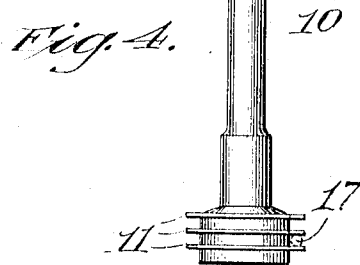
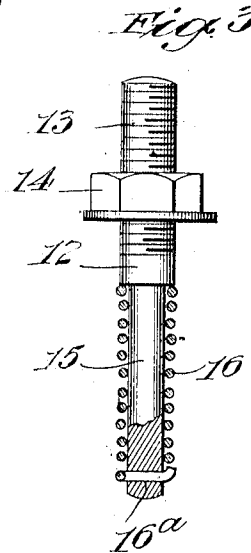
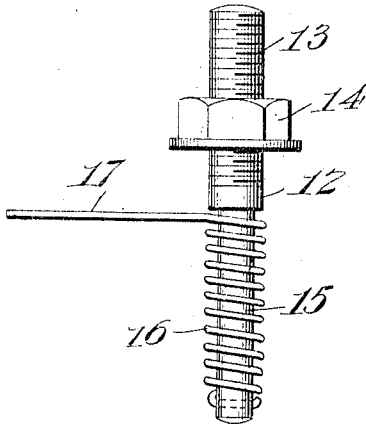
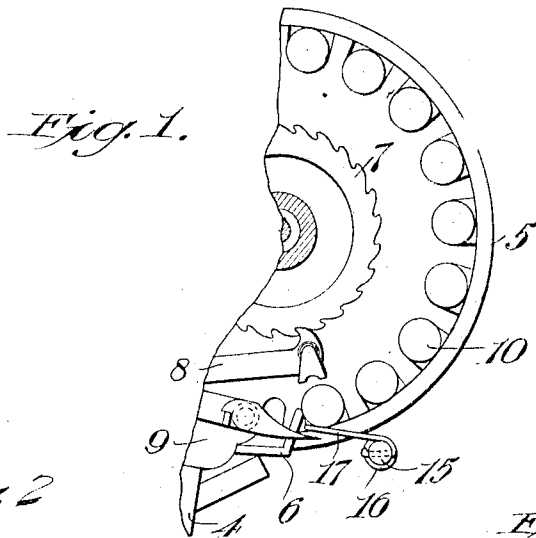


J. O. WADE.
BOBBIN SUPPORT.
APPLICATION FILED JULY 21, 1909.

947,465.

Patented Jan. 25, 1910.



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UNITED STATES PATENT OFFICE.

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BOBBIN-SUPPORT.

947,465.

Specification of Letters Patent. Patented Jan. 25, 1910.

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To all whom it may concern:

Be it known that I, JAMES O. WADE, a citizen of the United States, residing at Elon College, in the county of Alamance and State of North Carolina, have invented certain new and useful Improvements in Bobbin-Supports, of which the following is a specification.

The present invention relates more particularly to means for supporting bobbins while being transferred from a battery or replenishing magazine to the shuttle of a loom.

One of the primary objects of the invention is to provide a device which is exceedingly simple, and will outlast those now in general use.

A further object is to so construct the device that it will guide the bobbin and prevent its flying out of the shuttle and causing a "smash" of the warp yarn.

Still another and important object is to provide a supporting device, which will not hang in the shuttle, and thus cause the shuttle to be broken or else damage the box plate and battery.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a sectional view of a portion of the usual replenishing mechanism of a loom, showing the novel support in place. Fig. 2 is a plan view of the support detached and on an enlarged scale. Fig. 3 is a sectional view therethrough. Fig. 4 is a view in elevation of one of the bobbins.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

In the embodiment disclosed, the frame of the loom is shown at 4, and carried thereby is the usual circular stand 5. A guide stop 6 is associated with the stand, and the usual rotatable feeder disks are employed, one of which is shown at 7. A transferring hammer of the ordinary type is illustrated at 8, and the tip supporting member is shown at 9. The bobbins to be transferred from the bobbin carrier mechanism are designated 10, and as shown in Fig. 4, the base of each bobbin is provided with spaced rings 11. So far as thus described, the structure is well known to those in the art.

For the purpose of supporting the bobbins and guiding them during their transfer from

the battery or bobbin carrier, the following device is employed. A stud 12 is fixed to the frame of the mechanism, preferably by having one end threaded therein, as shown at 13 and held by a nut 14. This stud has a reduced portion 15, around which is coiled a spring wire 16, one end of which is passed through and upset in a transverse opening 16 formed in the free end of the stud. The other end of this wire is deflected outwardly away from the stud, producing a single supporting finger 17 that normally maintains the position shown in Fig. 1, but is capable of yielding downwardly, as will be obvious. This finger is so arranged that it will engage between the rings 11 of the bobbin, and as a result, will prevent the bobbin from moving out of position and out of the shuttle, so as to cause a "smash" of the warp yarn.

It will be obvious that this device is exceedingly simple, so that it can be cheaply manufactured, and experience has demonstrated that it will outlast the devices now in common use, and will not permit the filling bobbin to fly out of the shuttle. Furthermore it will not engage or hang in the shuttle so as to break or damage the parts.

From the foregoing it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is:—

1. In a bobbin feeder for looms, the combination with a frame, of a rotatable bobbin carrier, mechanism for transferring the bobbins from the carrier, and a yielding bobbin support associated with the carrier and transferring mechanism and comprising a stud fixed to the frame, and a spring of wire coiled about the stud and having one end secured to the free end of the stud, the other end of said wire being deflected outwardly away from the stud and constituting a yielding supporting finger that engages between the rings of the bobbin and prevents the longitudinal movement of said

bobbin out of the shuttle during the transferring operation.

2. As an article of manufacture, a yielding bobbin support comprising a stud having one end threaded and the other end reduced in cross sectional area, said latter end being provided in its free terminal with a transverse opening, a spring wire coiled about the reduced portion of the stud and
10 having one terminal engaged and secured

in the opening, the other terminal of said wire extending outwardly from the stud and constituting a yielding supporting finger.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. 15

JAMES O. WADE.

Witnesses:

P. T. ROSE,

W. D. NEWELL.