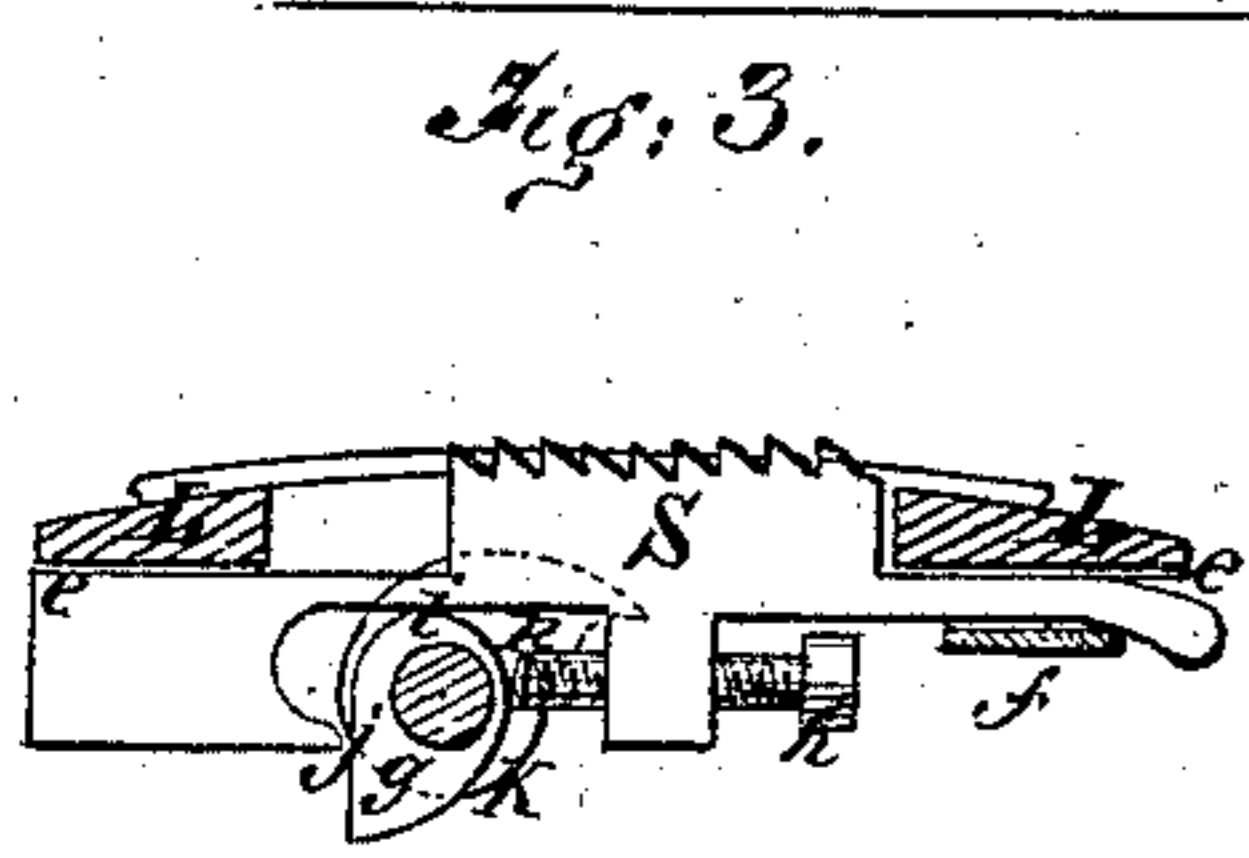
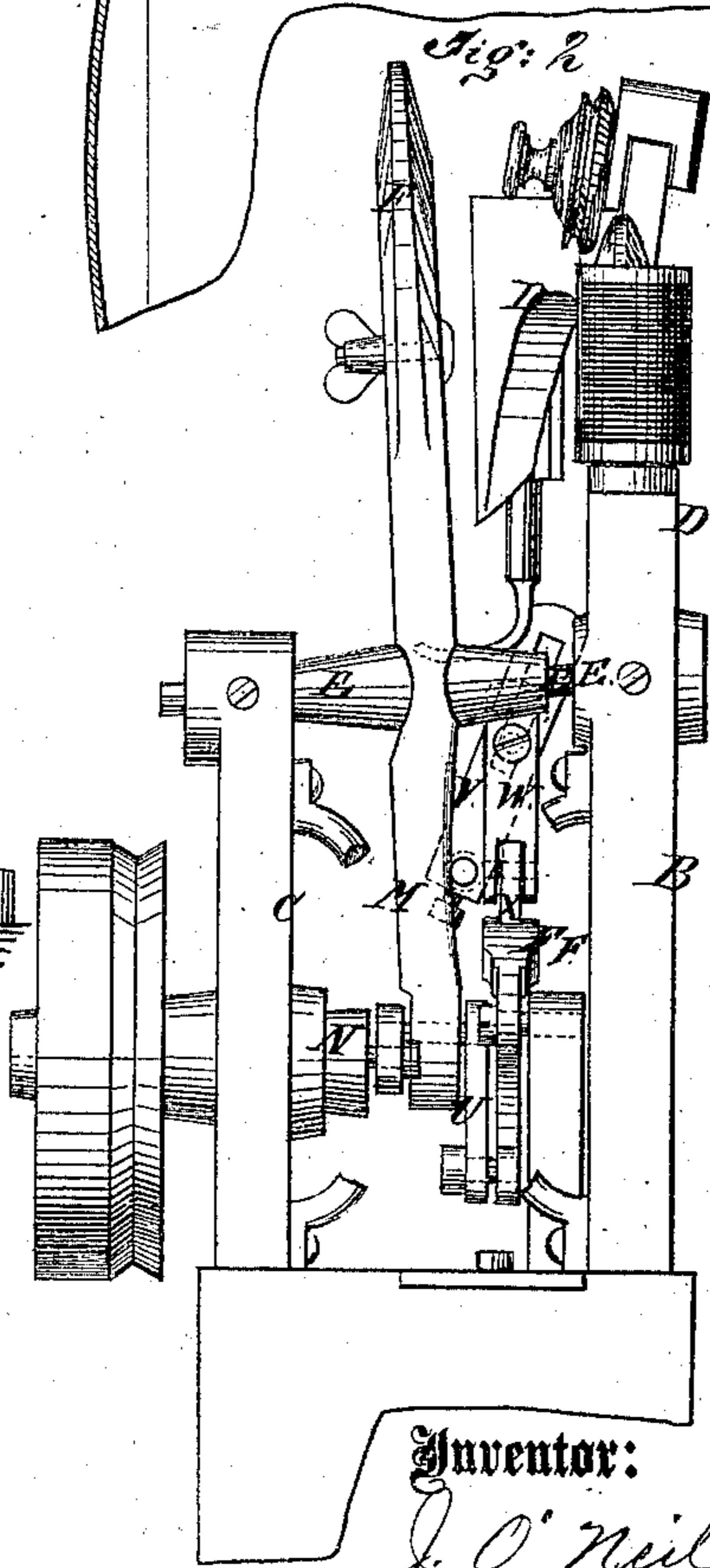
