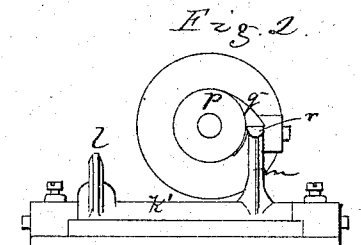
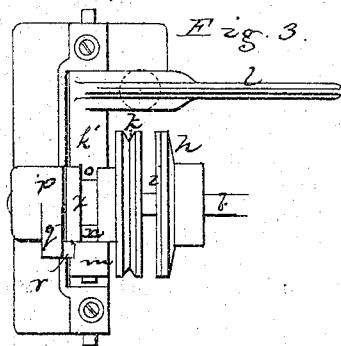
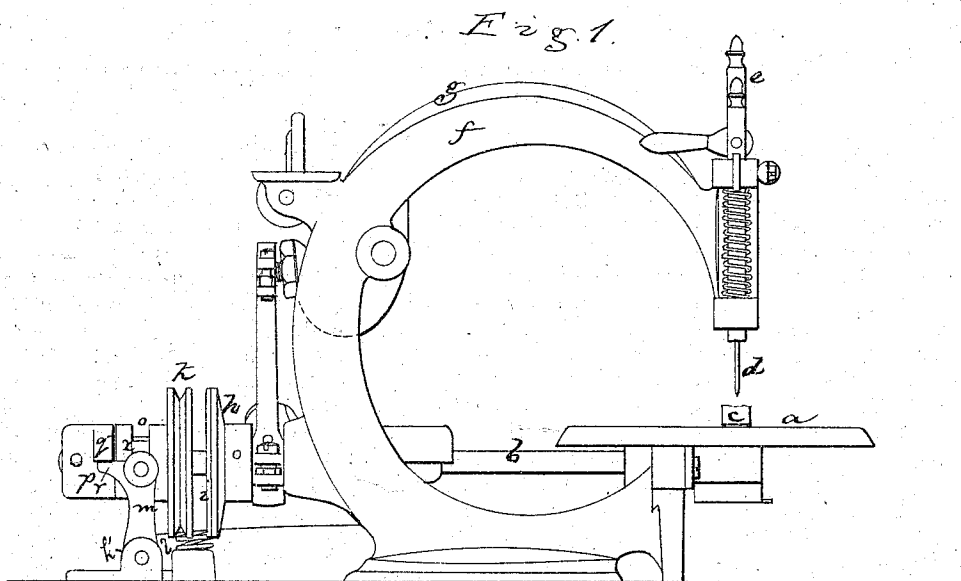


A. S. DINSMORE.

Sewing-Machines.

No. 136,976.

Patented March 18, 1873.



Witnesses.
M. W. Frothingham.
Levi L. Atwater.

Inventor.
 Alfred S. Dinsmore.
 By his Attys.
 Crosby & Gould

UNITED STATES PATENT OFFICE.

ALFRED S. DINSMORE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 136,976, dated March 18, 1873.

To all whom it may concern:

Be it known that I, ALFRED S. DINSMORE, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Sewing-Machines; and I do hereby declare that the following, when taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention consists in the combination of mechanism for automatically effecting stoppage of the machine with the mechanism or any part of it at a certain position.

The drawing shows in side elevation at Figure 1 a machine embodying the invention. Fig. 2 shows the friction-pulley and lever-stop in end view, and Fig. 3 is a plan of the pulley mechanism.

a denotes the work-supporting plate; *b*, the shaft that immediately actuates the feed, presser, and stitch-forming mechanism. *c* denotes the presser-foot; *d*, the needle; *e*, the needle-bar; *f*, the goose-neck; *g*, the lever that actuates the needle-bar. *h* is a disk-pulley fixed on the shaft *b*, and having a friction surface or pad, *i*, by contact with the face of which a band-pulley, *k*, is made to turn the shaft, the pulley *k* sliding on the shaft and turning loosely upon it, (except when clamped or held against the pulley *h*,) its motion being imparted by its band-connection with the crank-shaft. The pulley *k* is thrown against the pulley *h* by means of a shipper-rocker, *k'*, having two arms, *l* *m*, projecting therefrom, the arm *m* having a shoe, *n*, that enters a groove, *o*, in the hub of the pulley *k*, and moves the pulley *k* forward against the pulley *h* when the arm *l* is thrown down. When the arm *l* is released, a suitable spring throws the pulley *k* back,

and it ceases to drive the pulley *k* by any contact therewith; but when the pulley *k* is thus thrown back, the end of its hub *x* is thrown against the inner face of a collar, *p*, fixed on the end of the shaft, a friction-pad being placed between the collar and hub, and the friction of the hub *x* being sufficient to turn the collar *p* if there be no obstruction to the motion of the shaft except that involved in actuating the mechanism. From this collar *p* extends an arm, *q*, and from the lever-arm *m* extends a stop, *r*, this stop, when the hub *x* and collar *p* are in contact, being in the direct path of rotative movement of the arm *q*, so that when the arm *q* strikes this stop *r* further movement of the shaft *b* will be arrested. The arm *q* is so located that it will always strike the stop when, and only when, the needle-point is above the work or at its highest position, as seen at Fig. 1. The arm *q* may, of course, be so arranged as to stop the shaft with the needle or the mechanism at any desired point; but the invention is particularly designed for the arrest of the shaft with the needle in the position described. To move the pulley *k* up to the pulley *h*, the lever-arm *l* is preferably connected by a suitable rod with a lever to be operated by foot.

I claim—

The rocker *k'* provided with the arms *l* and *m*, shoe *n*, stop *r*, and a reacting spring, combined with the collar and its arm *q*, the friction-hub *x*, and the fast and loose pulleys *h* *k*, and shaft *b*, substantially as and for the purpose described.

A. S. DINSMORE.

Witnesses:

FRANCIS GOULD,
M. W. FROTHINGHAM.