

E. H. TYLER.

Flyers for Winding and Polishing Bonnet Wire.

No. 151,453.

Patented May 26, 1874.

Fig. 1.

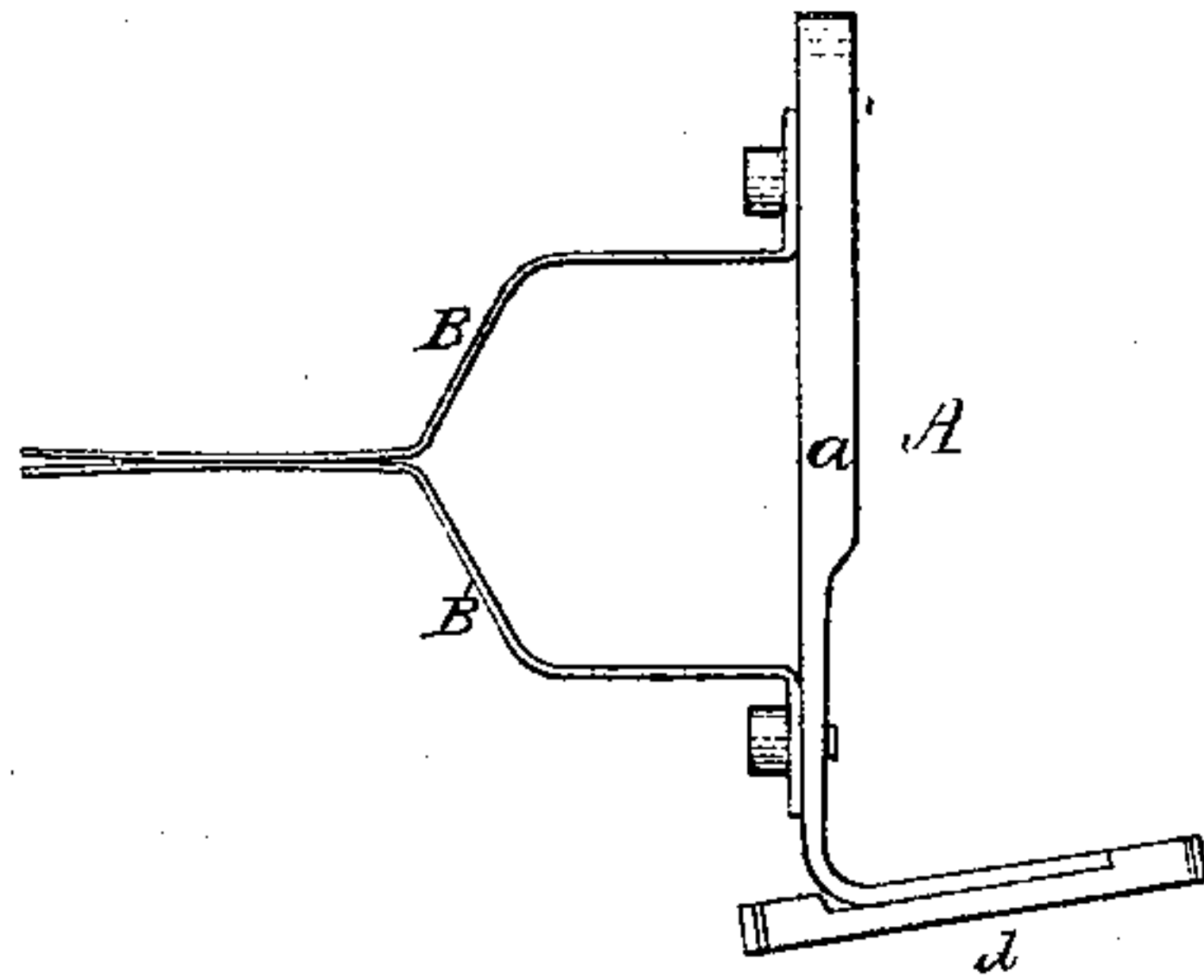


Fig. 2.