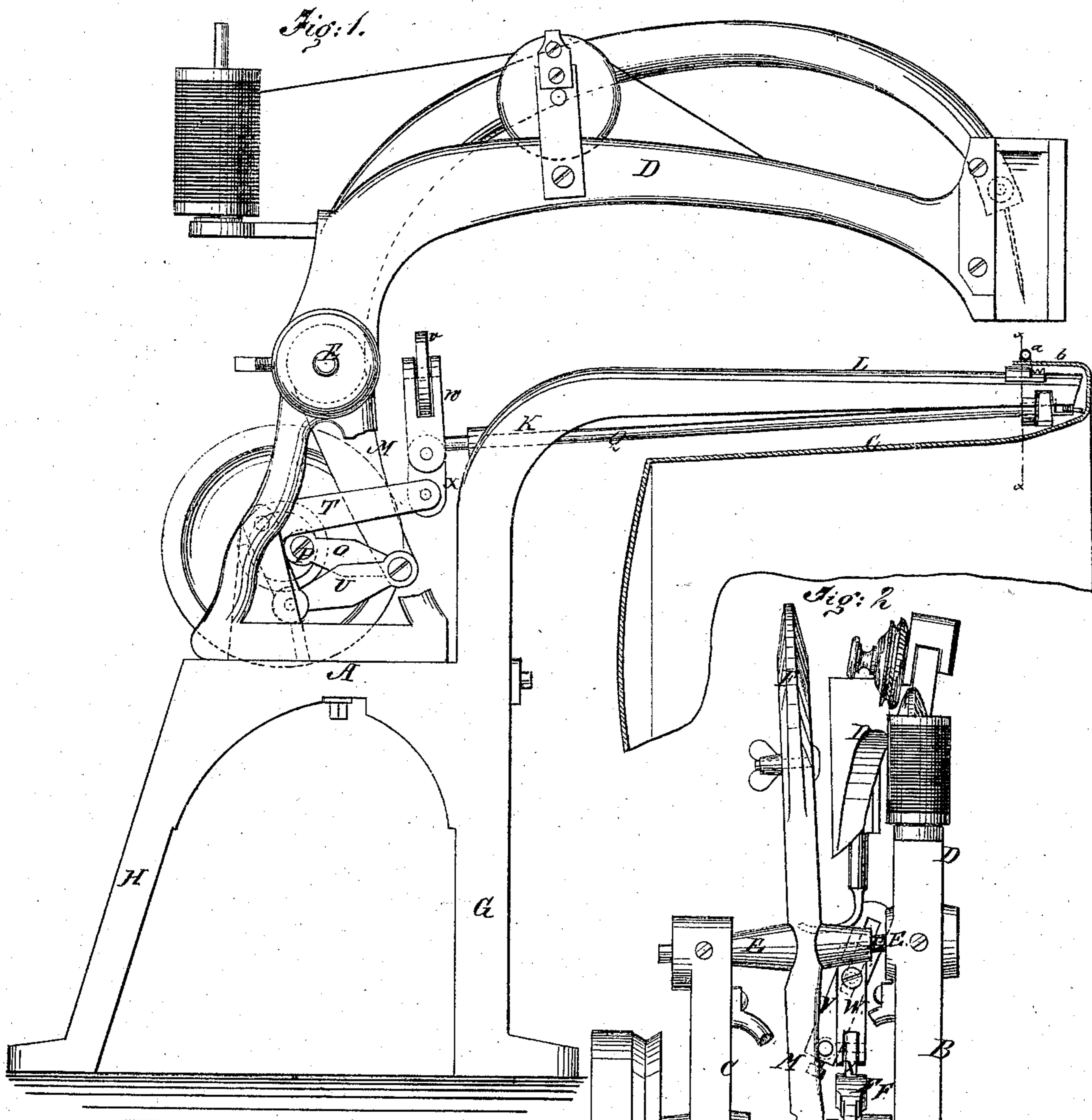


