(No Model.)

# A. S. TROWBRIDGE.

## SEWING MACHINE ATTACHMENT FOR PREVENTING KINKS IN WAXED THREAD.

No. 393,042. Patented Nov. 20, 1888.

*Fig. 1.*

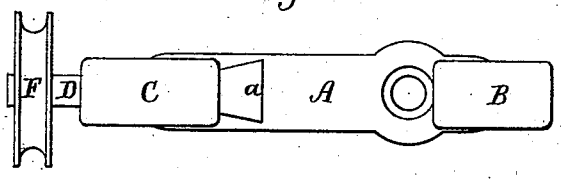
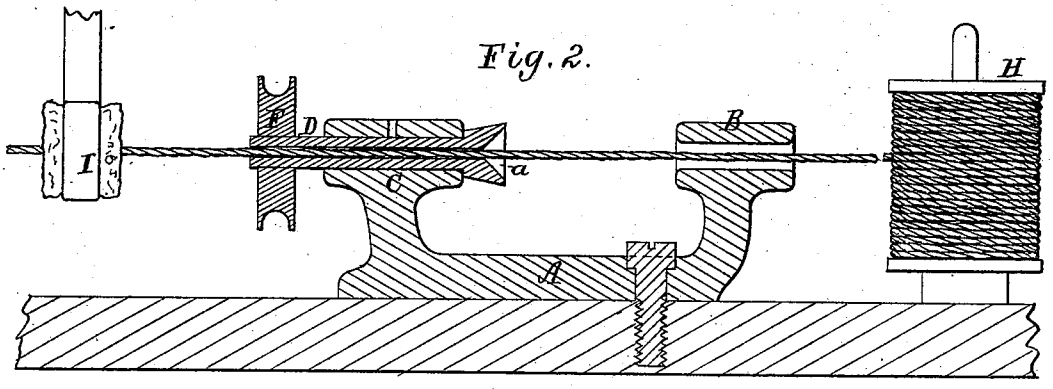



*Fig. 2.*




*Witnesses.*
W. E. Piper.
A. F. Piper.

*Inventor.*
Augustus S. Trowbridge,
by Singleton & Piper, attys

N. PETERS, Photo-Lithographer, Washington, D. C.

# UNITED STATES PATENT OFFICE.

AUGUSTUS S. TROWBRIDGE, OF MILFORD, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS TO CHARLES W. SHIPPEE, OF SAME PLACE, AND WILLIAM H. DANIELS, OF BOSTON, MASSACHUSETTS.

## SEWING-MACHINE ATTACHMENT FOR PREVENTING KINKS IN WAXED THREAD.

SPECIFICATION forming part of Letters Patent No. 393,042, dated November 20, 1888.

Application filed June 16, 1888. Serial No. 277,348. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUSTUS S. TROWBRIDGE, a citizen of the United States, residing at Milford, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in a Device for Preventing Kinks in the Thread of a Waxed-Thread Sewing-Machine; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Figure 1 is a top view, and Fig. 2 a longitudinal and vertical section, of the device for preventing kinks in thread while being waxed for use in a waxed-thread sewing-machine as made in accordance with my invention.

In waxed-thread sewing-machines much annoyance is experienced by the kinking of the thread between the spool and the waxing device.

The object of my invention is to prevent said kinking of the thread.

In the drawings, A denotes the body of the device, it being provided with a tubular guide, B, and a bearing, C, in which is arranged a tubular arbor, D, provided with a flaring mouth, *a*, and having a pulley, F, secured thereto. This device is to be secured to the table of a wax-thread sewing-machine, between the spool H and the waxer I, and generally in such a position that the belt of said machine will run in the groove of the pulley F and give motion to the arbor, although it may receive its motion from a separate or another belt than that of the sewing-machine, if desired.

The thread is to be carried through the guide B and the arbor, as represented, and the arbor is to be revolved in a direction that will turn the thread in such manner as to slightly untwist it, which in practice has been found to effectually prevent the kinking of it, the bearing in the arbor for the thread being of the proper size to act thereon, as described.

The device hereinbefore described is very efficient for the purpose for which it is intended. Therefore,

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

As a new article of manufacture, a guide for preventing kinks, the same consisting of a body, A, having means for attachment to a sewing-machine and having the guide B and bearing C, the tubular arbor D, arranged in the bearing C and having the flaring mouth *a*, and the pulley F, secured to the arbor D, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUSTUS S. TROWBRIDGE.

Witnesses:

S. N. PIPER,

C. F. DANIELS.