Sept. 29, 1936. R. W. REED 2,055,945

THREAD CHECK FOR SEWING MACHINES

Filed Nov. 26, 1935 2 Sheets-Sheet 1

Fig. 1.

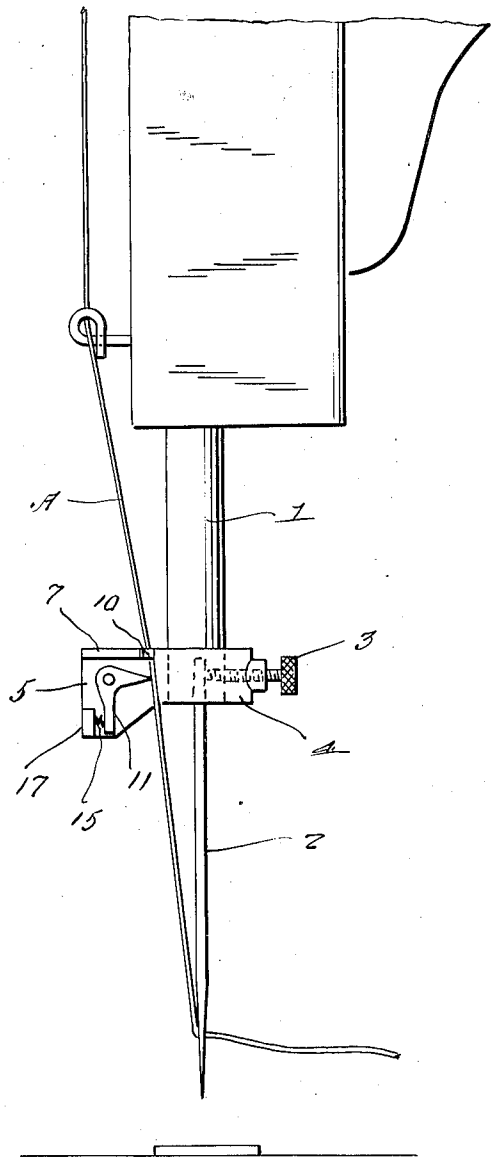


Fig. 4.

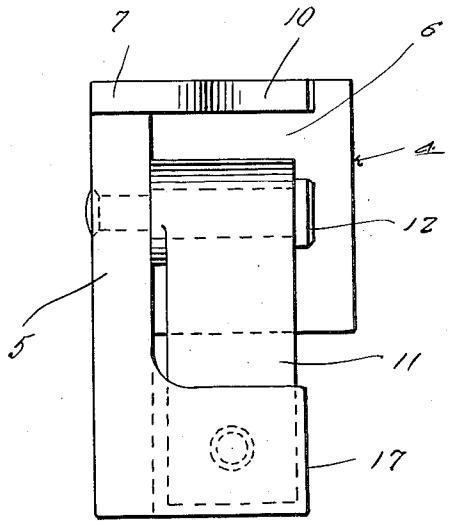
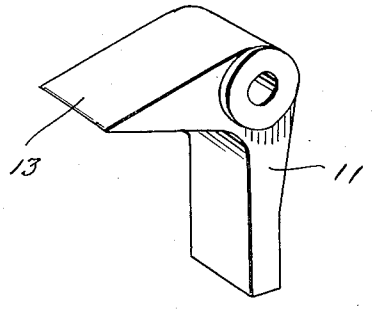


Fig. 5.



Inventor

R. W. Reed

By Clarence A. O'Brien

Attorney

Sept. 29, 1936. R. W. REED 2,055,945

THREAD CHECK FOR SEWING MACHINES

Filed Nov. 26, 1935 2 Sheets-Sheet 2

Fig. 2.

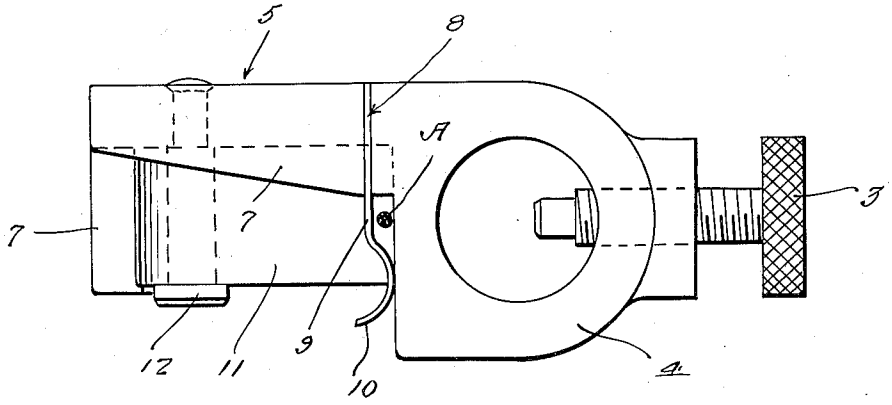
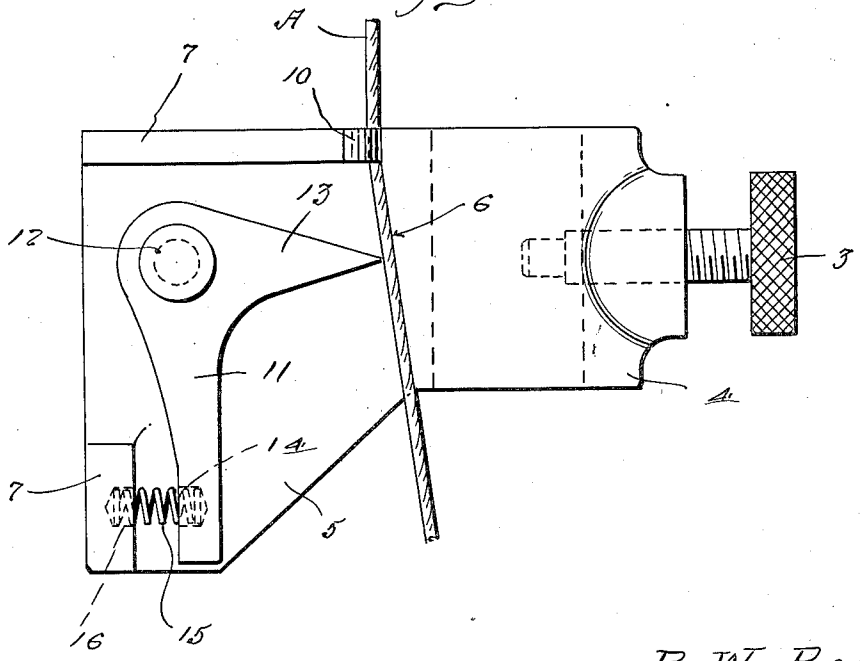


