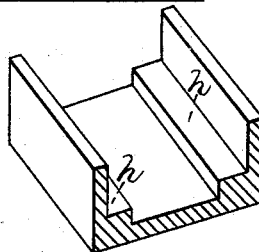
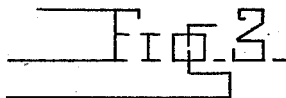
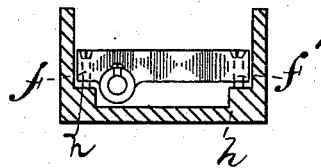
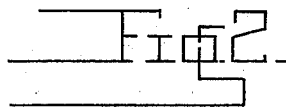
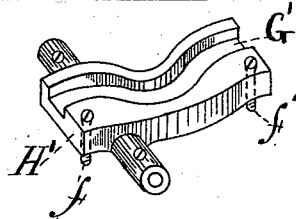
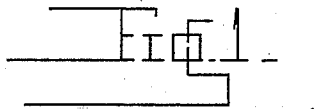


(No Model.)

D. L. KEELER.  
SEWING MACHINE.

No. 306,083.

Patented Oct. 7, 1884.



WITNESSES  
*J. A. Blackwood*  
*Philo L. D. Bois*

*David L. Keeler* INVENTOR  
by *M. R. Woolittle* ATTORNEY

# UNITED STATES PATENT OFFICE.

DAVID L. KEELER, OF GRAND RAPIDS, MICHIGAN.

## SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 306,083, dated October 7, 1884.

Application filed December 26, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID L. KEELER, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Sewing-Machines, of which the following is a specification.

The object of this invention is to give a steady and easy motion to the cross-head and to provide means of adjusting the same. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the grooved cross-head with a portion of the needle-bar attached. Fig. 2 is an end view of the cross-head shown in Fig. 1, with section of needle-bar. Fig. 3 is a section of the face-plate of the machine with a perspective view of the ways on which the cross-head travels.

Similar letters refer to similar parts throughout the several views.

H' is the cross-head, provided with a cam-groove, G', and is rigidly attached to the needle-bar in the usual manner, and is operated as is done in machines in use. *f* and *f'* are two screws passing through the cross-head and

projecting a short distance on the other side, the projecting ends being constructed to travel on the ways *h h* of Fig. 3—that is, the part shown by Fig. 1 is made to fit into the part shown by Fig. 3—so that *f* and *f'* will rest on ways *h h*. By this construction any wear that there may be between the screws *f* and *f'* and ways *h h* may be taken up by merely turning the screws, and by this means a smooth close-working fit is always maintained.

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

The face-plate of a sewing-machine, formed with ways *h h*, in combination with the needle-bar, the cross-head H', secured to said needle-bar, and two screws, *f f'*, on the two ends of the said cross-head, which screws bear against the ways *h h* of the face-plate and are adjustable thereto, whereby the wear may be taken up on both ends or either end of the cross-head between the screws *f f'* and the ways *h h*, substantially as set forth.

DAVID L. KEELER.

Witnesses:

FRED W. STEVENS,  
EDWARD TAGGART.