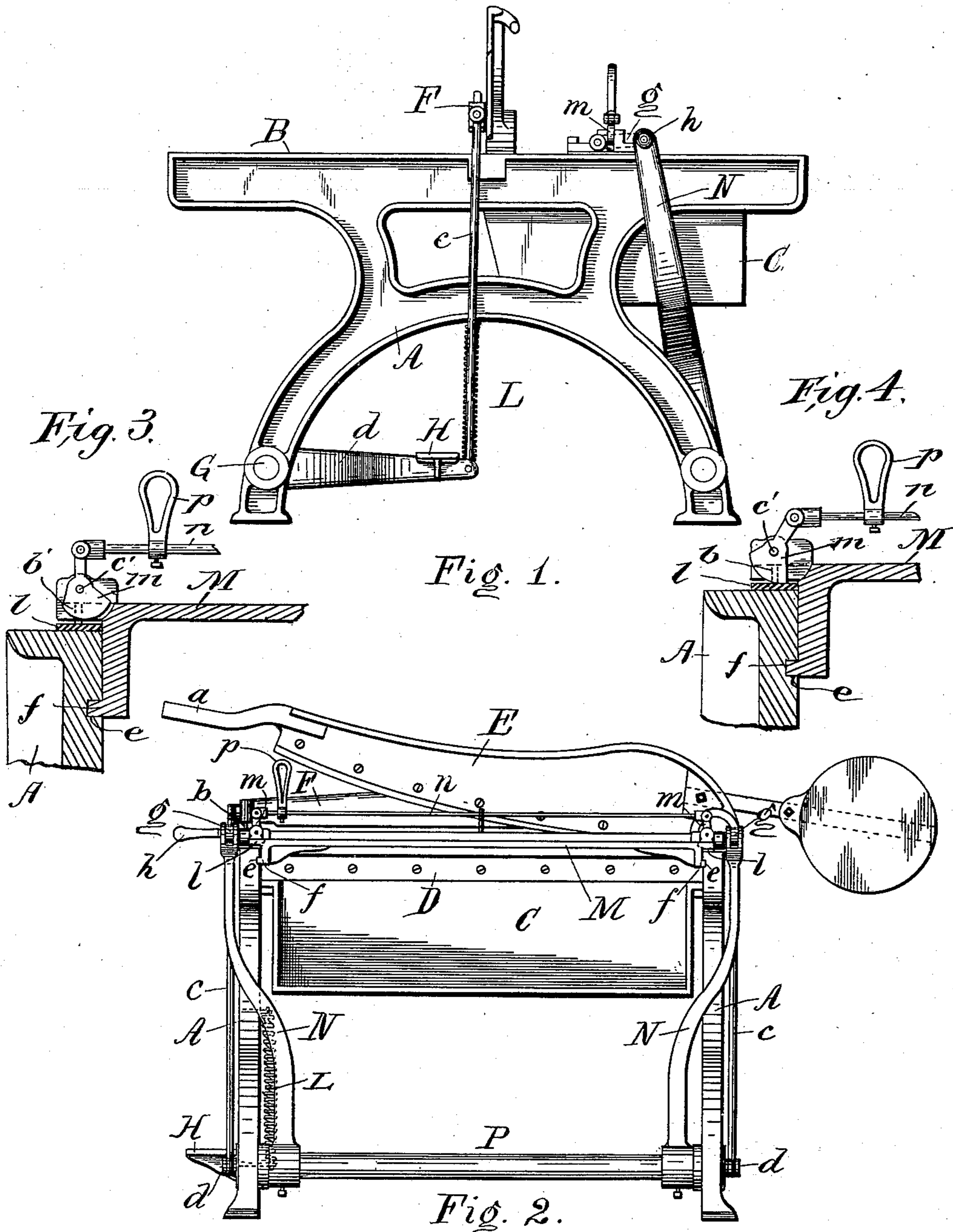
No. 654,925.

Patented July 31, 1900.

C. SEYBOLD.
TABLE SHEARS.

(Application filed July 28, 1898.)

(No Model.)

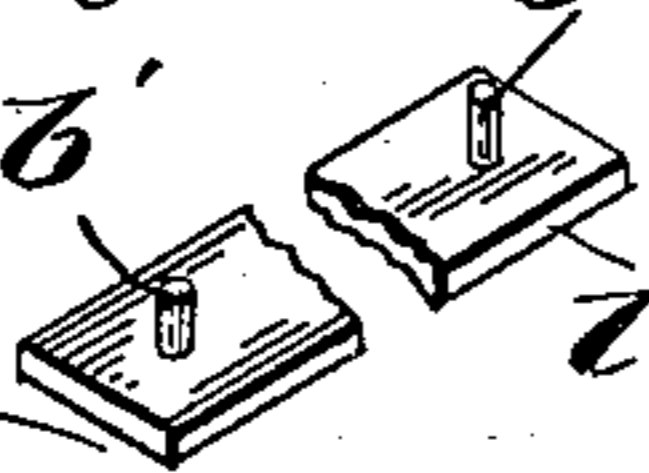


Witnesses.