Fig. 3.



Inventor

R. W. Reed

By Clarence A. O'Brien

Attorney

Patented Sept. 29, 1936

2,055,945

UNITED STATES PATENT OFFICE

2,055,945

THREAD CHECK FOR SEWING MACHINES

Robert W. Reed, Aberdeen, S. Dak.

Application November 26, 1935, Serial No. 51,663

3 Claims. (Cl. 112—253)

This invention relates to a thread check for sewing machines, the general object of the invention being to provide means for preventing the thread being pulled out of the eye of the needle, such as when starting the machine.

Another feature of the present invention is a design which will save thread, permit the saving of time ordinarily used in rethreading needles, and will add very little cost to the original machine.

This invention also consists in certain other features of construction and in the combination and arrangement of several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a fragmentary view of a sewing machine showing the invention in use thereon.

Figure 2 is a top plan view of the device.

Figure 3 is a front view thereof.

Figure 4 is an end view thereof.

Figure 5 is a view of the lever.

In the drawings the numeral 1 indicates the reciprocatory member of the sewing machine to the lower end of which the needle 2 is connected by the clamping screw 3. This screw passes through the collar 4 which carries the invention though if desired the collar which carries the invention may be made separate from the needle clamping means and placed above the same on the member 1.

The collar is provided with an extension 5 and at that side of the collar from which the extension projects is enlarged and flattened with the flattened part sloping downwardly and inwardly as shown at 6 for engagement by the thread A. The upper part of the extension is provided with a forwardly extending flange 7 which has a slot 8 in its upper part into which is inserted the shank 9 of a thread guide, the free end of which is of arcuate shape as shown at 10 bearing against a part of the flattened part of the collar and forming a space between the guide and said flattened part for the thread as shown in Figure 2. A substantially bell crank lever 11 is pivoted to the front face of the extension as shown at 12 and one limb of the lever is of wedge-shape as shown at 13 with its apex engaging the thread. The other limb of the lever extends downwardly and is formed with a socket 14 for receiving an end of a spring 15 which has its other end seated in a socket 16 in a projecting part 17 of the extension 5.

This spring tends to swing the lever on its pivot to cause the limb 13 to move upwardly to gripping relation with the thread so as to prevent upward movement of the thread and the spring is so slight that the thread can move downwardly with but little resistance from the lever. Thus this device will prevent the thread from pulling back out of the eye of the needle, as when starting the sewing machine, and it makes no difference how short the thread is broken off of the eye of the needle. The thread take up lever combines the down stroke of the needle bar and cannot jerk the thread back out of the eye of the needle as the lever 11 attached to the needle bar will instantly grip and hold the thread for the full down stroke.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What is claimed is:—

1. In a sewing machine, a thread check comprising a supporting member attached to the needle carrying bar of the machine and having a downwardly and inwardly sloping surface, a lever pivoted to the supporting member and having a wedge end compressing a part of the thread against the sloping surface and means for yieldingly holding said wedge end in engagement with the thread.

2. A thread check for sewing machines comprising a collar adapted to be attached to the needle carrying bar of the machine, an exterior side of the collar having a downwardly inwardly sloping surface, a bell crank lever pivotally supported by an extension of the collar and having a wedge-shaped end compressing a part of the thread against said surface and spring means for yieldingly holding said end in engagement with the thread.

3. A thread check for sewing machines comprising a collar adapted to be connected to the needle bar of the machine, one side of the collar having an extension and said side having a downwardly and inwardly sloping surface over which the thread passes, spring guiding means at the upper end of the extension for the thread, a bell crank lever pivoted to the extension and having a substantially horizontal arranged limb formed with a wedge end pressing a part of the thread against the surface and a depending limb and spring means engaging the depending limb and pressing the other limb upwardly.

ROBERT W. REED.