

T. M. LINCOLN.
CLIP FOR CLOTH TENTERING MACHINES.

No. 553,859.

Patented Feb. 4, 1896.

Fig: 1.

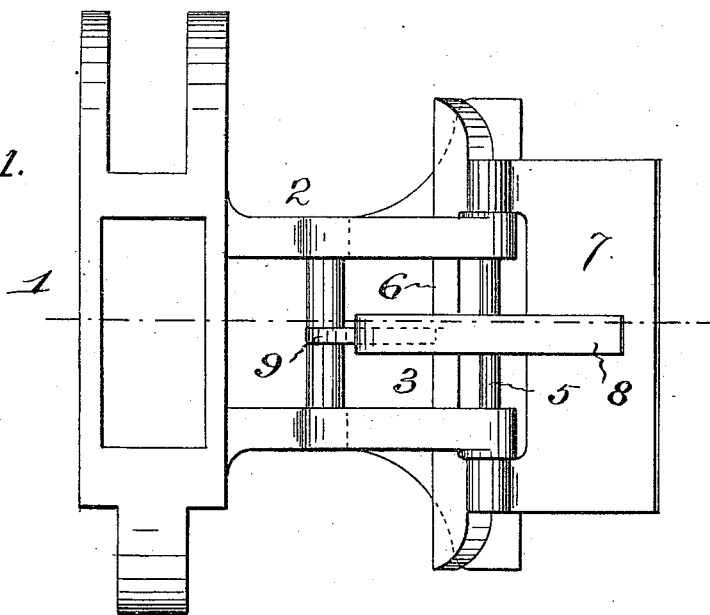


Fig: 2.

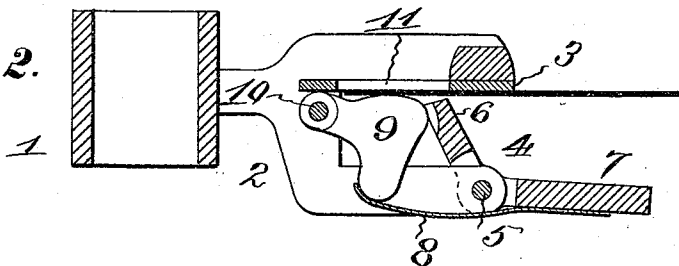
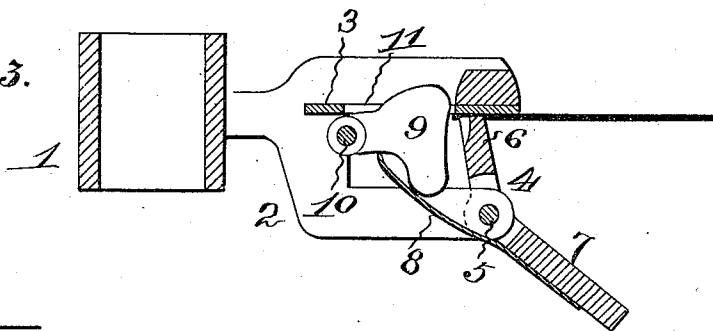


Fig: 3.



Witnesses:

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(No Model.)

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Fig. 4.

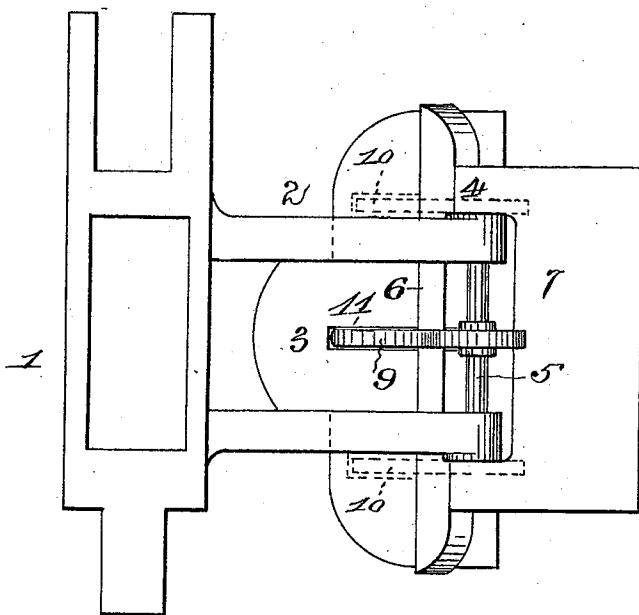
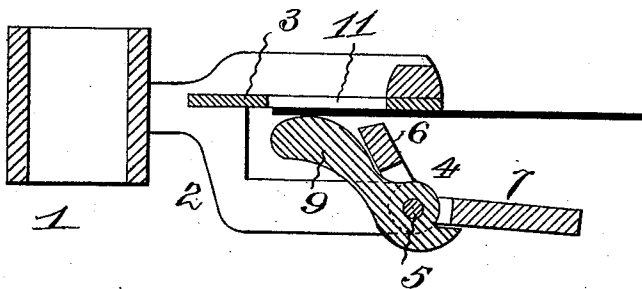


Fig. 5.



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(No Model.)