J. O'NEIL.
Sewing-Machines.

No. 137,618.

Patented April 8, 1873.



Witnesses:

Chas. Nida
Seignior

Inventor:

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PER

UNITED STATES PATENT OFFICE.

JOHN O'NEIL, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND R. A. SCHONEMAN, OF SAME PLACE.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 137,618, dated April 8, 1873; application filed January 6, 1873.

To all whom it may concern:

Be it known that I, JOHN O'NEIL, of the city, county, and State of New York, have invented a new and useful Improvement in Sewing-Machines, of which the following is a specification:

This invention consists in a simple and efficient arrangement of gear for working the rock-shaft which carries the hook and works the feed.

Figure 1 is a side elevation of a machine constructed according to my improvement, with a part of the stand for supporting the needle-arm broken away; also a section of a hat-frame, as applied to be wired in the brim. Fig. 2 is a rear elevation of the machine, except a portion of the lower part of the stand. Fig. 3 is a transverse section of Fig. 1 on the line *x x*.

The machine is designed more particularly for securing the wire *a* in the brim *b* of a lady's hat-frame, of which *c* represents the crown, and the frame or stand is therefore constructed as represented in the side elevation in Fig. 1, to allow of presenting the hat-frame so as to be properly acted upon. The said frame consists of a stand or platform, *A*, for the support of the housings *B C*, one of which supports the stationary arm *D*, and both support the journal *E* of the needle-arm *F*, which said platform is supported on suitable legs *G H*, which are cast with the platform, and form part of it, and the legs *G* extend upward beyond the table, and unite in a plate, *L*, which bends over from the platform at *K*, under the stationary arm, and extends along horizontally to a point a little beyond the said arm, and thus is adapted for the application of the hat-frames aforesaid. The

needle-arm has an extension, *M*, placed below the journals *E*, and connected at its lower end with wrist-pin *K* of drive-shaft *N* by the strap *O*. This extension *M* is also connected by rod *U* with bell-crank *T*, which is attached by a connection, *X*, to a block, *W*, having a pin that enters a slot of the arm *V* in the rock-shaft *Q*, which carries the parts for catching the upper thread, and also the feed-operating cams, so that the reciprocation of the block turns the arm and shaft. The feed-plate *S* is confined in the groove of plate *L* by the spring *f*. It rests against the cam *g* on the rock-shaft, which raises and moves it forward and back, and the length of the feed is varied by the set-screw *h*. The part *i* of the cam on which the plate rests raises it, the part *j* pushes it forward, and the part *k* pushes it back. For regulating the length of the feed, the part *l* of the cam is caused to act on an adjusting-screw, *h*, which, being shifted to or from the cam, causes the feed-bar to be pushed back more or less, so that its forward movement is correspondingly varied. Besides holding the feed-plate in its place in the groove *e* the spring *f* holds said plate in any position in which it may be left at rest by the cam.

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

The arrangement of the bell-crank *T*, connecting-rod *U*, slotted block *W*, slotted arm *V*, and connecting-link *X* with the needle-arm and the rock-shaft, for operating the latter in the manner described.

JOHN O'NEIL.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.