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J. A. SORRELLS

THREAD CUTTING TEMPLE FOR LOOMS

Filed Oct. 8, 1925

Fig.1.

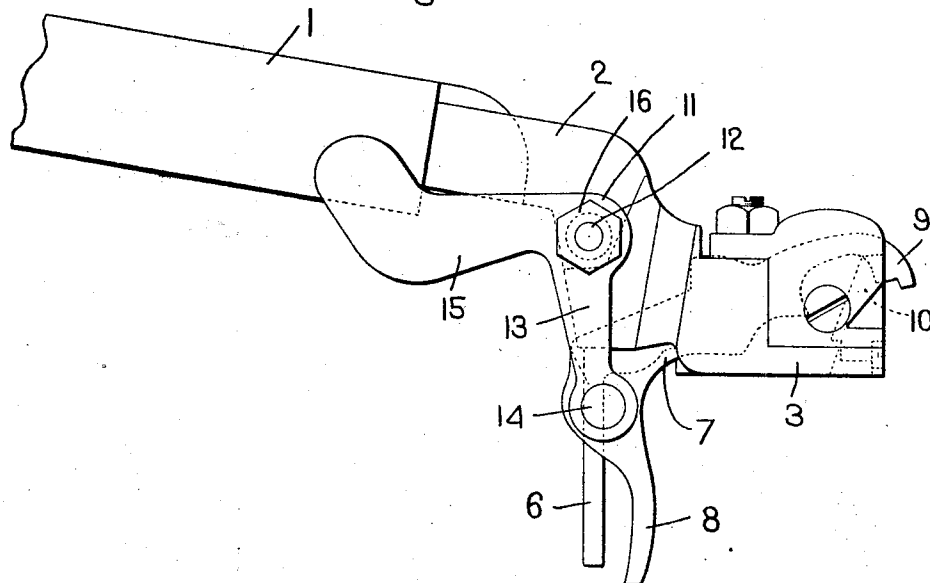
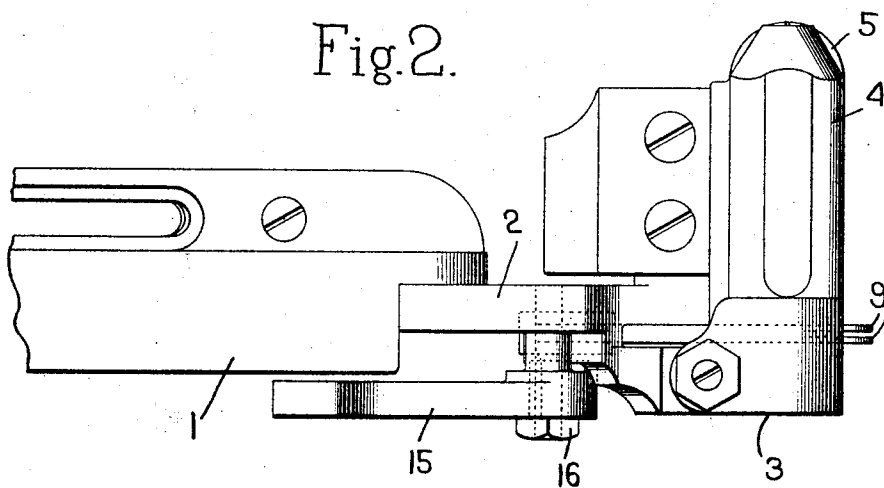


Fig.2.



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UNITED STATES PATENT OFFICE.

JAMES A. SORRELLS, OF GAINESVILLE, GEORGIA, ASSIGNOR TO DRAPER CORPORATION, OF HOPEDALE, MASSACHUSETTS, A CORPORATION OF MAINE.

THREAD-CUTTING TEMPLE FOR LOOMS.

Application filed October 8, 1925. Serial No. 61,194.

To all whom it may concern:

Be it known that I, JAMES A. SORRELLS, a citizen of the United States, and a resident of Gainesville, county of Hall, State of Georgia, have invented an Improvement in Thread-Cutting Temples for Looms, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to thread cutting temples for looms and the object of the invention is to provide simple and efficient means for eliminating the use of springs and for effecting the movement of the usual movable thread cutter member to open rearward projected position by gravity.

The object and nature of the invention will be more fully understood from the accompanying description and drawings and will be particularly pointed out in the claims.

