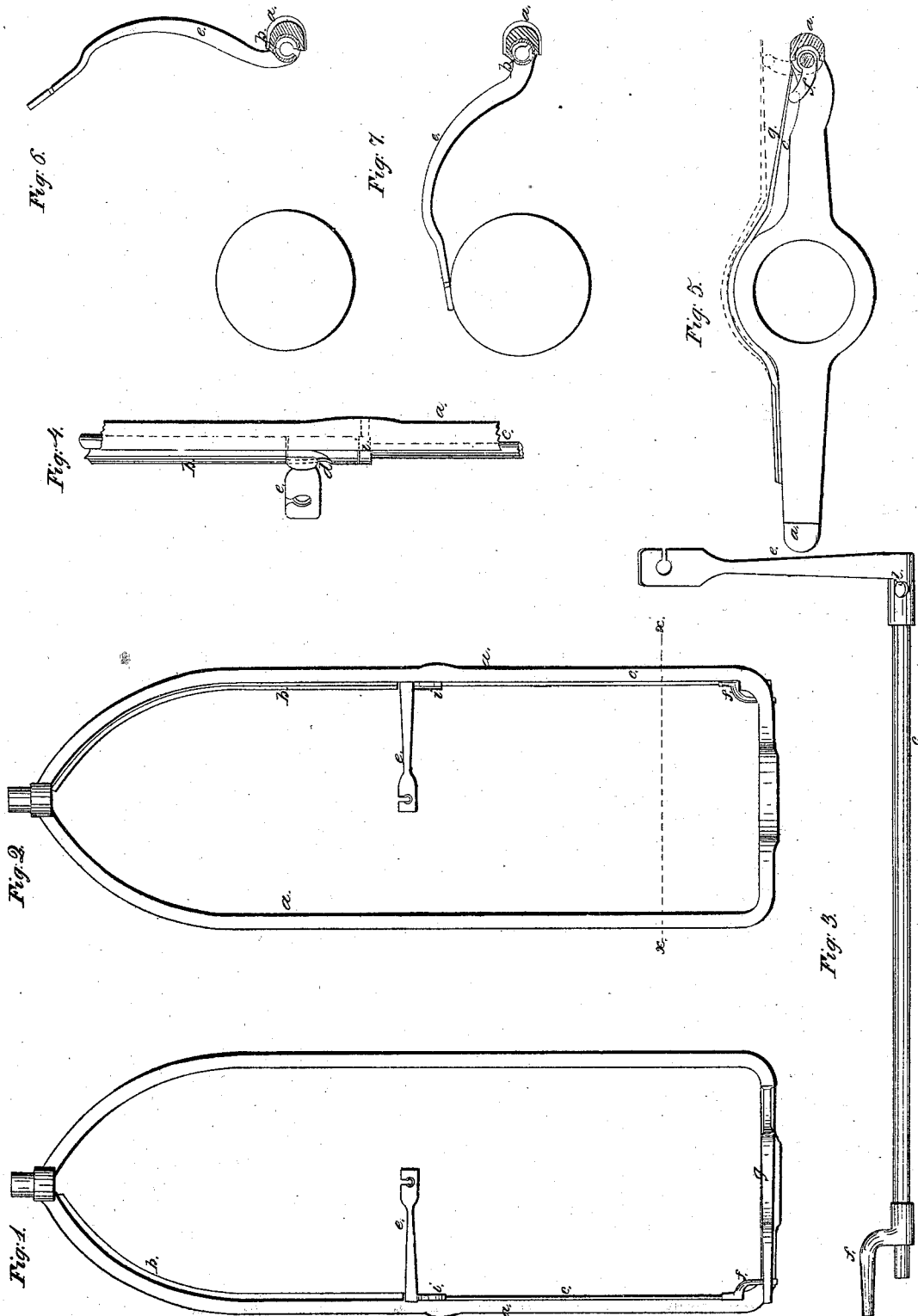


E. B. Bigelow. Spinning Flyer.

N^o 3926.

Patented Feb. 24, 1845.



UNITED STATES PATENT OFFICE.

ERASTUS B. BIGELOW, OF BOSTON, MASSACHUSETTS.

FLIER OF SPEEDERS.

Specification of Letters Patent No. 3,926, dated February 24, 1845.

To all whom it may concern:

Be it known that I, ERASTUS B. BIGELOW, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Speeder-Fliers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification, in which—

Figures 1 and 2, are the two sides of the flier. Fig. 3, is the presser detached. Fig. 4, is a section of one side of the flier with the presser open. Fig. 5, is the bottom of the flier showing the manner of attaching the spring; Fig. 6, sectional plan of the presser open, ready for doffing, piecing, &c.; Fig. 7, presser closed onto the roving.

The nature of my invention consists in adding a presser to a common flier, so that it will act efficiently, and at the same time can be thrown back out of the way while doffing or piecing.

The construction of the speeder flier is like that now in common use, and is marked (a) in the drawing it has the usual guide (b) for conducting the roving down on one side and the addition of the presser about to be described, which forms the improvement. The concavity in the inside of the flier extends down from the guide (b), to the bottom of the flier, it is shown in Fig. 5, which is the lower section of the flier from the line X, X, of Fig. 2. In this concavity or recess in the flier is placed an upright rod (c), the upper end of which terminates in a tube, in one side of which there is a slot, terminating in a circular enlargement (d) this slot when the presser is thrown back for doffing, &c., coincides with the opening in the guide (b), this is shown in Figs. 4, and 6. From the top of the rod (c), on the tubular part thereof and above the opening (d) a curved arm (e) projects which is flattened vertically at its end and has a hole through it from which a slot is cut to the upper edge. The lower end of the rod is inserted in a socket in the cross piece of the flier and just above this an arm (f) extends out from the rod and turns downward this is clearly shown in Figs. 3, and 5, the end of this arm has a spring (g) acting on it, which when in operation tends

to bear it against the flier; the spring is made to conform to the curvature of the edge of the cross piece of the flier, to which it is attached, as represented in Fig. 5, (g); when the presser is thrown back as above named, the arm (f) passes the line of the center of rotation, at right angles to the spring, as shown by the dotted lines on Fig. 5, and the presser is held back. The upper end of the rod (c) is attached to the flier by means of a collar (i) which surrounds it, just below the tube.

The operation of this improved presser is as follows, the presser is thrown back into the position shown in Figs. 4, 5, 6, (the position being denoted in Fig. 5, by dotted lines, this position opens the slot in the tube out, coincident with that in the guide (b) which allows the thread to be pieced and put into place the bobbin to be doffed or any other operation performed, (as both hands of the operator are left at liberty,) with the same facility as if the presser was not added, the presser is then closed in, and acts as desired. In the pressers heretofore used, they had to be held back with one hand, while the operation of doffing was performed. It will be perceived when the presser is thrown into action the slot in the tube at its upper end is turned inward, so as to prevent the possibility of the threads flying out, this is shown in Fig. 7.

A modified construction of this flier can be made by coiling a spring around the shaft of the presser and having a spring catch to hold the presser back.

Having thus described my invention and its operation what I claim therein as new and for which I desire Letters Patent is—

Extending the shaft of the presser down from the pressing arm to the bottom of the flier and providing the lower end thereof with an arm, which, in combination with the spring attached to the flier enables the attendant to throw back the presser which is there retained till the spool is doffed and replaced by an empty one as herein described.

E. B. BIGELOW.

Witnesses:

J. J. GREENOUGH,
C. HASTINGS.