

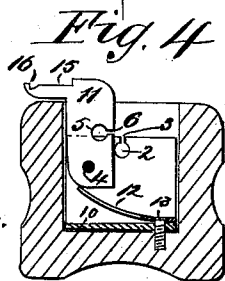
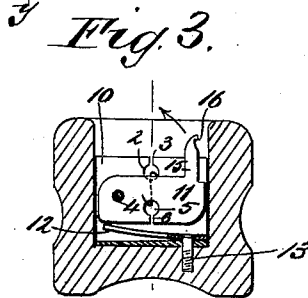
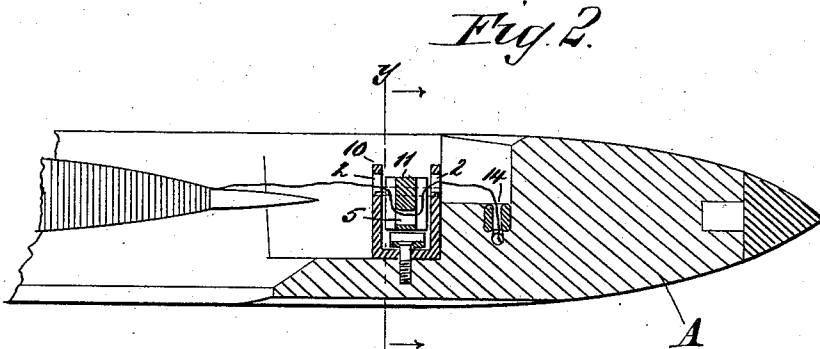
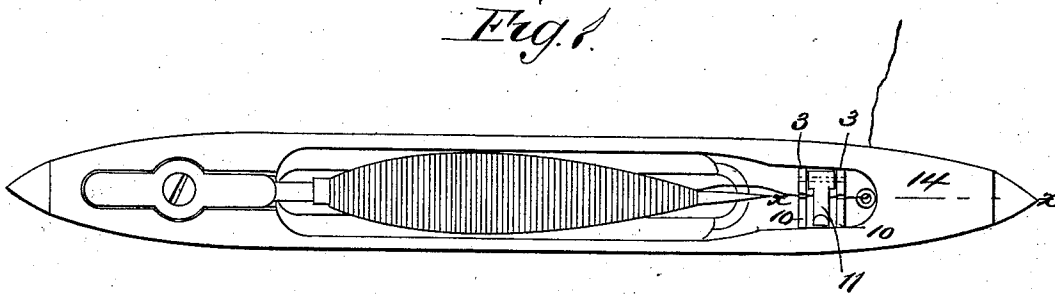
(No Model.)

P. ASHBY.

TENSION REGULATING ATTACHMENT FOR LOOM SHUTTLES.

No. 369,089.

Patented Aug. 30, 1887.



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PIERRE ASHBY, OF CENTRAL FALLS, RHODE ISLAND.

TENSION-REGULATING ATTACHMENT FOR LOOM-SHUTTLES.

SPECIFICATION forming part of Letters Patent No. 369,089, dated August 30, 1887.

Application filed February 26, 1887. Serial No. 228,961. (No model.)

To all whom it may concern:

Be it known that I, PIERRE ASHBY, a subject of the Queen of Great Britain, residing at Central Falls, in the county of Providence and State of Rhode Island, have invented a new and Improved Tension-Regulating Attachment for Loom-Shuttles, of which the following is a full, clear, and exact description.

An ordinary form of tension-regulating attachment for loom-shuttles consists of two pieces of cloth that are tacked to place and arranged so that the thread is drawn between the approaching edges of the said pieces of cloth; but with this construction, which, when first introduced, works very well, the cloth soon becomes worn and has to be replaced, whereby the body of the shuttle is injured and the time of the operator is wasted.

The object of my invention is to overcome the objections incident to the use of the tension device above described; and to this end the invention consists of a metallic tension attachment, which will be hereinafter described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of a shuttle provided with my improved tension attachment. Fig. 2 is a central sectional view, taken upon a line corresponding with the line *x x* of Fig. 1, of one end of the shuttle. Fig. 3 is a cross-sectional view taken upon a line corresponding with the line *y y* of Fig. 2, and Fig. 4 is a similar view with the folding tongue of the tension device represented as it appears when raised from within its case.

In constructing such a tension attachment as the one illustrated in the drawings above referred to, I provide a U-shaped case, 10, in the side walls of which there are formed apertures 2, said apertures being located at points near the upper edge of said side walls, and slits or openings 3 being formed in the side walls of the case, which said slits or openings extend from the upper edges of the walls to the apertures 2.

A tongue, 11, is mounted within the case 10, said tongue being supported upon a pivot-pin or bolt, 4, as is clearly shown in Figs. 3 and 4.

A spring, 12, is mounted beneath the tongue 11, being held to place by a screw, 13, which also serves to hold the case to its position within the end of the central opening of the shuttle-body A. The extending end of the spring 12 bears against the tongue 11 and acts to hold said tongue in the position in which it is shown in Fig. 3 or in the position in which it is shown in Fig. 4. An aperture, 5, is formed in the tongue, communication with said aperture being established by means of a slit or opening, 6, which extends from the aperture through the lower edge of the tongue.

My tension attachment having been adjusted as represented in the drawings, the thread from the bobbin is passed through the slits 3 into the apertures 2, the tongue 11 being at this time folded to the position in which it is shown in Fig. 4, so that when the tongue is returned to the position in which it is shown in Fig. 3 the thread will enter the aperture 5 through the slits 6, so that in being drawn through the tension device it will pass downward from the first aperture 2 to the aperture 5 of the tongue 11, then upward to pass through the second aperture 2, from which aperture it is led out through eyelet-protected ways 14.

In order that the tongue 11 may be readily moved from the position in which it is shown in Fig. 3 to the position in which it is shown in Fig. 4, I provide said tongue with an upwardly-extending finger, 15, that is formed with a notch, 16, which said notch may be caught by the thumb or finger nail when it is desired to throw the tongue upward and out of its casing.

By varying the relative positions of the apertures 2 and 5, the tension to which the thread from the bobbin is subjected may be varied, and in practice it has been found that such a tension attachment as I have herein illustrated and described will act to impart a uniform tension to the thread, whereby greater uniformity is obtained in the weaving of the cloth, the improvement being especially marked at the side edges of said cloth.

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

1. The combination, with the casing 10, having openings 2 3 in its upper edges, of the

tongue 11, pivoted near its end within the casing and having an opening, 5 6, in its lower edge, and a spring, 12, below the tongue and bearing on its pivoted end in rear of its pivot, 5 substantially as set forth.

2. The combination, with a shuttle-body, of a case, 10, the side walls of which are formed with apertures 2 and slits 3, a tongue, 11, formed with an aperture, 5, and a slit, 6, and 10 mounted between the side walls of the case 10, a spring, 12, arranged in connection with the tongue, and a screw, 13, all substantially as described.

3. The combination, with a shuttle-body, of a case, 10, formed with apertures 2 and 15 slits 3, said apertures being located near the upper edges of the side walls of the case, a tongue, 11, formed with an aperture, 5, and a slit, 6, and pivotally mounted between the side walls of the case 10, a notched finger being 20 formed upon the tongue, a spring, 12, and a screw, 13, substantially as described.

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Witnesses:

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