The thread cutting temple is such a well-known and familiar device in connection with looms that it is unnecessary here to illustrate or describe with any degree of detail the construction and operation of any particular form thereof. For the purpose of disclosing a preferred form of the present invention, a well-known form of temple such as shown in the patent to Draper and Stimpson, No. 585,465, granted June 29, 1897, is illustrated.

In the drawings:

Fig. 1 is a side elevation of a thread cutting temple with a preferred form of the present invention embodied therein.

Fig. 2 is a top plan view of the construction shown in Fig. 1.

Such a temple usually comprises the stand 1 by which the temple is secured to the loom, the shank 2 sliding in the stand, and the head 3 which forms the termination of the shank. This head is extended laterally to form the cap 4 and pod 5, between which the usual temple roll is mounted. The temple head is provided with a downwardly projecting heel 6 struck by the lay upon the beat-up in the usual manner.

Such temples are commonly provided with thread cutting devices to cut the ends of filling projecting from the selvage. In the drawings, a right-handed temple is shown adapted to be used on the right-hand side of the loom and provided with a thread cut-

ting mechanism of the general type shown in the Draper and Stimpson patent referred to. This mechanism comprises a movable cutter member mounted to slide longitudinally and rock vertically in the temple head. As illustrated, this member comprises a longitudinally extending body 7 terminating at the forward end in a depending heel 8 and at the rear end in a pair of hook-shaped cutting blades 9 which straddle a fixed cutting blade 10 mounted at the rear of the temple head. The movable cutter member is shown in its rearward projected open position with the hooked blades 9 elevated. When the lay beats up and strikes the heel 8, this movable cutter member is rocked so as to swing the hooked blades 9 downwardly over any filling end which may extend in front of the temple, and then the movable cutter member is slid forwardly and such ends are thereupon severed.

The present invention relates to the means for effecting the movement of the movable thread cutter member to its open and rearward projected position. Heretofore it has been common to provide springs of various constructions for this purpose, and while such springs have been widely and successfully used, they are, of course, subject to the objections which are inherent in springs. They are subject to breakage. They not infrequently wear into and cut away the studs on the movable cutter member and temple head upon which they are mounted. They require care in the manufacture.

In the present invention, a weighted lever preferably in the form of a bell crank is employed. This lever 11 is fulcrumed on a stud 12 projecting laterally from the temple head. One arm 13 of this lever extends downwardly and is pivoted at its lower end upon a stud 14 extending laterally from the heel 8. The other arm 15 extends forward and is made of such a size as to constitute a substantial weight. This arm 15 preferably extends substantially horizontally so that the full force of gravity on this weight is exerted to rock the lever about its pivot.

It will be seen that the arm 13 constituting a link between the studs 12 and 14 controls the movement of the movable cutter member, which is otherwise guided in the temple head. It will also be seen that the pivotal connections between the lever and the stud

12 and between the lever and the stud 14 enable smooth, extended bearings to be provided which are little subject to wear.

5 The present construction may be readily embodied in existing temples wherein studs such as 12 and 14 are provided for the usual spring construction, a lever simply being substituted for the spring and suitable means such as a nut 16 threaded on the stud
10 12 to hold the lever in place.

The invention thus provides a construction which is durable, certain in its action, economical of construction and little subject to getting out of order.

15 Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is:

1. A thread cutting temple for looms having a movable cutter member mounted for
20 vertically rocking and longitudinally sliding movement in the temple, and a lever fulcrumed on the temple, pivoted at one end to the movable cutter member, weighted at the other end and acting to move the movable
25 cutter member to, and hold it yieldingly in, rearward projected open position.

2. A thread cutting temple for looms hav-

ing a movable cutter member mounted for vertically rocking and longitudinally sliding movement in the temple, and a bell crank 30 lever fulcrumed on the temple with one arm extending downwardly and pivoted at its lower end to the movable cutter member and with the other arm extending forwardly and weighted, the said lever acting 35 to move the movable cutter member to, and hold it yieldingly in, rearward projected open position.

3. A thread cutting temple for looms comprising a movable cutter member having a 40 depending heel and mounted for vertically rocking and longitudinally sliding movement in the temple, a link connection between the temple and said movable cutter member to control the movement thereof, 45 and a weight movable with respect to the temple and acting normally by gravity to move the movable cutter member to, and hold it yieldingly in, rearward projected
50 open position.

In testimony whereof, I have signed my name to this specification.

JAMES A. SORRELLS.