

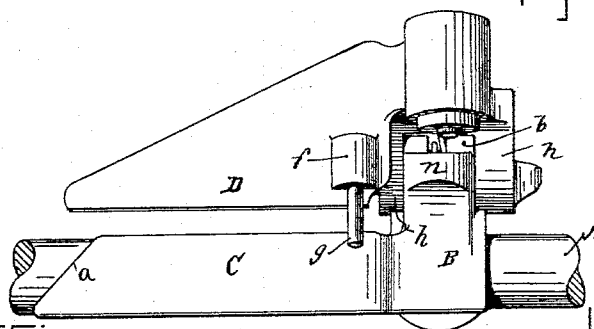
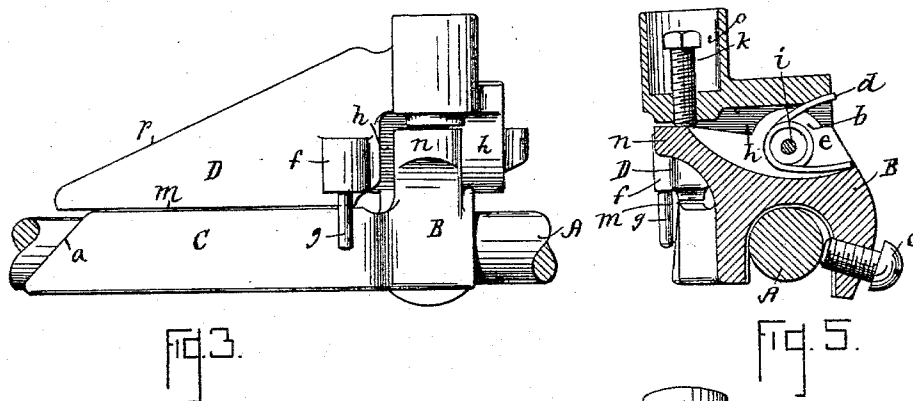
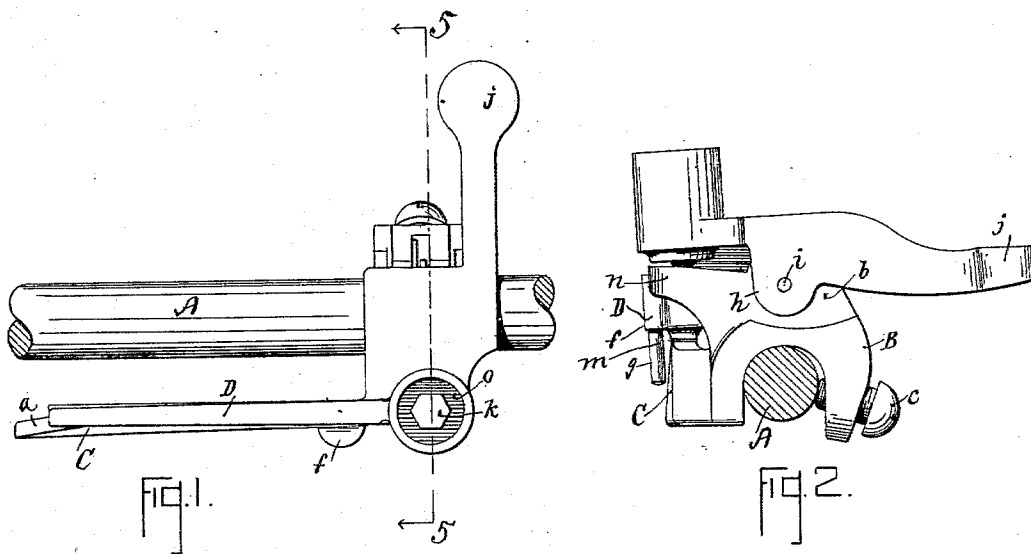
(No Model.)

F. W. EASTON.

BUNCH ARRESTING YARN GUIDE FOR SPOOLING MACHINES.

No. 563,755.

Patented July 14, 1896.



WITNESSES:

Harry J. Gayman
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Fig. 4.

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BY

UNITED STATES PATENT OFFICE.

FREDERIC W. EASTON, OF PAWTUCKET, RHODE ISLAND.

