

R. Lewis,
Covering Cord.

No. 113,675.

Patented Apr. 11. 1871.

Fig: 1.

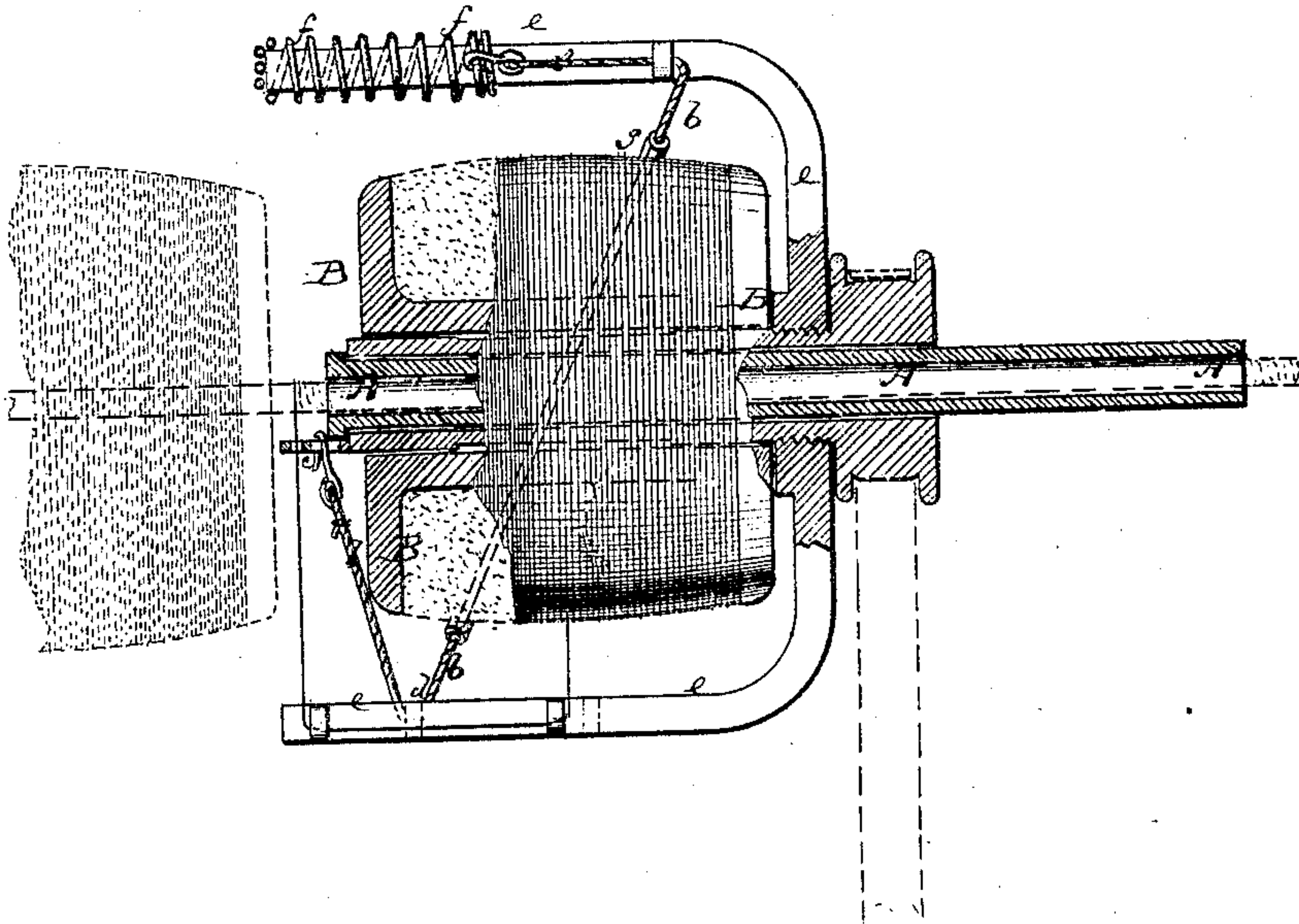
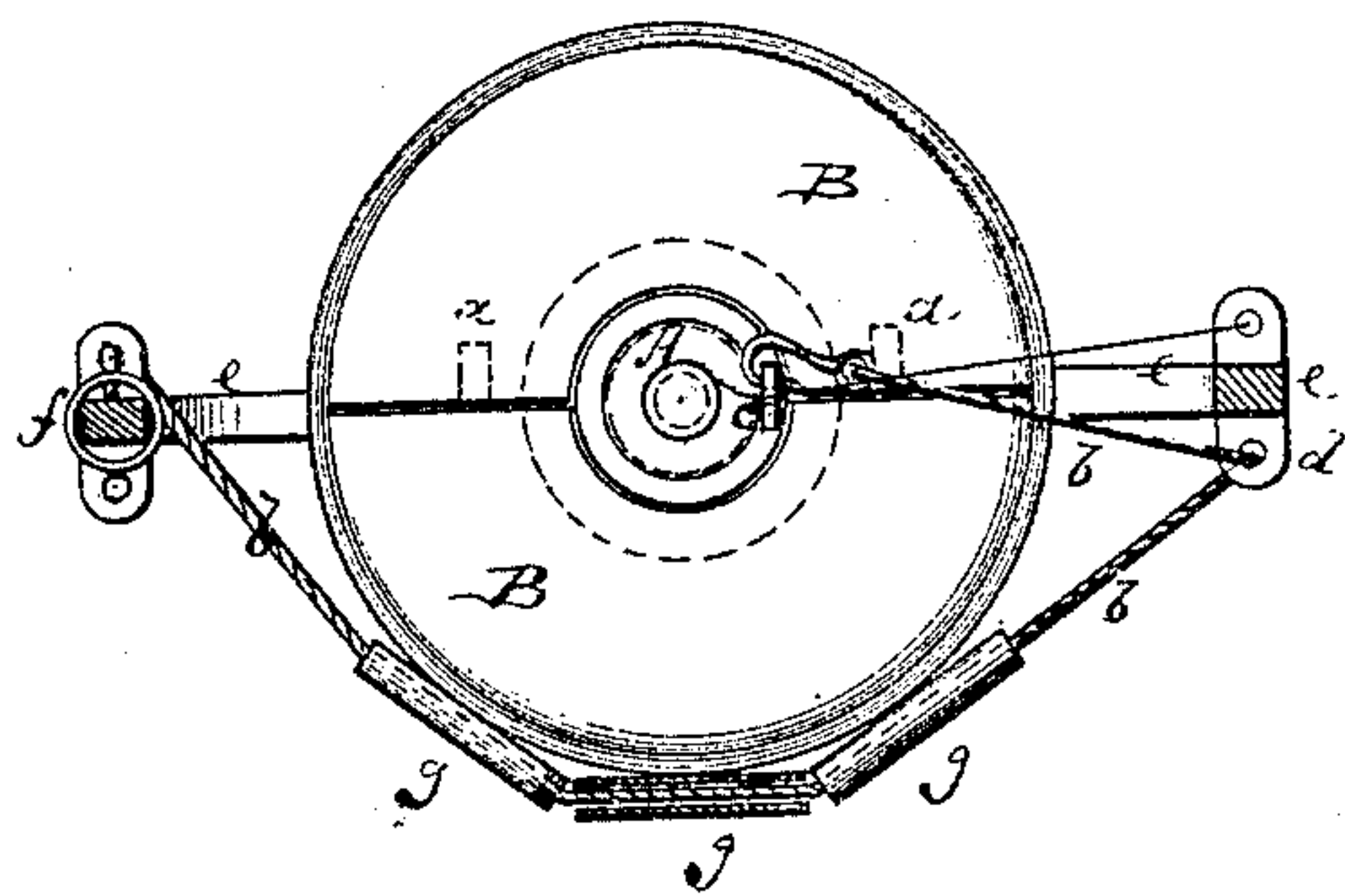


