

C. K. PEVEY.

FLYER FOR SPINNING MACHINERY.

No. 172,651.

Patented Jan. 25, 1876.

Fig. 1.

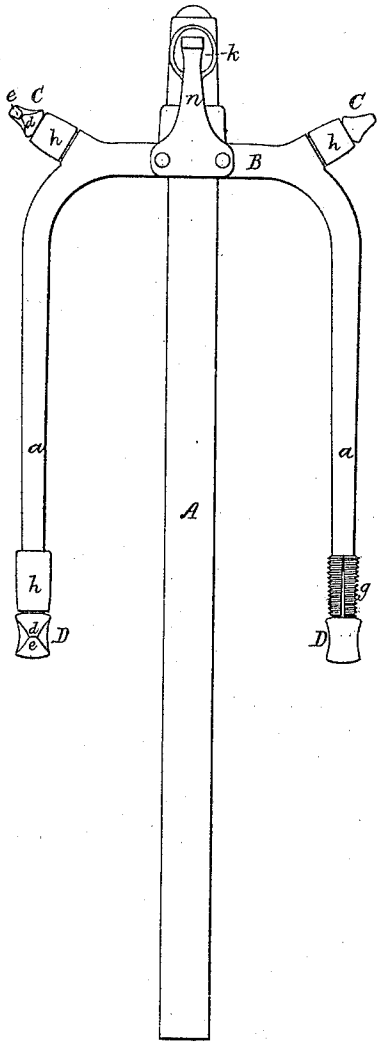


Fig. 2.

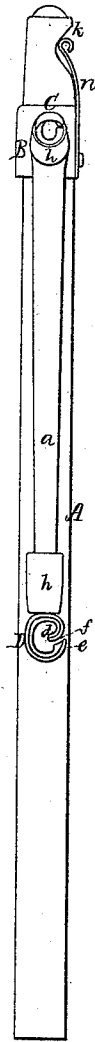


Fig. 3.

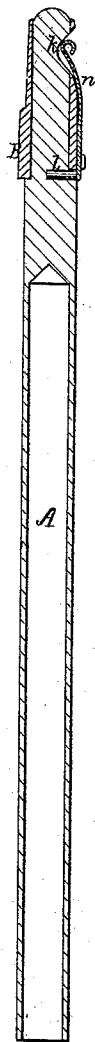


Fig. 4.

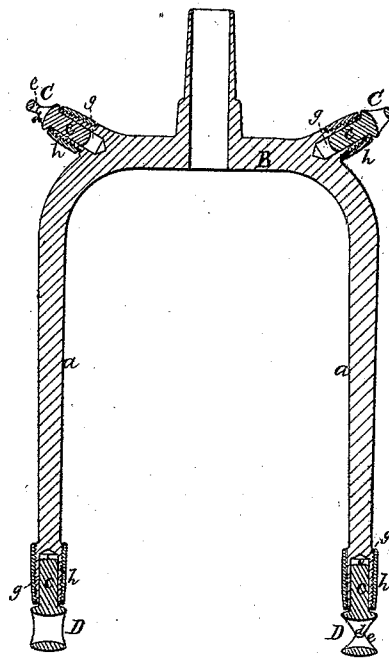


Fig. 5.

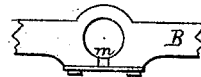


Fig. 6.



Fig. 7.



Witnesses

S. W. Piper
L. W. Miller

Charles K. Pevey

by his attorney
R. H. Eddy

UNITED STATES PATENT OFFICE.

CHARLES K. PEVEY, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN FLIERS FOR SPINNING MACHINERY.

Specification forming part of Letters Patent No. **172,651**, dated January 25, 1876; application filed September 9, 1875.

To all whom it may concern:

Be it known that I, CHARLES K. PEVEY, of the city and county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in Fliers for Spinning Machinery; and 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 side view, Fig. 2 an edge view, and Fig. 3 a transverse and longitudinal section, of a spindle and flier provided with my invention. Fig. 4 is a longitudinal section of the flier.

The said invention relates, first, to a duplex hook-guide applied to the flier-arm, and having its two hooks arranged to lap on each other with an intervening space or passage between them; second, to the flier provided with a spring-latch, and one or more recesses in its neck, in combination with the spindles provided with a stud and a latching-groove, all being as and arranged as hereinafter specified; third, to the flier provided with a movable guide and coupling, arranged at or near the head of each leg, and also with another such guide and coupling at the foot of the said leg.

In the drawings, A denotes a spindle or part thereof, and B its flier. To each of the legs *a a* of the flier there are two removable duplex hook-guides, C D, one of which is near the head of the flier-leg, and the other is at its foot. Each of these duplex hook-guides consists of a shank, *c*, and two hooks, *d e*, arranged as represented—viz., in reverse of each other, with one overlapping the other near their joints, and with a thread-passage, *f*, between them. To connect each guide to the flier-leg there is fixed to the latter a tube, *g*, split lengthwise. This tube is tapering on its outer surface, and there has a male screw to engage with a sleeve, *h*, which is tapering in its bore, and there has a female screw to engage with the screw of the tube *g*. On inserting the shank *c* endwise into the sleeve and the tube *g*, and revolving the sleeve, the said tube will be contracted on the shank, and with the sleeve will hold the guide to the leg.

The advantage of the duplex hook-guide over a common helical guide, such as is shown in my Patent No. 165,363, dated July 6, 1875,

is that it is easier to get the yarn into or out of it, and it can be cast or founded cheaper. As the flier has to be removed from the spindle every time a bobbin is placed thereon or removed therefrom it becomes advisable to adapt some means by which such can readily be effected by one hand, while the other may have hold of the bobbin.

Fig. 5 is a view of the lower end of the flier-neck, Figs. 6 and 7 being side views of the upper part of the spindle, or that part of it which goes into the neck of the flier. This part has a notch or groove, *k*, and is also provided with a stud, *l*, all being as shown. The neck has a notch, *m*, to receive the stud, and it also has a spring-latch, *n*, to work through it into the groove *k*, which inclines in opposite directions vertically, as represented.

On inserting the spindle into the neck the spring-latch will hold it thereon and enable the flier to be readily pulled off the spindle by one hand. The stud *l*, by entering the notch *m*, will with the latter prevent the flier from revolving on the spindle or independently thereof.

The groove *k* may be extended entirely around the spindle should it be desirable to have such.

I do not herein claim a helically-twisted guide, as shown in my Patent No. 165,363; nor do I claim a warper drop-wire made and provided with a guard and hook, as shown in the United States Patent No. 134,396.

I claim—

1. As an improved manufacture for use with a flier, as described, the guide C, as provided with the fastening-shank *c* and the two hooks *d e*, arranged as represented.

2. The flier provided with the latching-spring *n* and the notch *m*, in combination with the spindle provided with the stud *l* and the groove *k*, all being to operate substantially as set forth.

3. The flier provided with the two movable guides and their couplings, arranged with and applied to each leg of it, one of such guides being at the foot and the other at or near the head of each leg, all as set forth.

CHARLES K. PEVEY.

Witnesses:

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