BUNCH-ARRESTING YARN-GUIDE FOR SPOOLING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 563,755, dated July 14, 1896.

Application filed July 24, 1895. Serial No. 557,037. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC W. EASTON, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Bunch-Arresting Yarn-Guides for Spooling-Machines, of which the following is a specification.

My invention relates to improved means for preventing the winding of imperfect yarn onto the spool, and it consists in the improved construction of a bunch-arresting yarn-guide, attached to the traverse-rod, and adapted to receive the yarn from the traverse-rod and guide it onto the spool.

In the accompanying drawings, Figure 1 represents a top view of my improved yarn-guide. Fig. 2 represents an end view of the same. Fig. 3 represents a side view showing the jaws in their closed condition. Fig. 4 represents the same view with the jaws in their opened condition. Fig. 5 represents a vertical section taken in the line 5 5 of Fig. 1.

In the drawings, A represents the traverse-rod of a spooling-machine, to which the bunch-arresting yarn-guides are attached, the said yarn-guides consisting of a holder B, provided with a set-screw *c*, for attachment to the rod A, the said holder being provided at one side with an elongation which forms the stationary jaw C, which is provided with the inclined edge *a* at its outer end and with the ear *b*, to which is pivoted the movable upper jaw D, the said jaw being actuated to close upon the stationary jaw C by means of the spring *d*, which is held in a recess *e*, made in the middle portion of the ear *b*. At the base of the jaw D is formed the boss *f*, to which is attached the pin *g*, which serves to limit the lateral movement of the yarn as it is being run onto the spool.

The movable jaw D is provided with the opposite ears *h h*, which embrace the opposite sides of the ear *b* of the holder, and are secured thereto by means of the pivot *i*. The movable jaw D is also provided with the projecting arm *j*, by means of which it may be raised from its normal closed position with the jaw C against the closing action of the spring *d*, as shown in Fig. 4, and with an adjusting-screw *k*, by means of which the

width of the elongated opening *m*, between the parallel jaws C and D, may be adjusted to adapt the device for spooling different grades or sizes of yarn, the projecting lug *n*, upon the holder B, forming a bearing-seat for the lower end of the screw *k*.

In order to prevent the operator of the machine from readily tampering with the adjustment of the yarn-guide, as they are liable to do in order to avoid the trouble of piecing the broken ends, the head of the adjusting-screw *k* is placed in a chamber *o*, which upon the proper adjustment of the opening *m* may be sealed, thus providing a check against the dishonesty of the operator. The movable jaw D is also provided with the downwardly-inclined edge *p*, which serves to assist in the rapid threading of the guide.

In the manufacture of the yarn-guide it is necessary that the jaws C and D be ground, so that the sides of the opening *m* between them will be perfectly parallel with each other, and in order to effect this properly it is necessary that the pin *g* be inserted subsequent to the grinding of the engaging surfaces. The said separately-formed pin is therefore a valuable feature of my improvement.

The yarn to be wound upon the spool first passes over the surface of the traverse rod A, and then through the opening *m*, between the horizontal jaws C and D, and thence passes to the spool; and when a bunch or enlargement of the yarn arrives at the opening *m*, the said bunch or enlargement will be arrested, and the thread will be broken between the said jaws and the spool, so that the imperfect yarn will not be wound thereon. The operator of the machine can then, by raising the jaw D, as shown in Fig. 4, release the yarn from the opening *m*, and readily remove therefrom an impediment to the subsequent proper passage of the yarn therein.

It will be noticed from Fig. 1 that the device, considered as a whole, is of right-angular form, the jaws extending lengthwise of the traverse-rail and the forked holder extending across the same.

I claim as my invention—

In combination in a yard-guide, the holder B having a fork adapted to be clamped to the traverse-rod transversely thereof and having

a rigid jaw extending at right angles from the fork and longitudinally of the traverse-rod, the movable jaw extending longitudinally of the traverse-rod and having a right-
5 angular portion extending transversely of the traverse-rod and pivoted to the forked holder B, an adjusting-screw to limit the position of the parts, a spring for closing the jaws and a

pin *g* carried by one jaw at the inner end thereof and extending across the joint between the jaws, substantially as described.

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Witnesses:

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