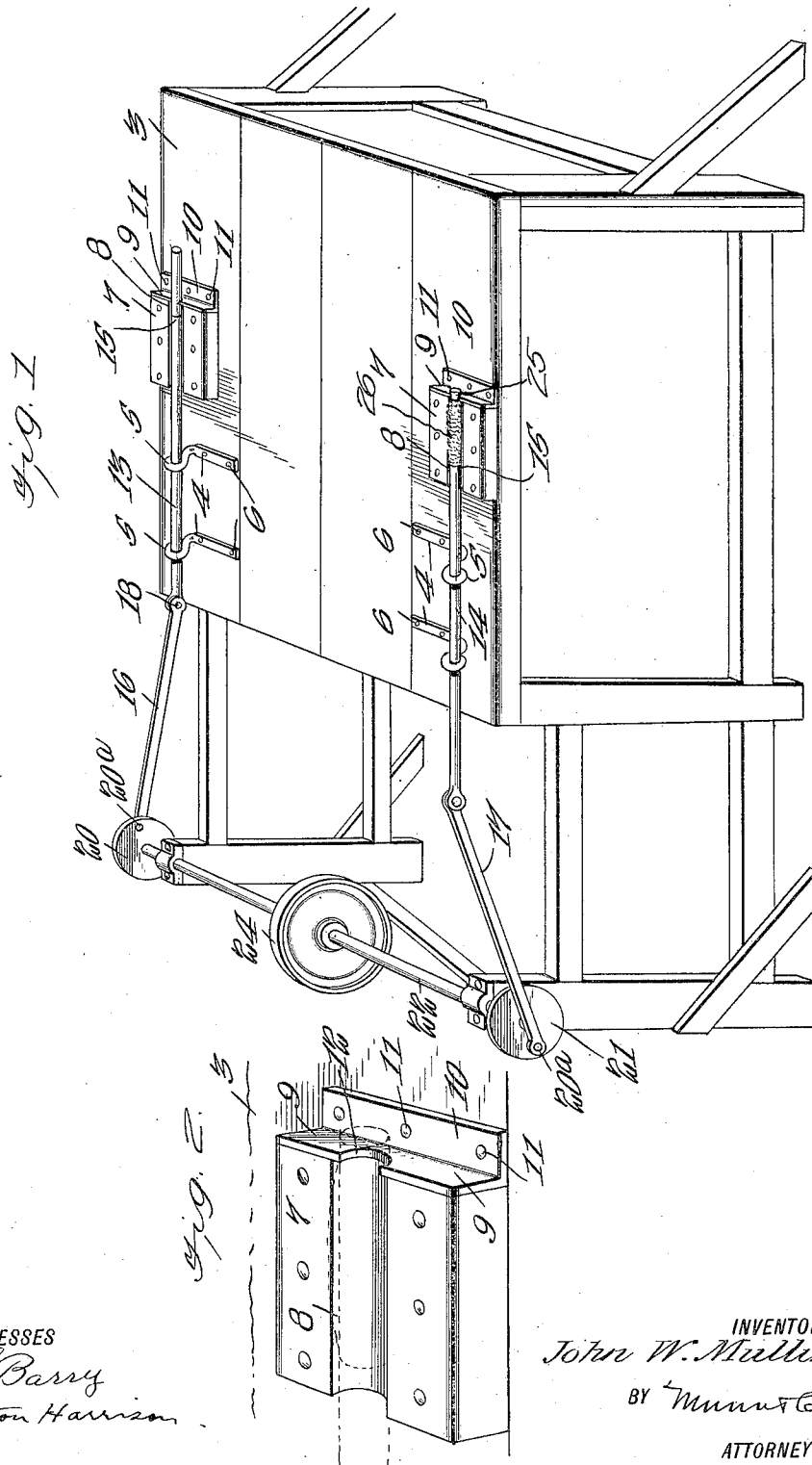


J. W. MULLIKIN.
YARN STRIPPER.
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1,057,356.

Patented Mar. 25, 1913.



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JOHN W. MULLIKIN, OF AUGUSTA, GEORGIA.

YARN-STRIPPER.

1,057,356.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN W. MULLIKIN, a citizen of the United States, and a resident of Augusta, in the county of Richmond and State of Georgia, have invented certain new and useful Improvements in Yarn-Strippers, of which the following is a specification.