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Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES SEYBOLD, OF DAYTON, OHIO.

TABLE-SHEARS.

SPECIFICATION forming part of Letters Patent No. 654,925, dated July 31, 1900.

Application filed July 28, 1898. Serial No. 687,115. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SEYBOLD, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented a certain new and useful Improvement in Table-Shears for Cutting Cardboard, Stiff Paper, and the Like, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to machines for cutting stiff paper, in which a swinging knife is employed operating by hand against a fixed knife to sever the cardboard in proper lengths, the action of the machine being that of a pair of shears.

The improvements consist of a certain novel construction and arrangement of gage and clamp to be hereinafter particularly pointed out and claimed, whereby the clamp may be operated quickly and the gage may be easily and accurately adjusted, and in which the wear on the gage adjustments is reduced to a minimum.

In the drawings, Figure 1 is a side elevation of my machine. Fig. 2 is a front elevation of same. Fig. 3 is a detail cross-section of one end of the gage-plate and standard, showing the cam for locking the parts together in unlocked position. Fig. 4 is a similar view in locked position. Fig. 5 is a perspective view of one of the locking-plates.

The operating parts are mounted on a substantial framework consisting of side standards A A and a table-top B, supported by same across the rear half of the machine. The front half of the machine is open between the side standards, and a box or trough C is supported by the standards to receive the cardboards as they are cut.

Secured vertically to the front or inner edge of the table portion of the machine is a stationary knife-blade D, while E is the swinging knife operated by handle *a* and brought down against the cardboard, so as to give a shearing cut.

The paper-stock to be operated on is held in position by the clamp F, which is mounted to slide up and down on pins *b* at each end of the table. The ends of this clamp are cou-

pled by connecting-rods *c c* with the arms *d d*, mounted on shaft G at each end, which shaft is journaled in the side standards, while H is a foot-treadle by means of which the clamp is brought down firmly on the paper-stock to be cut. L is a coiled spring, one end attached to the foot-treadle and the other to the frame, to draw up the clamp when released by the operator. The advantage to be gained from this method of operating the clamp over the older arrangements, in which a hand-wheel and screw are employed to operate the clamp, is manifest, as my arrangement operates instantly and uniformly at each end, so as to bring uniform pressure to bear no matter how narrow or wide the paper-stock nor whether placed on the middle or either side of the table.

Sliding on the top of the side standards is the gage-plate M, guided by flanges *f f*, sliding in ways *e e* on the upper inner side edges of the standards. Pivoted at each end of the gage-plate by the links *g g* are the levers N N, keyed at their lower ends to the shaft P, which is journaled in the standards at the base, while *h* is a handle by means of which the levers N N are oscillated to slide the gage-plate back and forth. In this way a perfectly uniform and accurate movement can be given the gage-plate for adjusting the cut of the shears. In order to lock the gage-plate at any desired position, I provide the loose plates *l l*, mounted on pins *b' b'* on the lower surface of the gage-plate at each end and resting between the ends of the gage and the upper edges of the standards. *m m* are a pair of cam-levers connected together by the connecting-rod *n* and pivoted on pins *c' c'* at each end of the gage-plate. The gage-plate at these points is slotted, so as to allow the cams to bear against the plates *l l*, while *p* is a handle for shifting the connecting-rod and with it the cams to bring pressure to bear on the plates *l l* to lock the gage-plate in any desired position. It will be evident from the foregoing that the movement of the gage-plate will be absolutely uniform throughout and that this plate will always keep its position parallel to the shears, while the gage can be locked instantly at each end in any desired position by shifting the handle *p*.

Heretofore in machines of this kind the

gage has been adjusted by rack and pinion; but with such construction after a very little wear there is lost motion at one side or the other, and the gage will not remain exactly parallel with the knife, and its accuracy is lost. Heretofore, also, it has been customary to lock the gage-plate by a clamp or a screw at each end of the plate, so that in order to tighten or release the plate the operator must pass from one side of the machine to the other. These disadvantages are all obviated by my present construction. The gage-plate being oscillated by the lever-arms at each end must always remain parallel with the knife, and the plate can be instantly locked in any position from the operating side of the machine alone.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

In a table-shears, a sliding gage-plate with ways for guiding same on the standards, oscillating shaft with lever secured thereto, links for connecting said gage at each end to the levers, and pair of cams pivoted at each end of the gage-plate, with movable plate resting on the standards against which said cams have a bearing, and a rod connecting said cams, whereby the shifting of the rod will lock the gage-plate in any desired position on the standards, substantially as shown and described.

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Witnesses:

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