G. FRAME.

Sewing-Machines.

No. 154,385. Patented Aug. 25, 1874.

Fig. 1.

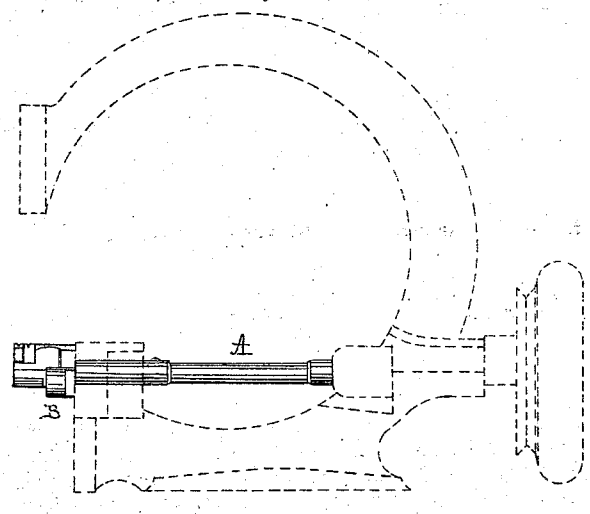

Fig. 2.

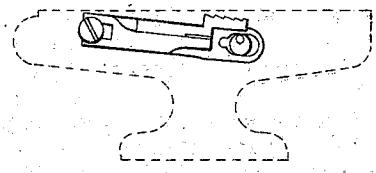

Fig. 3.

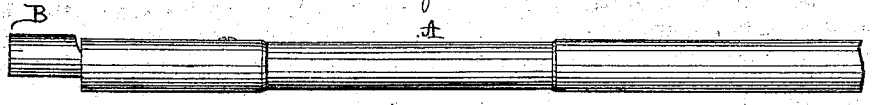

Fig. 4.

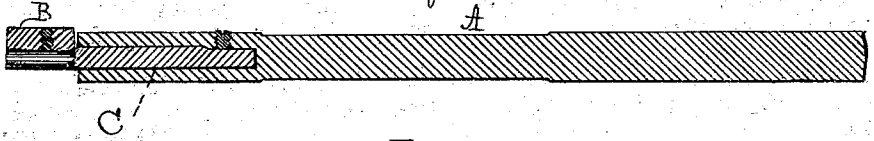

Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

GIBBONS FRAME, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO OSCAR F. DAVIS, OF SAME PLACE.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **154,385**, dated August 25, 1874; application filed April 8, 1874.

To all whom it may concern:

Be it known that I, GIBBONS FRAME, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Sewing-Machines; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figures 1 and 3 are side views of the device embodying my invention. Figs. 2 and 5 are end views thereof, and Fig. 4 is a central longitudinal section thereof.

Similar letters of reference indicate corresponding parts in the several figures.

It is well known that the cam or eccentric that imparts motion to the feed-bar of a sewing-machine of a certain class is formed solid with the driving-shaft, and that when said cam is worn the entire shaft is no longer serviceable. In order to withdraw said shaft the machine must first be removed from the table.

The loss of the shaft and difficulty of its removal are serious matters, which my invention is to remedy, the same consisting of a cam having a stem which enters a longitudinal opening in the shaft, the construction, operation, and advantages of which will be hereinafter stated.

Referring to the drawings, A represents the shaft of the sewing-machine, and B the cam or eccentric which imparts motion to the feed-bar in the manner well known. The cam B is detached from the shaft, and has formed with it a stem, C, which is adapted to enter an opening formed longitudinally in the shaft A. D represents a set-screw, which passes through the shaft A, and bears against the stem of the cam for holding the latter in position. The looper or looper-hook is fitted into a longitudinal opening in the cam B, and a set-screw will be provided for holding the looper in place.

It is evident that as the cam, during usage, is in contact with the adjacent portions of the feed-bar, the former is continually subjected to wear; therefore the feed-bar is not properly operated, and the uniformity of stitch is impaired. In some cases the cam is fractured or broken off, and in either case the shaft has to be removed.

By the use of my invention, the shaft need not be disturbed, for the old cam will be replaced by a new cam, and the shaft continues to render service as previously.

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

The feed-operating cam B, formed with stem C, and with the opening for the shank of the hook, when combined with the shaft A, having a longitudinal opening for the stem, all constructed, arranged, and operating substantially as and for the purpose set forth.

GIBBONS FRAME.

Witnesses:

O. F. DAVIS,

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