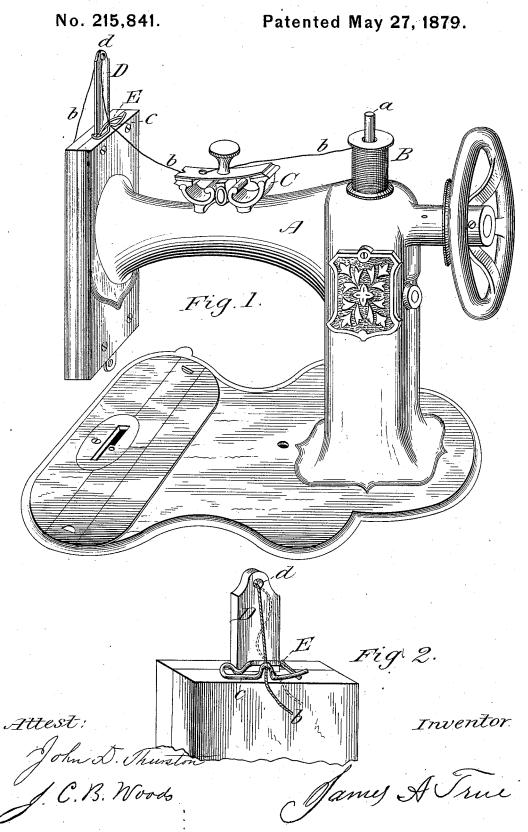
J. A. TRUE. Sewing-Machine.



UNITED STATES PATENT OFFICE.

JAMES A. TRUE, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 215,841, dated May 27, 1879; application filed September 20, 1878.

To all whom it may concern:

Be it known that I, James A. True, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Sewing-Machines; and I do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

In many sewing-machines which are constructed with a vertically-reciprocating needlebar mounted in a guide which is perpendicular to a horizontal supporting arm or bracket the thread is led, while under the friction of a tension device, over the top surface of the horizontal bracket-arm, through suitable guide-eyes, to a hole through the upper end of the needle-bar, and from thence is conducted through the take-up device to the eye of the needle.

Whenever the thread breaks in the operation of sewing, or when a seam is finished and the needle is to be started to sew a new line of stitches, it is usually necessary for the operator to take hold of the thread in front of and near to the tension-plate and unwind from the spool a sufficient length of thread, which, when afterward pulled through the eye of the needle, will enable a hold to be taken by the thumb and finger upon its free end until the first two or three stitches have been formed and the machine has recommenced working regularly.

It is necessary to keep the needle-bar well oiled, and it often happens that the thread, when pulled from the spool through the tension by a movement in the direction of the needle-bar, will incline toward and coming into contact with the oiled surface of the bar, as indicated by dotted lines at Fig. 2, become soiled. This discoloration of the thread is a serious inconvenience when the machine is used for stitching white cambric or muslin goods.

The purpose of my improvement is to provide a simple means for preventing this result; and it consists in the employment of a fender, located between the back face of the

needle-bar and the tension device, the effect of which is to keep the bellying loop of slack thread inclined away from contact with the face of the needle-bar.

In the drawings, Figure 1 represents so much of a sewing-machine of the class referred to as is necessary for the understanding of the improvement.

A is the bracket-arm incasing the main shaft. B is the spool of sewing-thread, mounted upon a vertical spindle, a; and C is one description of tension device.

D is the vertically-reciprocating needle-bar, and b is the thread, (represented as slack,) which is led from the tension-plate through the guide-eye e to the hole d through the upper end of the needle-bar.

Directly in front of the guide-eye c, I place a fender, E, or thread-guard, of wire, in a horizontal plane somewhat above the eye of the guide, and closely adjacent to it, which is more clearly shown at Fig. 2, and which is located, in this instance, as shown, between the guide-eye and the back face of the needle-bar. The form of this fender is not important so long as it can perform the office of inclining the slack-ened thread rearward over the guide-eye, and thereby preventing it from being in contact with the oiled face of the bar.

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

In a sewing-machine, the combination, with a needle-bar provided with a thread-eye at its upper end, of a stationary thread-eye on the frame of the machine at the rear of the bar and a thread guard or fender between the bar and stationary eye, which, by contact with the thread above and adjacent to said eye, inclines the thread away from the needle-bar and prevents contact therewith, substantially as described.

JAMES A. TRUE.

Witnesses:

JOHN D. THURSTON, J. C. B. WOODS.