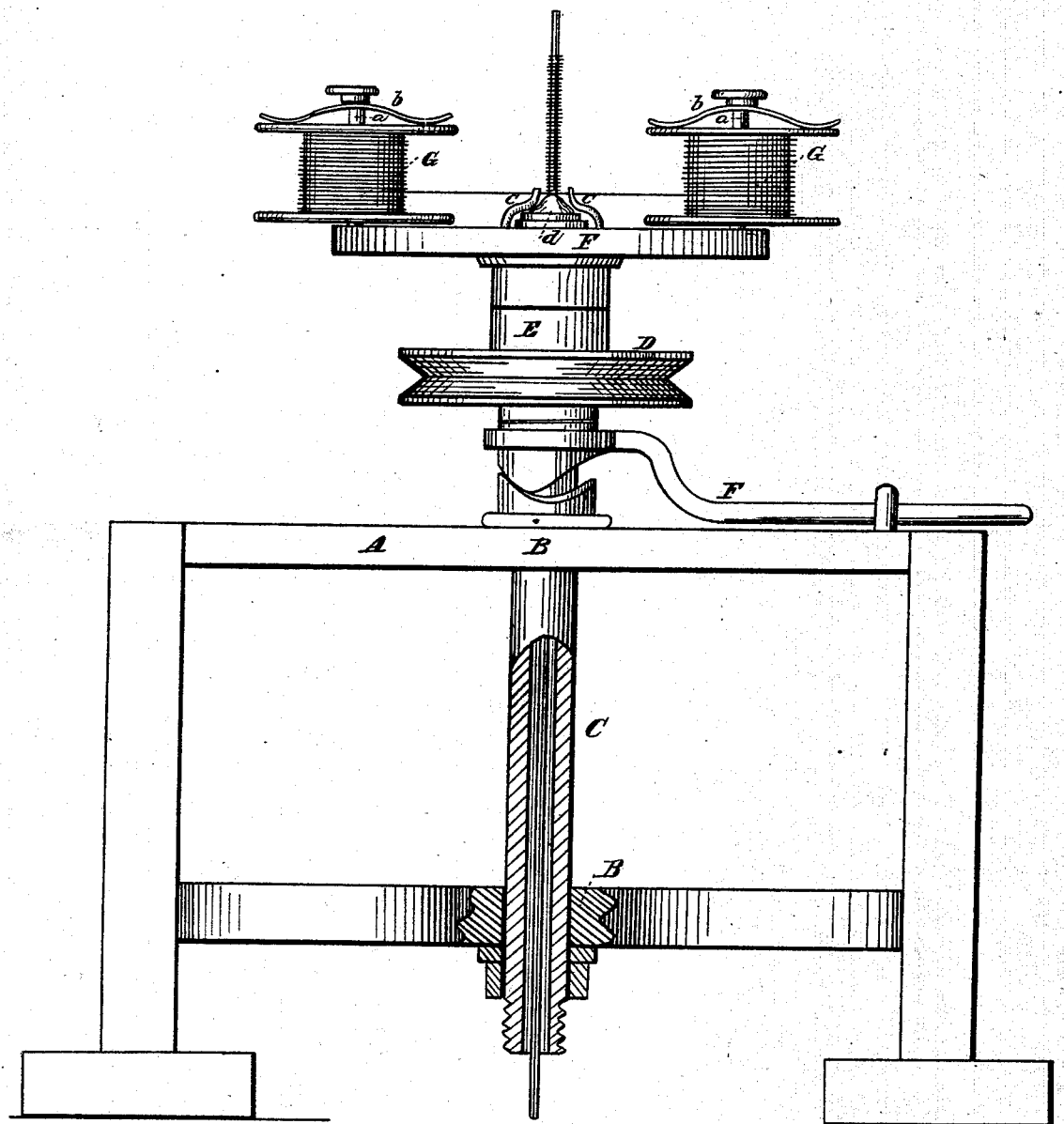


*T. S. Sperry.*  
*Hoop Skirt Machine.*  
*Nº 47343*      *Patented Apr. 18, 1865.*



*Witnesses*  
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# UNITED STATES PATENT OFFICE.

T. S. SPERRY, OF NEW YORK, N. Y.

## IMPROVED MACHINE FOR COVERING WIRE.

Specification forming part of Letters Patent No. 47,343, dated April 18, 1865.

*To all whom it may concern:*

Be it known that I, T. S. SPERRY, of the city, county, and State of New York, have invented a new and Improved Machine for Covering Wire; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a sectional side elevation of this invention.

This invention relates to an improvement in that class of machines which are used for the purpose of covering wire of inferior metal with thin wire of some more costly and non-corrosive metal, and the improved machine is intended to be used particularly for covering skirt-wire; but it also can be used for wire of any other description, flat or round.

The invention consists in making the main wire feed forward at a proper rate by the act of winding the covering-wire around it, and also in certain specific means for effecting this end—to wit, the employment of a smooth projection on the outer end of the hollow spindle, through which the wire passes which is to be covered, in combination with one or more guides and a corresponding number of spools carrying the covering-wire in such a manner that by the combined action of said projection and guides the main wire is evenly covered and rendered self-feeding.

A represents a frame, made of cast-iron or other suitable material, and provided with two bearings, B, for the spindle C. This spindle may be placed in a vertical or in any other convenient position, and it may be stationary or movable. It bears a disk, F, to which motion is imparted by a belt running over a pulley, D, which is mounted on a sleeve, E, and a clutch-lever, F, serves to throw said sleeve and pulley in and out of gear with the disk. The clutch may be a simple friction-clutch; or it may be constructed in any other suitable manner, though a friction-clutch is preferable, because it does not produce a sudden check nor a sudden start, and injury to the working parts and to the wire to be covered is avoided.

The spindle C is hollow, and the disk F carries one or more spools, G, as clearly shown in the drawing. These spools are placed on pins *a*, which project from the disks, so that the same are allowed to revolve on their axes or pins *a*, and they are held down by springs *b*, the pressure of which is adjusted by screws or in any other suitable manner so as to produce the required tension.

The spools G carry the covering-wire, which passes from the same through guides *c*. The number of guides correspond to the number of spools used, and each strand of covering-wire passes through a separate guide.

From the center of the disk F rises a conical projection somewhat above the eyes in the guides *c*. This conical projection *d* fits very closely to the main wire, which is allowed to travel freely through it.

The covering-wire, in being wound upon the main wire, acts as a wedge to force itself continuously between the surface of the conical projection *d* and the coils previously wound. In doing so it exerts an upward pressure on the main wire W, and the main wire is rendered self-feeding. The guides *c*, or equivalents therefor, may be made adjustable up and down.

Instead of the conical projection *d*, a plain smooth projection may be applied.

This machine is exceedingly simple in its construction, and it performs a large quantity of work, requiring no attention or hand-labor.

I claim as new and desire to secure by Letters Patent—

1. In a machine for covering wire with wire, making the main wire self-feeding by means substantially as herein described.

2. The smooth projection *d* on the end of the hollow spindle C, in combination with one or more guides, *c*, or equivalents therefor, or the disk F, which carries the spools containing the covering-wire, substantially as and for the purpose shown and described.

T. S. SPERRY.

Witnesses:

M. M. LIVINGSTON,  
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