Fig: 2.



Witnesses:

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United States Patent Office.

REUBEN LEWIS, OF NEW YORK, N. Y.

Letters Patent No. 113,675, dated April 11, 1871.

IMPROVEMENT IN MACHINES FOR COVERING CORD.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, REUBEN LEWIS, of New York city, in the county and State of New York, have invented a new and improved Apparatus for Covering Cord &c.; and 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.

Figure 1 represents a sectional side view of my improved cord-covering apparatus.

Figure 2 is a transverse section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to certain improvements in the arrangement of bobbins and apparatus for winding woolen or other yarn around cords or wires to produce picture-cords, stems for artificial flowers, or similar covered goods.

The invention consists—

First, in making ten bobbins of two longitudinal halves, so that it can be taken from the spindle when empty; and

Secondly, in the application of a spring tension which will be automatically regulated by the thickness of yarn on the bobbin.

A in the drawing represents the tubular spindle of a covering apparatus.

B is the bobbin, placed upon the same, filled with yarn.

The bobbin is longitudinally divided into halves, which are held together by tenons *a*, fitting into corresponding mortises, as indicated in fig. 2.

The cord or wire to be covered is drawn through the tube A. The yarn for covering it is gradually unwound from the bobbin and placed around the cord or wire, which is fed ahead.

In the machines heretofore in use the cord had to be cut whenever the yarn had all been taken from one bobbin, as otherwise the empty bobbin could not be removed nor a filled one put in its place.

By the use of the sectional bobbin I can continue the operation on one cord or wire for an indefinite length. I draw the cord from the tube A through as many bobbins filled with yarn as I desire to use on the same cord, besides having one filled bobbin on the tube. When this latter bobbin is empty I take it to pieces and remove it thereby from the tube, and slip another filled bobbin from the cord upon the tube, continuing thus to operate on the same cord without cutting it.

Tension on the bobbin is provided by means of a string, *b*, which is with one end hooked to an eye, *c*, at the end of the spindle, then drawn through an eye, *d*, at one of the projecting arms *e e* of the said spindle, then laid over the filled bobbin and finally hooked to a wire or other spring, *f*, which is attached to the other arm *e*.

Small tubes *g g* are slipped upon the string *b* to prevent its cutting the yarn. It will be noticed that the spring *f* will be strained the most when the bobbin is filled, and that its tension will relax in the same degree as the bobbin becomes smaller.

The tension is thus automatically regulated in the desired manner, and the troublesome manual adjustment of weights hitherto employed dispensed with.

Having thus described my invention,

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

1. The bobbin B, made of two longitudinal halves so that it can be removed from the spindle when empty, without requiring the cutting of the cord, as specified.

2. The tension-string *b*, spring *f*, and frame *e*, when combined as described with the divided bobbin B, arranged on the spindle A, as and for the purpose specified.

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Witnesses:

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