J. A. SAWYER.

THREAD HOLDER AND CUTTER FOR SEWING MACHINES.

No. 67,591. Patented Aug. 6, 1867.

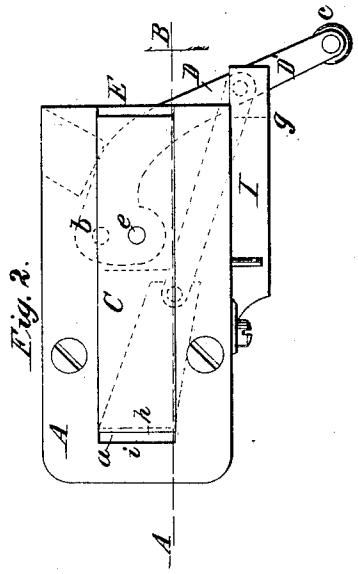

Fig. 2.

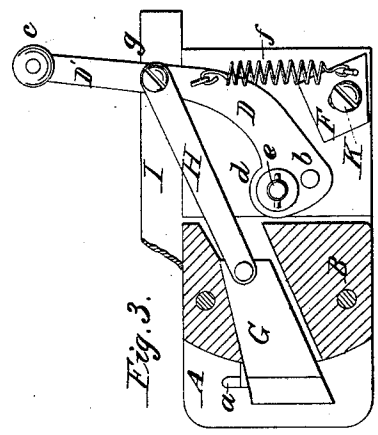

Fig. 3.

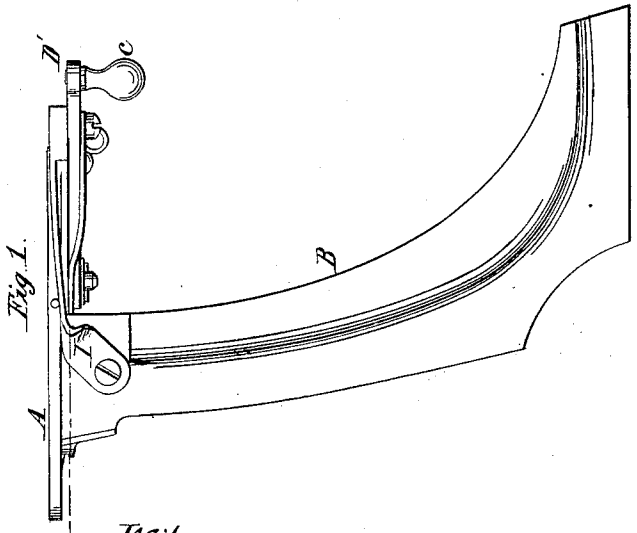

Fig. 1.

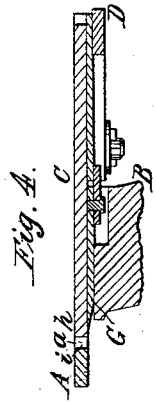

Fig. 4.

Witnesses:

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J. A. SAWYER, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 67,591, *dated August* 6, 1867.

IMPROVEMENT IN THREAD-HOLDER AND CUTTER FOR SEWING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

KNOW ALL MEN BY THESE PRESENTS:

That I, J. A. SAWYER, of the city and county of Worcester, and Commonwealth of Massachusetts, have made certain new and useful Improvements in Wax-Thread Sewing Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a side view of my improvement, as applied to so much of a sewing machine as is necessary to illustrate my invention.

Figure 2 represents a top or plan view of fig. 1.

Figure 3 represents a bottom view on line D, fig. 1; and

Figure 4 represents a section on line A B, fig. 3

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

In wax-thread sewing machines it is quite important to have the last stitch drawn well into the leather, and which must be done either before or after the thread is cut, or at the time of cutting the thread. As the machines have heretofore been constructed, if the thread is drawn tight before the thread is cut by the operator's pulling upon the work, there is great danger of breaking the needle or hook, and if drawn after the thread is cut, it must be performed by the use of a pair of pincers, which takes up much time; besides, the wax upon the thread is apt to become partially cooled before the operation can be completed, thus rendering it impossible to perform the work properly. In reference to the other mode of drawing the stitch tight, it is quite clear that if the knife or cutter is sharp the thread will be cut before it will be drawn into the leather very much, and if the cutter or knife is dull, then there is danger of bending or breaking the hook or needle. To obviate all of the above objections is the main object of my present improvements in wax-thread sewing machines.

In the drawings, the part marked A represents the table or part of the top plate of a wax-thread sewing machine attached to the top of the stand B. A part, C, of the table or plate A is adjustable, so that it can be moved back by the operator to leave an opening, *a*, through which the needle or hook works to form the stitches in the ordinary and common manner, the needle or hook being arranged below the plate or table, and its point forced up by suitable mechanism through opening *a* at the proper time. To a stud, *b*, upon the under side of the table A, the lever D is hinged, its outer end, D′, projecting out by the side of the top of the table A, and having a knob or finger-piece, *c*, attached to it for convenience of operation. The inner end of lever D is made or provided with a projection, *d*, through which a slot or hole is made to receive the pin *e*, which is fastened to the movable piece C, and passes through a slot cut in the recessed part E of plate A, upon which the part C slides. Lever D is drawn back by a spring, *f*, against the adjustable block or piece F, as shown in dotted lines fig. 2, when the machine is in operation. A knife, G, is fitted in a groove in stand B, so as to work under the movable part C of the table A, the rear end of the knife being connected to lever D by a hinged connection, H. I is a spring-holder, fastened to the stand B, and projecting out over lever D, so that when lever D is drawn back, as shown in fig. 3, spring-holder I will spring down and hold lever D in place by reason of a projection, *g*, falling below the surface of lever D.

The operation is as follows: When the operator desires to cut the waxed thread at the end of a seam, he takes hold of lever D and draws it forward, thereby forcing forward both the knife G and the movable part C of table A. The result is that the thread is cut or severed by the knife G, while the movable part of table A closes the opening *a*, and thus holds the end of the thread firmly between its end, *h*, and the edge *i* of table A, so that the operator, by drawing upon the work, can pull the last stitch very tight.

It will be seen that by my improvements the end of the thread can not only be cut without unduly straining upon the hook or needle, but the end of the thread forming the last stitch can also be drawn firmly into the leather without injury to the needle or hook. As soon as the end of the thread forming the last stitch has been sufficiently tightened, the operator allows lever D to spring back into the position shown in fig. 2, when the machine is ready for sewing the next seam. By means of screw *k* the block F can be set to stop lever D in any desired position, to give a greater or less opening *a* in the table A. The projection *g* is made a little inclined on its inner edge, so as to have a tendency to press lever D forward. In common use the spring-catch I may

be dispensed with, since the operator can very conveniently hold lever D up with one hand while he draws up the last stitch by pulling upon the work with the other hand. Those accustomed to sew with a waxed thread will readily appreciate the value and importance of my invention.

Having described my improvements in wax-thread sewing machines, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination with the table of a wax-thread sewing machine of a thread-holding device to enable the operator to draw up the last stitch, substantially as set forth.

2. The combination with the table of a wax-thread sewing machine of a thread-holder and a knife, substantially as and for the purposes set forth.

3. The combination with the movable piece C and knife G of the handle D, substantially as set forth.

4. The combination with table A and lever D of the adjustable block F and spring *f*, substantially as and for the purposes set forth.

5. The combination with lever D of the spring-catch I, substantially as and for the purposes set forth.

J. A. SAWYER.

Witnesses:

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