J. GLINES & N. W. STILES.

Sewing-Machine.

No. 168,894. Patented Oct. 19, 1875.

Fig. 1

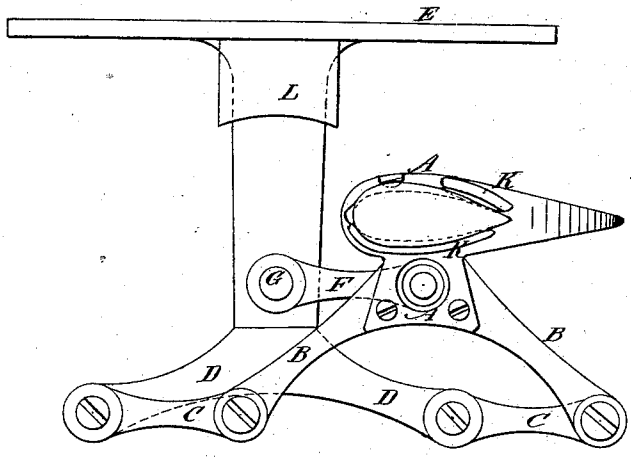


Fig. 2

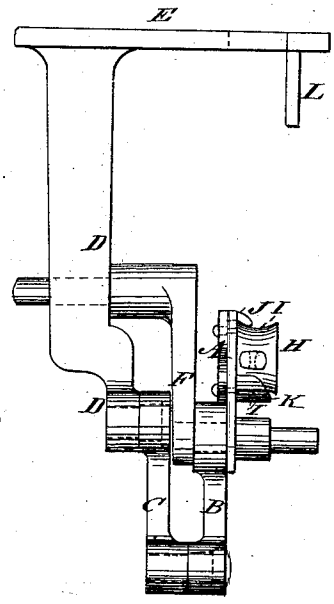
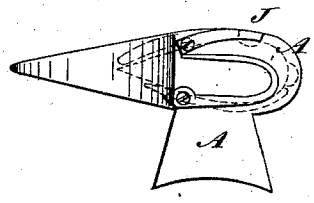


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSIAH GLINES AND NOEL W. STILES, OF POSTSVILLE, IOWA.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **168,894**, dated October 19, 1875; application filed August 21, 1875.

To all whom it may concern:

Be it known that we, JOSIAH GLINES and NOEL W. STILES, of Postsville, Allamakee county, Iowa, have invented new and useful Improvements on Sewing-Machines, of which the following is a specification:

Our invention consists of a shuttle-carrier mounted on a pair of cranks, and operated by a crank on the driving-shaft in such a manner that the shuttle travels in a true circle without revolving on its own axis, and thus does not twist the thread.

Figure 1 is a side elevation of our improved shuttle motion. Fig. 2 is an end elevation, and Fig. 3 is an elevation of the shuttle-carrier.

Similar letters of reference indicate corresponding parts.

A is the shuttle-carrier, which is attached to the bar B, which is mounted on the cranks C, pivoted on support D hanging from the under side of the plate E, and the bar is geared with the crank F of the driving-shaft G, having the same throw as the cranks C, and swinging the carrier in a circular orbit without revolving it, thus avoiding the twisting of the thread, and also saving friction by carrying it altogether on pivots; and it also prevents noise. The shuttle H is grooved a little in the sides I, and the flanges K, by which it is connected to the carrier, are a little undercut or dovetailed to secure the shuttle when confined by the spring-latch J, so as not to require a face-plate along the circle around which the shuttle travels. L is the needle backing-plate, along which the shuttle runs when passing the needle.

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

The combination, with a shuttle-carrier, of bar B, cranks C C, and the crank F, and shaft G, as and for the purpose specified.

JOSIAH GLINES.
NOEL W. STILES.

Witnesses:
L. B. SHAW,
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