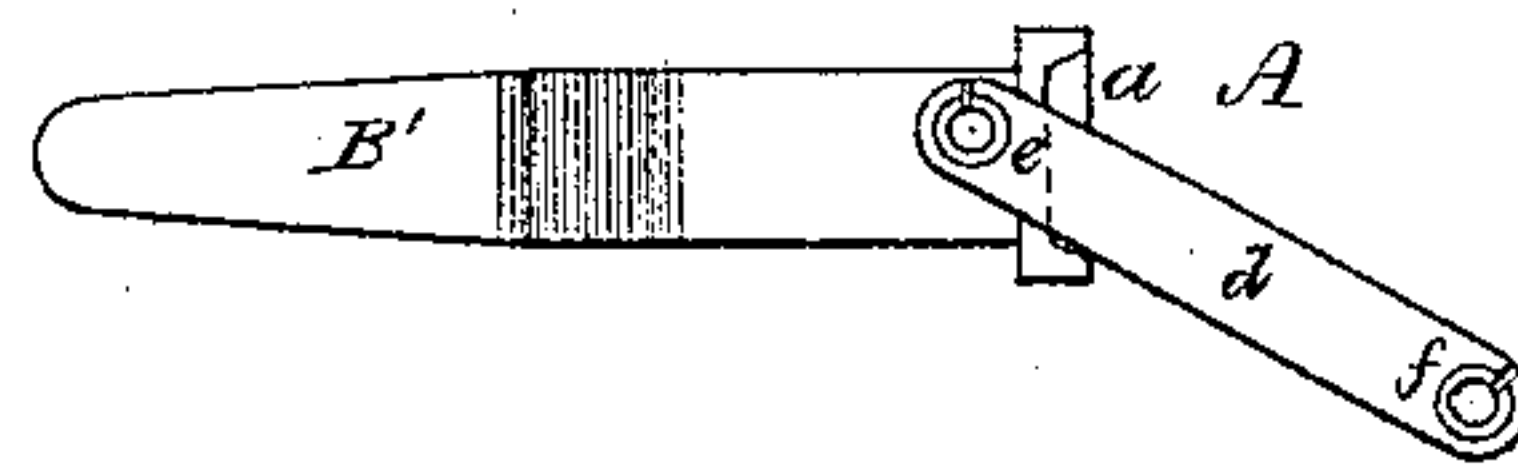
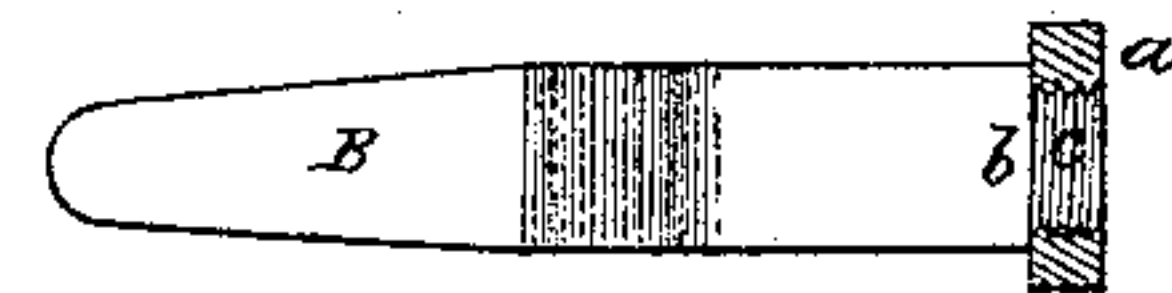


Fig. 3.



Witnesses.
V. W. Piper.
L. O. H. Cole.

Erastus H. Tyler.
by his attorney.
N. W. Ladd.

UNITED STATES PATENT OFFICE.

ERASTUS H. TYLER, OF ROCKVILLE, MASSACHUSETTS.

IMPROVEMENT IN FLIERS FOR WINDING AND POLISHING BONNET-WIRE.

Specification forming part of Letters Patent No. 151,453, dated May 26, 1874; application filed August 6, 1873.

To all whom it may concern:

Be it known that I, ERASTUS H. TYLER, of Rockville, of the county of Norfolk and State of Massachusetts, have invented a new and useful Flier for Winding Wire with Thread and Smoothing or Polishing the Same; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of it.

It consists of an ordinary flier, A, for winding bonnet-wire with thread, and two elastic supporting-guides and smoothing or polishing springs or fingers, B B', all being constructed, combined, and arranged substantially as represented in the said drawings. The flier-head is shown at *a* as provided with the central hole *b* and its female screw *c*, by which such head is to be attached to the tubular arbor for revolving the flier. The said head is furnished with the thread-guide *d*, having two eyes, *e f*, through which the thread from the bobbin passes to the wire to be covered. Such wire, after having the thread wound upon it, and while it may be so receiving thread, is drawn between and against the inner surfaces of the two springs B B', which, revolving with the flier and bearing on the covered wire, compact and smooth or finish the covering.

I do not claim, in machinery for making rope, the employment of jaws for smoothing the rope after its formation, my machine not being for making rope.

Nor do I claim, in a machine for covering cord or wire with cord or thread, an arm and a wire loop to embrace the covered cord and smooth its covering, such being devices placed just above the point of covering the cord, and over a set of rolls, between which the naked

cord passes, all being as shown in the United States Patent No. 125,467. Such devices do not admit of the covered wire being readily slipped laterally between and from between the supporting and smoothing devices, as do the two springs, as used by me, to the flier.

The springs, in case of becoming clogged by filaments, admit of having the covered wire readily lifted from between them, and as readily put back after they may have been cleansed; and, furthermore, they are arranged so as to bear at once upon many of the coils of the covering. In fact, they are arranged lengthwise of the wire to be covered, and so as to operate on many coils of the covering at once, whereby the smoothing and polishing of it is far more perfectly effected than by a mere guide-eye or loop of wire extended laterally around the covering, as a loop so applied tends to separate the coils, especially when there may be any mote or irregularity on the thread; but with the two springs arranged as they are with the winding flier, they extend at once across very many of the coils, so as not to enter between them, and they subject each coil to repeated and many rubbings or polishings, and they press them together, and readily allow any bunch in the thread to pass, and, besides, operate to rub it down. Therefore,

I claim—

The wire-covering flier A, provided with the elastic smoothing springs or fingers B B', meeting in line of the movement of the wire, each being allowed to yield, and all combined and moving with the flier, substantially as and for the purpose set forth.

ERASTUS H. TYLER.

Witnesses:

R. H. EDDY,
J. R. SNOW.