My invention relates to yarn strippers employed for stripping threads and yarn from bobbins and quills, in order that the latter may be filled with new thread or yarn. As is well known in this art, bobbins and quills employed in weaving and analogous arts are filled by winding them with thread and the thread is gradually used up in the work to which the bobbin relates. From various causes the threads are frequently left upon the bobbins and it is necessary to remove them. In many instances this is done by hand. Only a portion of the material can be readily slipped off by hand and the balance is removed by cutting. This is an expensive process because it consumes much time and in the cutting, the bobbins are quickly injured or ruined.

What I seek to do therefore is to provide a simple mechanism by aid whereof the thread (usually termed in this art as the yarn) is readily slipped off from the bobbin or quill.

Reference is made to the accompanying drawing forming a part of this specification and in which like letters indicate like parts.

Figure 1 is a perspective of my device complete. Fig. 2 is an enlarged fragmentary perspective showing one of the strippers.

Mounted upon a table 3 are hangers 4 provided with bearings 5 each having generally the form of an eye and secured to the table by fastenings 6. The bearings 5 are arranged in sets, the bearings of each set being in alinement. Adjacent to each set of bearings is a block 7 provided with a centrally disposed groove 8 having the general form of a semi-cylinder. Against one end of each block 7 is a stripping plate 9 provided with a base flange 10 integral with it, this base flange being secured to the table by bolts or screws 11. The stripping plate 9 is provided with a recess or notch 12, having a semi-circular form and having a diameter less than the diameter of the cylindrical groove 8. The geometrical axis of the notch 12 is a continuation of the longi-

tudinal axis of the groove 8. Slidably mounted within the bearings 5 are plungers 13, 14 each carrying a leather tip 15. A connecting rod 16 is connected with the plunger 13 by a pivot 18. Similarly, a connecting rod 17 is pivotally connected with the plunger 14. Two disks 20, 21 are mounted rigidly upon the ends of a revolvable shaft 22 and are each provided with a crank pin 20^a upon which the adjacent connecting rod is journaled. A pulley 23 is secured upon the shaft 22 and is engaged by a driving belt 24.

A bobbin or quill is shown at 25 and at 26 is the yarn or material to be removed.

The belt 24 may be driven intermittently or continuously, as desired.

The operation of my device is as follows:—The operator takes in his hand a bobbin 25 from which the yarn 26 is to be stripped and places the bobbin, carrying the yarn, within one of the grooves 8. The rotation of the pulley 23 by the belt 24 causes the shaft 22 to turn and reciprocating motion is thus conferred upon the plungers 13, 14. The plunger is thus brought against the adjacent end of the bobbin 25 and as the plunger makes its outward stroke, toward the stripping plate 9, the bobbin is forced through the notch 12 so as to leave the yarn behind—that is in the groove 8, as will be understood more particularly from Fig. 2. As the crank pins 20^a are disposed upon the opposite sides of the shaft 22, each plunger 13, 14 makes its thrust at the time that the opposite plunger is being withdrawn. Since, therefore, the plungers make their thrusting movements alternatively, the operator can be placing a bobbin in position to be operated upon by one of the plungers, while the other plunger is making its thrust. Such being the case, the work of the operator is greatly expedited as it is not necessary for him to wait for the withdrawal of a plunger in order to place a bobbin in position to be operated upon.

I do not limit myself to the exact mechanism shown as variations may be made therein without departing from the spirit of my invention.

I claim:—

1. In a yarn stripper the combination of a block provided with a groove for holding a bobbin, a stripping plate disposed adjacent to said block and provided with a notch

through which said bobbin may be forced in order to strip yarn therefrom, a plunger movable into and out of said groove for the purpose of forcing said bobbin through said notch, and means for actuating said plunger.

2. A stripping mechanism comprising a block provided with a groove, a stripping plate having a notch registering with said groove, a plunger in registry with said groove and movable in the general direction of its length through said groove toward said stripping plate, a plurality of bearings engaging said plunger for maintaining the same in alinement with said groove, a connecting rod pivotally connected to said plunger, a revoluble disk provided with a crank pin, said crank pin being journaled to said connecting rod, and means for actuating said disk.

3. A stripping mechanism comprising a

plurality of stripping blocks each provided with a groove, a stripping plate provided with a notch so located that said notch registers with said groove, a plurality of plungers movable relatively to said blocks and adapted to extend into the grooves thereof, a driving shaft, means for actuating the same, disks mounted rigidly upon said driving shaft and provided with crank pins, said crank pins being located in different angular directions from the axis of said shaft, and connecting rods extending from said crank pins to said plungers.

JOHN W. ^{his} X MULLIKIN.
_{mark}

Witnesses:

JOHN C. FRASER,
WM. R. McELVEEN,
JOHN E. PURVIS,
JAMES P. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."