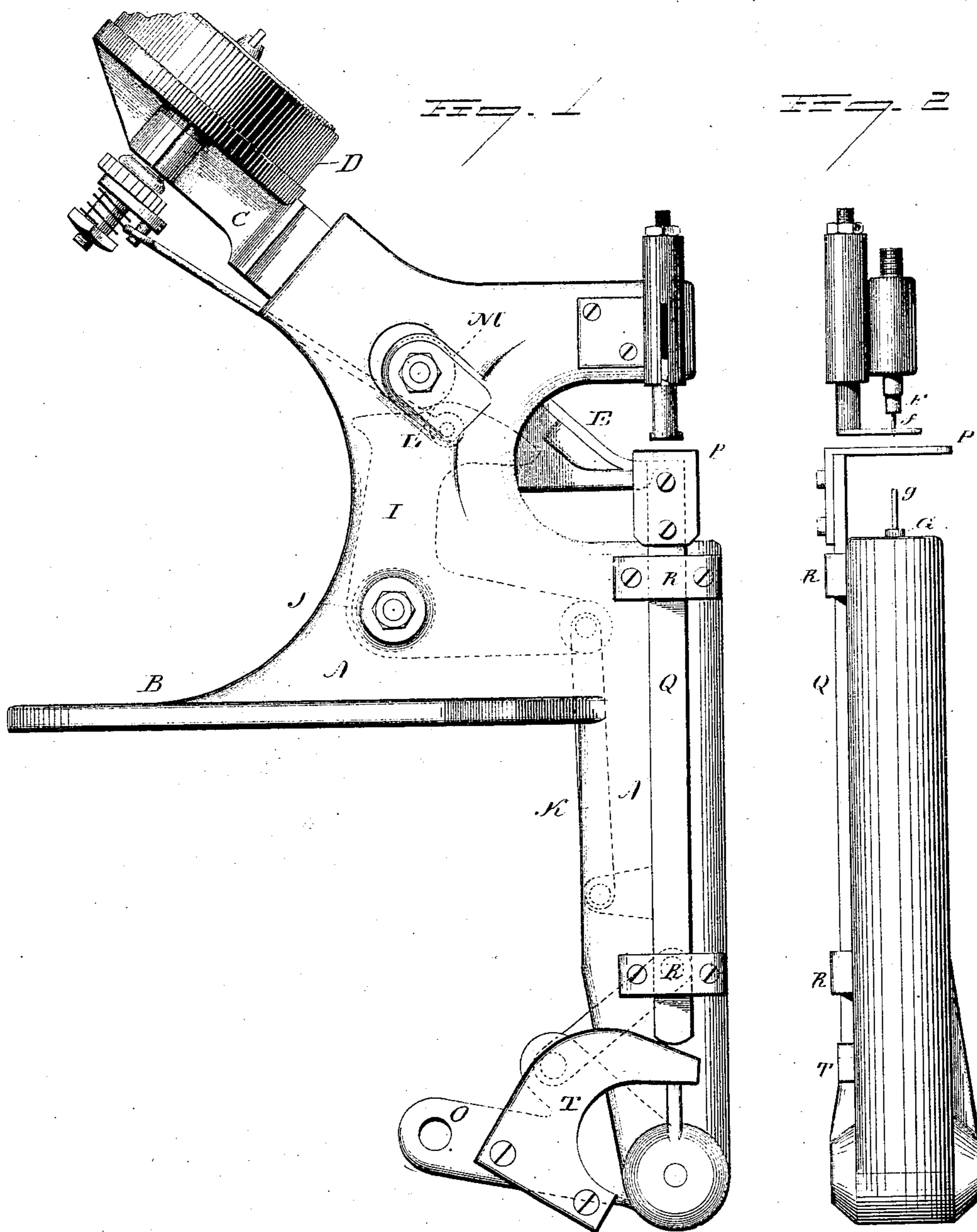


(No Model.)

A. J. SHIPLEY.
EYELETING MACHINE.

No. 284,911.

Patented Sept. 11, 1883.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALFRED J. SHIPLEY, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
SCOVILL MANUFACTURING COMPANY, OF SAME PLACE.

EYELETING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 284,911, dated September 11, 1883.

Application filed August 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALFRED J. SHIPLEY, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new
5 Improvement in Eyeletting-Machines; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same,
10 and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a partial front view.

