

J. K. P. PINE.

SEWING-MACHINE STARTER.

No. 173,335.

Patented Feb. 8, 1876.

Fig 1

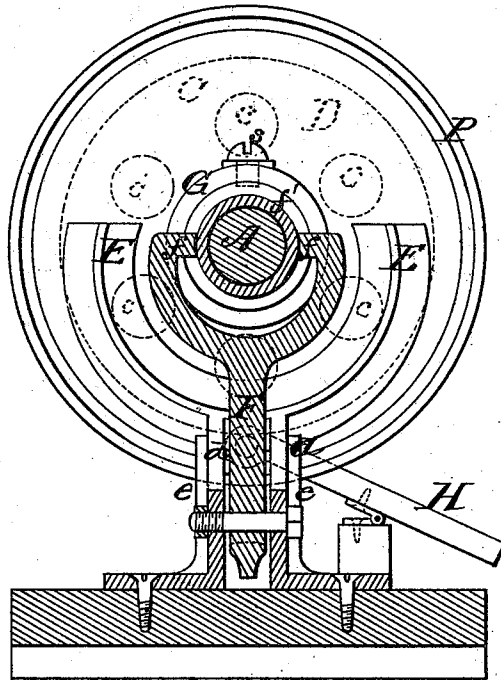
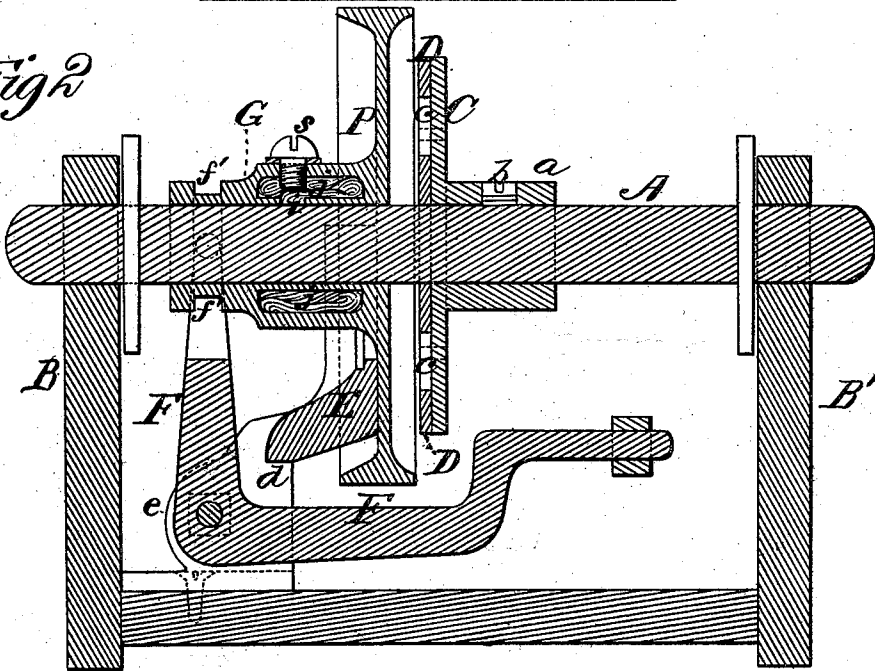


Fig 2



WITNESSES

Villette Anderson.
E. H. Bates

INVENTOR

James K. P. Pine
Chipman & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES K. P. PINE, OF TROY, NEW YORK.

IMPROVEMENT IN SEWING-MACHINE STARTERS.

Specification forming part of Letters Patent No. **173,335**, dated February 8, 1876; application filed December 18, 1875.

To all whom it may concern:

Be it known that I, JAMES K. P. PINE, of Troy, in the county of Rensselaer and State of New York, have invented a new and valuable Improvement in Sewing-Machine Starters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a transverse vertical section of my sewing-machine starter, and Fig. 2 is a longitudinal vertical sectional view of the same.

This invention has relation to improvements in devices for starting and stopping sewing-machines; and it consists in the arrangement and novel construction, in connection with an actuating-shaft, of a loose pulley, a fixed frictional disk, a brake, and the actuating mechanism, whereby the pulley is thrust against the frictional disk for starting the machine, and against the brake for stopping the same, all as hereinafter shown and described.

In the annexed drawings, the letter A designates an actuating-shaft, having its bearings in standards B B', and extending under the table from end to end thereof. This table may have upon it any number of machines, all of which will receive motion from the same shaft A. The object of the invention is then to provide means whereby any one or more of the machines may be stopped at pleasure without interference with the remainder. C represents a flat metallic disk, having a collar, *a*, by means of which and a bolt or screw, *b*, it is detachably secured to the shaft, and a leather face, D, having spaced perforations *c*, the object of which will hereinafter appear. P indicates a pulley-wheel, which is loosely applied upon shaft A, between disk C and a flat semicircular brake-plate, E, which is also leather-faced, so as to have a degree of play between the two. Plate E is rigidly secured, by means of an angular shank, *d*, to the floor, and is provided with spaced lugs *e*, between which is passed, and in which is fulcrumed, a vertically-vibrating angular operating-lever, F.

This lever, at its upper end, is bifurcated, and is provided with spurs *f*, projecting inward toward each other, which are engaged in an annular groove, *f'*, formed in the hub G of the loose pulley P.

When the power end of lever F is depressed by a suitable treadle, H, pulley P will be jammed against the leather-covered face of disk C, and by its frictional contact therewith will communicate motion to the machine. When the disk and pulley are thus in contact, cushions of air will be inclosed in perforations *c* in the leather face D of the former, which, when the necessity occurs for stopping the machine, will greatly facilitate the separation of the disk and pulley by preventing suction. This separation is accomplished by depressing the treadle, and raising the power end of lever F, being a reversal of the movement above described for gearing the shaft and pulley, and the said pulley will be jammed against the brake-plate E, when the rotation of the pulley, which, although disconnected from the disk, would otherwise continue, will be immediately arrested, and the danger of breaking and entangling the thread effectually obviated.

As shown in Fig. 2, hub G is hollow, and the hollow is filled with felt or wicking, which is saturated with oil poured in through a duct, closed, when requisite, by a plug or screw, *s*, from which oil chamber or hollow *j* the lubricant is discharged through an opening, *i*, upon the shaft A.

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

The combination, with an actuating-shaft, of a loose pulley, a frictional brake, and an actuating-treadle for thrusting the pulley against the brake and stopping the machine, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES K. P. PINE.

Witnesses:

JAMES PINE,

HERBERT A. VIETS.