Feb. 11, 1930. J. GABLER 1,746,465

WEFT THREAD CONTROL DEVICE FOR SHUTTLELESS LOOMS EMPLOYING WEFT THREAD INSERTERS

Filed Nov. 10, 1927

Fig. 2

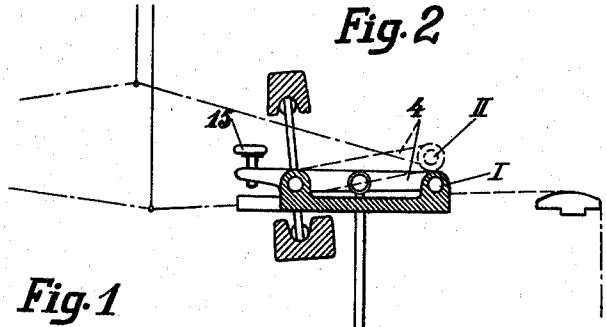
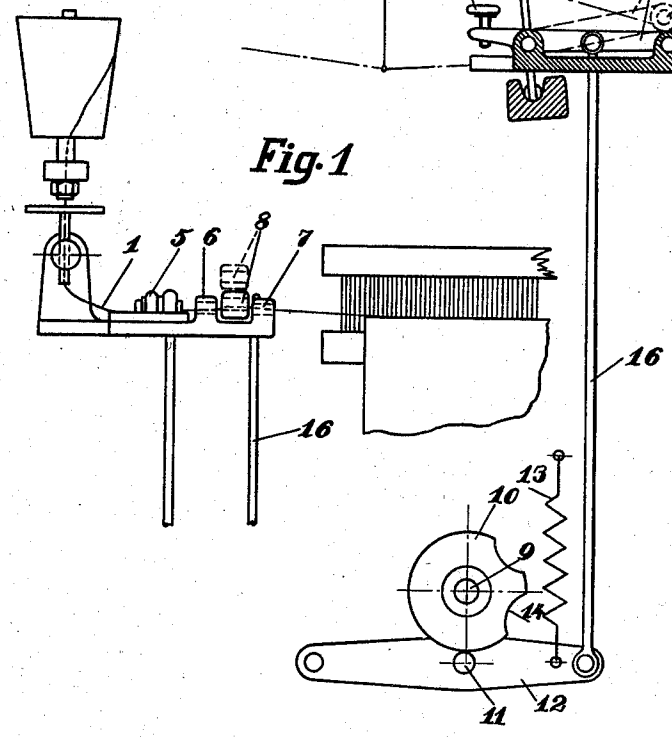


Fig. 1



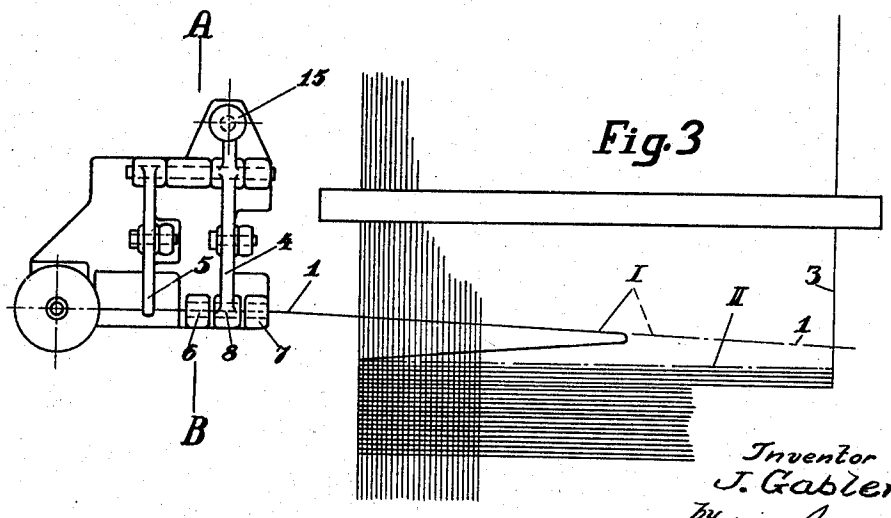


Fig. 3

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Patented Feb. 11, 1930 1,746,465

UNITED STATES PATENT OFFICE

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WEFT-THREAD-CONTROL DEVICE FOR SHUTTLELESS LOOMS EMPLOYING WEFT-THREAD INSERTERS

Application filed November 10, 1927, Serial No. 232,396, and in Germany November 16, 1926.

This invention relates to a weft thread control apparatus for shuttleless looms in which by inserting the weft by means of grippers the length of the thread is determined by the gripper and is always of uniform length. As the grippers overlap one another at the middle, the weft is somewhat longer than it ought really to be and the extensibility of the different materials plays an important part, so that the weft must be adjusted after having been inserted by the grippers up to the middle, this adjusting being carried out in the simplest manner by pulling the thread back a little after it has been cut off and transferred to the other gripper, the thread being pulled back such a distance that the cut off end is lying in the edge.

An embodiment of the invention is illustrated, by way of example, in the accompanying drawing in which

Fig. 1 is a front elevation showing the adjusting mechanism.

Fig. 2 is a section on line A—B of Fig. 3.

Fig. 3 is a view seen from above.

When the weft 1 has been pushed by the weft inserter up to the middle of the warp shed and drawn by the second weft inserter, the weft 1 would project about two centimeters over the edge 3 (position I). To adjust the weft to the right length, it is drawn back by lever 4 in the following manner. The thread runs under a lever 5, through guide eyes 6 and 7 and through a guide eye 8 in the lever 4 into the warp shed. From the shaft 9 an eccentric 10 is set in motion and acts upon a roller 11 on a lever 12. At the rotation of the eccentric 10 the lever 12 is raised by the action of a spring 13, when the roller 11 engages with a recess 14, and the lever 4, connected by a rod 16 with lever 12, is raised also. At the thread passes through the eyes 6 and 7 and as the eye 8 is raised, the thread is bent and thus tautened.

Position II shows the position of the thread when the warp shed is open, the thread being held by the lever 5. On the lever 4 an adjustable screw 15 is arranged by means of which the thread may be adjusted to a longer or shorter length.

I claim:—

1. In a weft thread control device for shuttleless looms of the type employing weft thread inserters, a lever mechanism cooperating with the thread delivered by the inserters, and means for actuating said mechanism for withdrawing the length of delivered thread to a predetermined extent.

2. In a weft thread control device for shuttleless looms of the types employing weft thread inserters, a lever for withdrawing the length of thread delivered by the inserters for a predetermined distance, an eccentric connected with and serving to operate said lever, and a manually adjustable screw for controlling the length of the throw of the lever to thereby vary the withdrawing effect of the lever on the weft thread.

In testimony whereof I affix my signature.

JOHANN GABLER.