F. H. BROWN.

SEWING-MACHINES.

No. 183,836. Patented Oct. 31, 1876.

Fig. 1

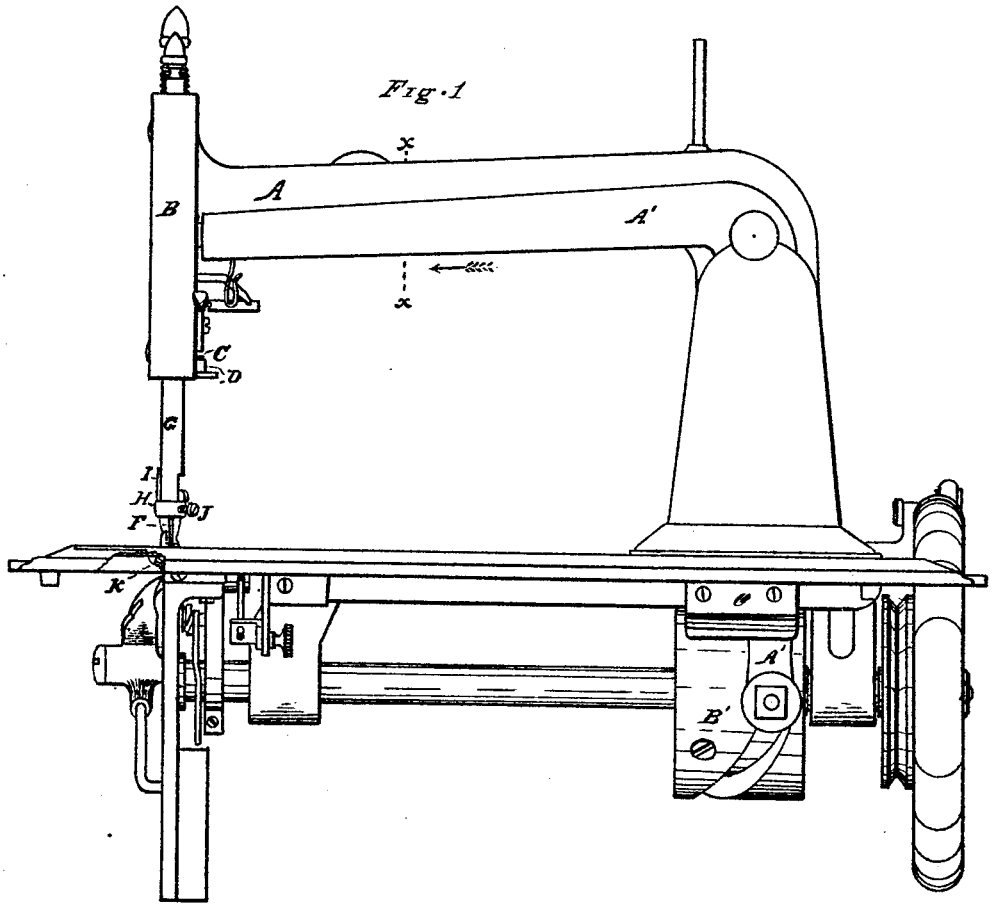

Fig. 2

Fig. 3

WITNESSES.

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UNITED STATES PATENT OFFICE.

FRANKLIN H. BROWN, OF INDIANAPOLIS, INDIANA, (WILLIAM P. BROWN, ADMINISTRATOR.)

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **183,836**, dated October 31, 1876; application filed June 7, 1875.

To all whom it may concern:

Be it known that I, FRANKLIN H. BROWN, of Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Sewing-Machines, of which improvements the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the said improvements, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 is a side or front elevation of a sewing-machine to which my improvements are applied; Fig. 2, a representation of the feed-shield detached, and as viewed from the end of the machine; Fig. 3, a view of the same as seen from the front of the machine.

Like letters of reference indicate like parts.

My invention relates to the means employed for the purpose of preventing the thread from being caught by the feed-bar, and for steadying the movement of the vibrating arm, substantially as hereinafter set forth.

K is the feed-shield. This shield lies on the outside of the face-plate, and below the feed-bar, and above the orbit in which the shuttle-carrier is moved, as represented in Fig. 1. The form of the shield is such that the action of the feed-bar, needle, shuttle, and shuttle-carrier is not thereby interfered with, and it is so constructed and arranged that the thread is prevented from being caught by the feed-bar. I have clearly shown in Figs. 2 and 3 the form of shield which I deem preferable for the purpose of accomplishing these results, and in the broad part of the shield I make a hole or opening, *k*, to allow the lint and dust to fall away, which would otherwise be collected. It will also be perceived by reference to Figs. 2 and 3 that the shield K is attached to the needle-plate.

O is a guard attached to the bed-plate, and arranged for contact with the heel of the vibrating arm A′. This contact prevents the lower part of the arm from being tilted laterally by the grooved cam B′, which vibrates it, and thus prevents unnecessary friction of the arm upon its bearing. Packing should be arranged between the bed-plate and the guard, until the latter is thereby properly adjusted with relation to that part of the arm with which it is intended to be in contact. The guard should not be crowded upon the arm, but should be so arranged with relation to it as to prevent the lateral movement referred to without creating too much friction.

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

1. The shield K, constructed substantially as shown and described, in combination with the feed-bar and the vertical face-plate, the said shield being arranged externally to the said face-plate and below the feed-bar, and above the circuit in which the shuttle-carrier is moved, substantially as and for the purposes specified.

2. The combination of the guard O and vibrating arm A′, substantially as and for the purposes specified.

FRANKLIN H. BROWN.

Witnesses:

O. E. SEYMOUR,

GEO. K. PERRIN.