(No Model.)

H. E. SWIFT.

THREAD GUARD FOR SPINNING MACHINES.

No. 253,321. Patented Feb. 7, 1882.

Fig. 1.

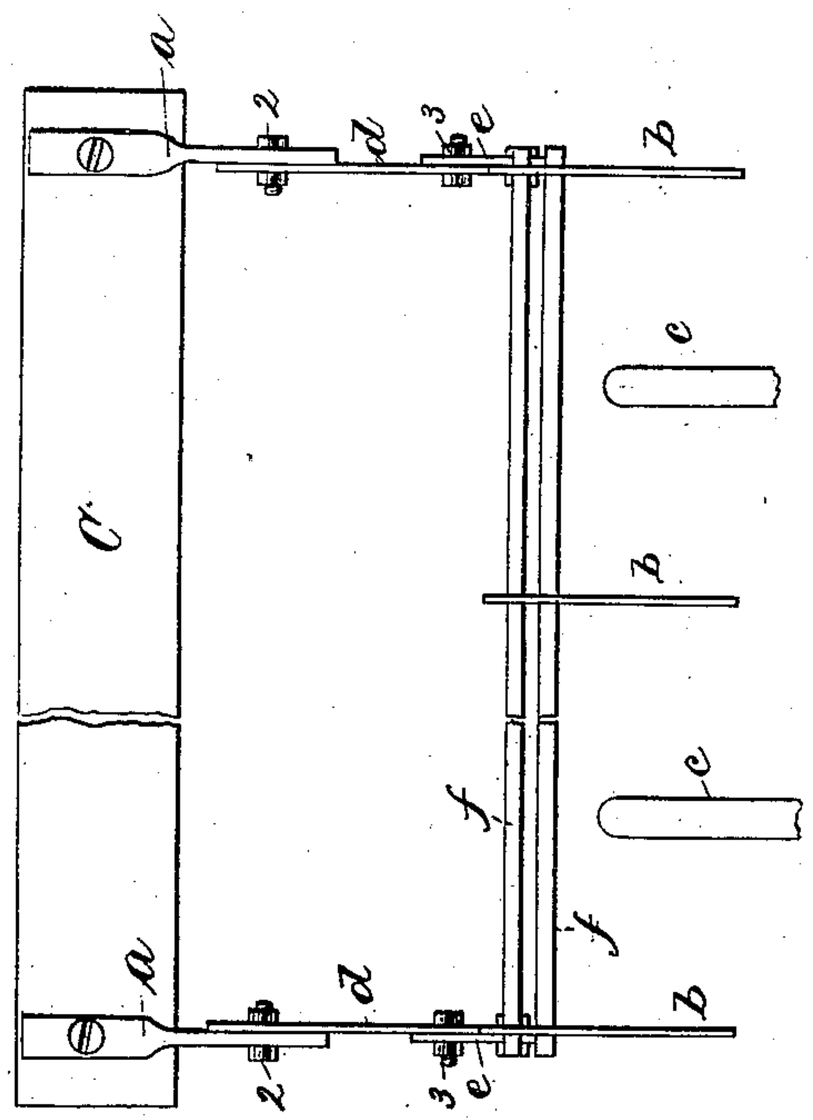
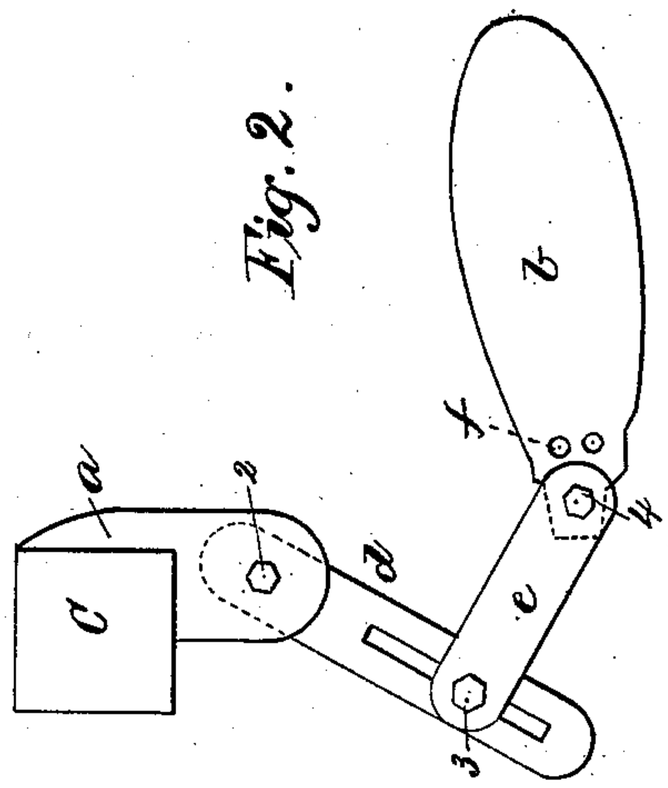


Fig. 2.