This invention relates to an improvement in
15 machines for setting eyelets, with special reference to and is an improvement upon the machine for which Letters Patent of the United States were granted January 23, 1883, No. 271,049. In that patent the work-supporting
20 bed or table is arranged upon one end of an arm, the said arm pivoted in rear of the table, and so that the table in its movement up and down vibrates upon the said pivot as its center of motion; hence the plane of the table is constantly changing from its lowest to its highest
25 position, presenting the work at constantly-changing angles. Again, owing to the vibratory or oscillating motion of the table, it is difficult to retain that nicety and precision of pre-
30 senting the work desirable in setting eyelets.

The object of my invention is to avoid the vibratory movement of the table and retain it always in a plane at right angles to the setting mechanism; and it consists in arranging the
35 table on a slide in vertical guides, and imparting to said slide an up-and-down movement in a line parallel with the axis of the setting mechanism, and as more fully hereinafter described.

The following is a brief description of the
40 operative mechanism, sufficient to enable those skilled in the art to understand my improvement.

A represents the frame, adapted to be secured by a base, B, to any suitable support,
45 and is provided at its upper end with inclined guides, in which slides the support C for the eyelet-hopper D, and the inclined channel, through which the eyelets pass from the hopper to the inserting and setting mechanism.

50 The setting mechanism is composed of the fixed anvil F, attached to an arm of the frame,

and provided with a downwardly-projecting punch, *f*, and in vertical axial line with this punch *f* is a yielding follower, *g*, arranged in a vertical movable plunger, G. To this plun- 55 ger a reciprocating movement is imparted by means of a lever, O, which is hung at the lower end of the frame.

I is a bell-crank lever, (seen in broken lines, Fig. 1,) hung in the frame at J, one of its arms 60 connected by a link, K, with a lug on the plunger, as seen in Fig. 1, broken lines, and its other arm with a cam or shoulder, L, which bears against a roller, M, on the support C, and imparts to the support C and the chute a 65 reciprocating movement, so that the first eyelet in the channel will at the proper time be presented to its position between the setting devices for the delivery of the eyelet, and then removed. A rotative movement is imparted 70 to the hopper for the proper feeding of the eyelets; but these devices, constituting no part of my invention, need not be herein further described.

P represents the work-table, which is made 75 fast to a vertical slide, Q, arranged in guides R on the side of the frame, as shown, and so as to be moved freely up and down in said guides, and said guides are arranged to support said slide in a plane parallel with the axis of the 80 setting mechanism. The table projecting from the slide stands in a plane between the setting devices and at right angles to their axis, as shown.

Attached to the lever O is a cam, T, which 85 bears against the lower end of the slide Q. The work is placed over the table when in its down position, and when in that position the eyelet is presented over the follower *g*. Then as the follower *g* rises it enters the eyelet. The chute 90 is withdrawn, leaving the eyelet on the follower. The table with the work thereon rises, causing the punch *f* to pass through the work and make a hole therein. The follower then forces the eyelet through the material. The plunger G, 95 following, forces the eyelet against the fixed anvil F, upsetting the eyelet upon the work in the usual manner. Then the plunger G and its follower *g* drop. The work-table also drops by being released from the pressure of its cam 100 T, all substantially as in the before-mentioned patent; but it will be observed that instead of

the vibratory movement of the table, whereby the plane of the table is constantly changing from one extreme position to the other, the table by my improvement is maintained in the same constant relative position to the axis of the setting mechanism from one extreme to the other—that is, its plane does not change, but always stands at right angles to the axis of the setting devices, and because of its being thus vertically guided it is not liable to be deranged, which is unavoidable in a vibrating lever.

What I claim as an improvement on the before-described machine in Letters Patent of the United States No. 271,049 is—

In an eyeleting-machine, the combination, with the fixed anvil *F* and its punch *f*, the

movable plunger *G* and its follower *g*, and mechanism, substantially such as described, for presenting the eyelet over said follower, with the work-table *P*, arranged upon a slide guided in a plane parallel with the axis of the setting mechanism, said table standing in a plane at right angles to said axis, and mechanism, substantially such as described, for imparting to said table a vertical reciprocating movement without changing the plane of said table during such reciprocating movement, substantially as described.

ALFRED J. SHIPLEY.

Witnesses:

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