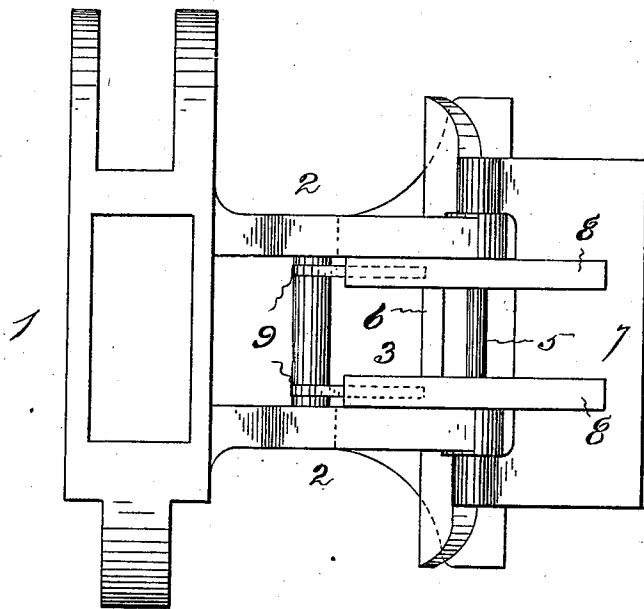
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Fig. 6.



Witnesses:

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UNITED STATES PATENT OFFICE.

THEODORE M. LINCOLN, OF HARTFORD, CONNECTICUT.

CLIP FOR CLOTH-TENTERING MACHINES.

SPECIFICATION forming part of Letters Patent No. 553,859, dated February 4, 1896.

Application filed July 15, 1893. Serial No. 480,593. (No model.)

To all whom it may concern:

Be it known that I, THEODORE M. LINCOLN, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Clips for Cloth-Tentering Machines, of which the following is a full, clear, and exact specification.

The invention relates to the class of automatic gravity clips or holders, which are connected into an endless chain and used on machines for stretching woven fabrics; and the object is to provide a simple and cheap clip of this class, which will more positively, accurately and firmly clasp and hold the cloth at the selvage without any possibility of its becoming caught by the guard or latch which controls the closing of the jaws.

Referring to the accompanying drawings, Figure 1 is a bottom view of the clip. Fig. 2 is a central vertical sectional view with the jaws open. Fig. 3 is a similar view with the jaws closed. Fig. 4 is a bottom view of a modified form of clip. Fig. 5 is a central vertical section of the latter form, and Fig. 6 is a bottom view of a modified arrangement of the clip shown in Fig. 1.

In the views, 1 indicates the body of one of the links of the chain used in a tentering-machine. From one side of the body of this link project the forked arms 2, and to the under surface of the upper of these arms is secured a plate 3, which forms the fixed jaw of the clip, while to the end of the lower arm is pivoted a lever 4. This lever is preferably bent and is supported on a rod 5, that passes through perforations in the lower arm. The upper edge of the lever is made to serve as the movable jaw 6, while the lower or outer end of this lever is made heavier and forms a counterbalance 7, that normally tends to keep the upper end against the fixed jaw and also provides a means which, by contact with a part of the machine, will open the jaws and release the cloth. Projecting from the counterbalance is a finger 8, adapted to make contact with a guard or latch 9, held to the fork by a pivot 10. This latch has a movement across the plane of the fixed jaw into a slot 11 when the cloth does not cover the slot.

The links are connected into a chain and applied to the machine in the common and well-

known manner, and when the cloth is started in the clips the movable jaw is held in the position shown in Fig. 2, the counterbalancing part of the lever tending to throw the movable jaw against the fixed jaw, but being prevented by the contact of the finger on the counterbalance with the edge of the latch, that cannot rise into the slot until the cloth has been drawn from beneath it. When the edge of the cloth has been drawn from beneath the slot in the fixed jaw, the latch, under the influence of the counterbalance, passes into the slot and allows the counterbalance to close the movable jaw against the fixed jaw, so that the edge of the cloth is grasped, as shown in Fig. 3. With this construction a heavy counterbalance, so arranged that it will work surely and positively, always tends to close the jaws together, and such counterbalance also serves as a means for making contact with a part of the machine to open the jaws and release the cloth. It will be noticed that as the cloth is pulled over the latch its weight holds the latch down, so that the cloth cannot become wedged by the latch into the slot; also, that the cloth is pulled away from the pivot of the latch, so that should it become caught on the edge of the latch it will not pull the latch into the slot and thus wedge and tear the cloth when strained in stretching.

The lever and the latch formed in independent pieces can be conveniently, cheaply, and accurately made and assembled.

If desired, more than one finger may be used to project from the counterbalanced lever in such manner as to come in contact with an equal number of guards or latches used to control the movement of the lever. This construction differs only from that described by the duplication of the fingers and guards, as shown in Fig. 6.

In the form shown in Figs. 4 and 5 the independent guard or latch and the finger are made in one piece and pivoted upon the pivot that holds the lever. In this construction, while the latch is independent of the lever, its lower end is shaped to come in contact with the under surface of the counterbalance portion of the lever, and its upper edge is adapted to make contact with the back surface of the movable jaw.

I claim as my invention—

1. A clip consisting of a body having projecting upper and lower arms, a fixed slotted jaw attached to the upper arms, an oscillating jaw pivoted to the lower arms, a projecting counterbalance connected with the oscillating jaw, a latch pivoted at a point below the level of the fixed jaw so as to normally fall away therefrom, and a finger connection between the counterbalance and the latch
10 whereby the latch and the oscillating jaw are raised toward the fixed jaw by the counterbalance, substantially as specified.

2. A clip consisting of a body having pro-

jecting upper and lower arms, a fixed slotted jaw attached to the upper arms, an oscillating jaw an independent latch and a counterbalance held by the same pivot to the lower arms, said counterbalance being connected with the oscillating jaw and engaging a part of the oscillating latch whereby the oscillating jaw and the latch are lifted toward the fixed jaw, substantially as specified. 15 20

THEODORE M. LINCOLN.

Witnesses:

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