Witnesses.
B. J. Noyes.
John F. Brinkerhoff

Inventor.
Horace E. Swift,
by Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

HORACE E. SWIFT, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO GEORGE DRAPER & SONS, OF SAME PLACE.

THREAD-GUARD FOR SPINNING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 253,321, dated February 7, 1882.

Application filed September 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, HORACE E. SWIFT, of Hopedale, Worcester county, State of Massachusetts, have invented an Improvement in Thread-Guards for Spinning-Machines, of which the following description, in connection with the accompanying drawings, is a specification.

This invention in thread-guards adapted to be applied to ring-spinning frames to prevent the yarns being wound upon the bobbins of adjacent spindles from striking together and being broken has for its object to so support the said thread-guards that the rod or rods carrying them may be readily adjusted both vertically and toward or from the ring-rail.

My invention consists essentially in a series of thread-guards and a rod or rods to support them, combined with pivoted or jointed arms or levers and a suitable support therefor, whereby the thread-guards may be adjusted simultaneously both vertically and horizontally with relation to the ring-rail.

This invention is an improvement on the class of thread-guards described in United States Patent No. 202,420, to which reference may be had. In that patent the thread-guards are made adjustable on a fixed rod held by depending brackets connected with a rigid part of the spinning-frame, preferably the roller-beam. To adapt the devices shown in that patent to spinning-frames made by different builders, it is necessary to keep on hand a great variety of brackets of different lengths and curvatures to enable the thread-guards to be placed in proper position with relation to the position of the ring-rail of each different make of machine, as the position of the ring-rail is greatly varied, according to the particular notions of the builders. By supporting the thread-guards as herein provided for they may readily be raised or lowered, also moved toward and from the rail laterally. The thread-guards may be made adjustable on their supporting-rods in any known way, preferably as shown in an application of E. S. Stimpson, No. 40,667, filed August 25, 1881; but I desire it to be understood that I do not claim anything shown by the said Stimpson.

Figure 1 represents in front elevation a sufficient portion of a ring-spinning frame to illustrate the application of my invention, and Fig. 2 an end elevation of Fig. 1.

The bar C, intended to be the same as in the patent referred to, has connected with it the brackets *a*, which serve to support the jointed or swinging arms that sustain the endmost thread-guards *b* of the series of thread-guards. These endmost guards are herein shown as made to receive and hold the rods *f*, on which are placed the intermediate guards of the series. These guards of the entire series are adapted to be extended between the bobbins *c* of adjacent spindles of usual construction. These arms are shown as composed each of two members, *d e*. The member *d* is held in place upon the bracket *a* by a bolt, 2, and nut, which may be turned when it is desired to adjust the position of the said member about the said bolt. Member *e* is connected with member *d* by means of a bolt and nut, 3, held in one and inserted through a slot in the other member, and the thread-guards are shown as attached to the outer ends of the members *e* by suitable bolts and nuts 4. By loosening the said bolts and nuts 2 3 4 one or more of the members *d e* and thread-guards may be adjusted vertically and horizontally, or in a direction the resultant of both such adjustments, to place the said guards in proper position with relation to the bobbins and spindles or ring-rail, and by tightening the said bolts and nuts the said parts may be securely held in their adjusted positions.

In the drawings, *f* represents rods or wires to support the guards *b;* but such rods are not claimed.

Any desired number of thread-guards may be used in a series. I have shown but three, and parts of two bobbins.

I claim—

The series of thread-guards *b* and their connecting-rods *f* and brackets *a*, combined with the pivoted or jointed arms or levers, whereby the thread-guards may be adjusted vertically or horizontally, as described, or in a direction the resultant of both, to thus place the thread-guards in the described position with relation to the bobbins or their spindles, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HORACE E. SWIFT.

Witnesses:

F. J. DUTCHER,

GEO. F. DRAPER.