G. CHURCHILL.

Sewing Machine.

No. 29,138.

Patented July 17, 1860.

Fig: 1.

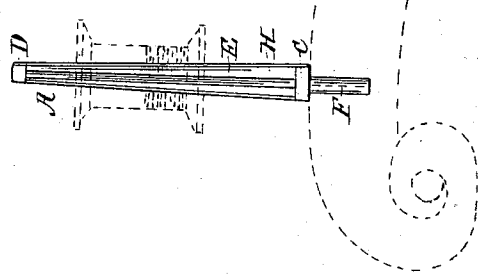
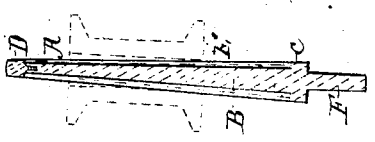


Fig: 3

Fig: 2.



Witnesses.
Wm. Vine
Chas Calhoun

Inventor
George Churchill

UNITED STATES PATENT OFFICE.

GEORGE CHURCHILL, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN SPOOL-PINS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **29,138**, dated July 17, 1860.

To all whom it may concern:

Be it known that I, GEORGE CHURCHILL, of the city of Hartford, county of Hartford, and State of Connecticut, have invented an Improved Revolving Spool-Pin—a new and useful article for giving a regular and uniform tension to the thread as it is unwound from the spool, for the use of sewing-machines or any other machine or purpose where a line or thread is required to be drawn regularly from the spool; and I do hereby declare that the following is a correct description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of a conical-shaped pin with a thin elongated elastic spring tube surrounding and revolving on the same.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the drawings, Figure 1 is a side view of the pin; Fig. 2 a sectional view vertically; Fig. 3, a transverse section.

The main pin A is formed similar to the drawings, Figs. 1, 2, 3, with a tapered or conical-shaped shank, B, a projecting base, C, and a projecting top, D, solid or screwed onto the shank B to retain the revolving spring-tube E in position. The pin F, either plain or with a screw, is to fix in or attach the whole to the arm or other parts of a sewing-machine or other article, either vertically or horizontally.

The revolving spring-tube E is made of thin sheet steel, brass, or other suitable metal, and is formed to incase the shank B and surround the same loosely, having a small suitable space, H, to allow the pressure of the spool to close it as much as is necessary to hold it firmly, or so much so as to cause the spring-case E to revolve by the action and draft of the thread while being unwound and used, the tension of the thread being thus made uniformly regular by more or less pressure of the spool on the spring-case E, which causes it to tighten and rub against the shank B with more or less friction.

All varieties of spools can be placed on the revolving tube or case E.

The utility of this spool-thread-tension pin is in the economy of construction, simplicity and regularity of operation, and suitability to all kinds of sewing-machines and various other uses where regularity of tension is required.

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

The revolving conical spring-tube E, in combination with the taper or conical-shaped pin A, in the manner and for the purpose substantially as herein set forth and described.

GEORGE CHURCHILL.

Witnesses:

WM. VINE,

SAML. A. KENDALL.