(No Model.) 2 Sheets—Sheet 1.

C. SINNING.

TACKING MECHANISM FOR LASTING MACHINES.

No. 476,695. Patented June 7, 1892.

Fig. I.

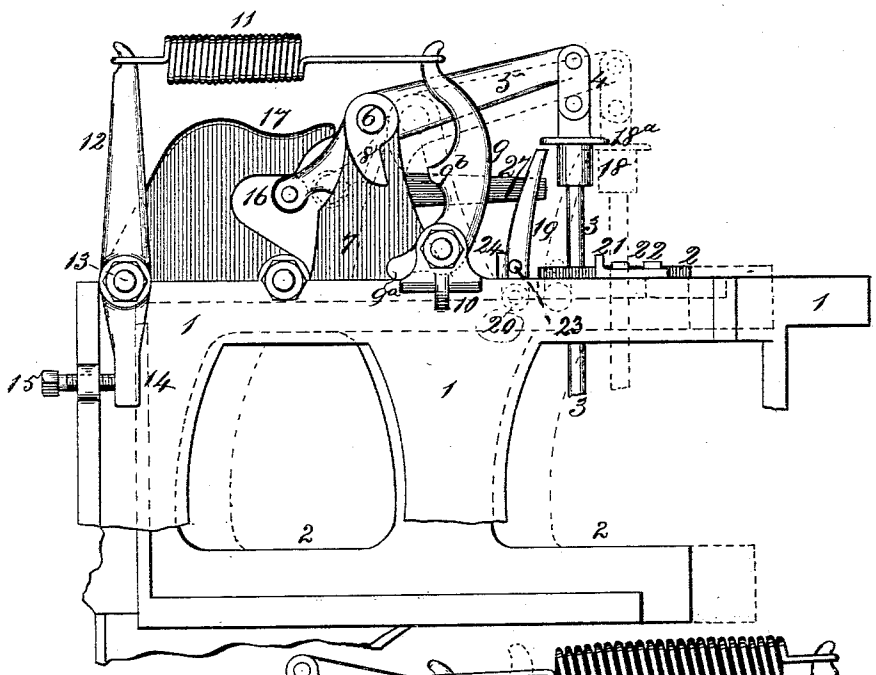
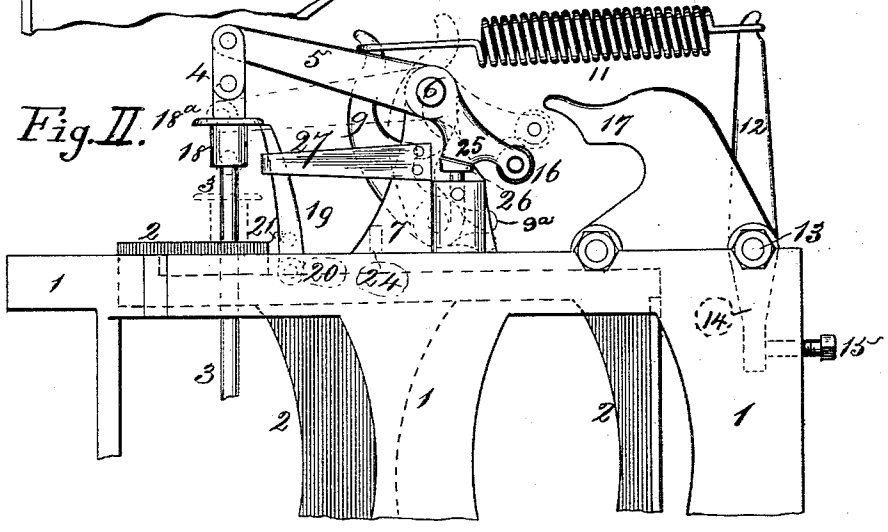


Fig. II.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. III.

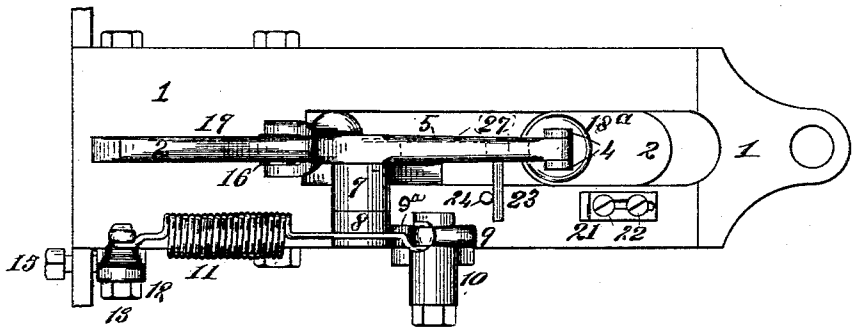
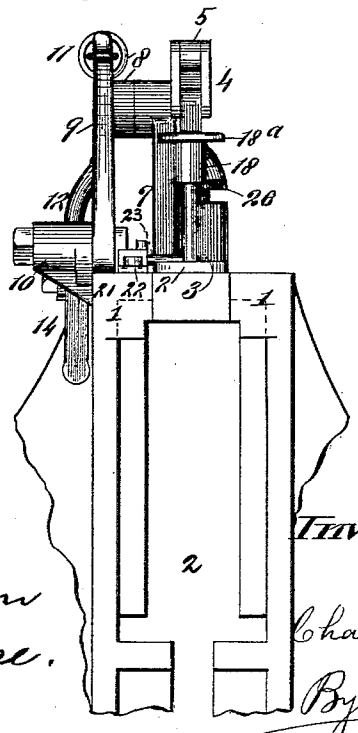


Fig. IV.



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UNITED STATES PATENT OFFICE.

CHARLES SINNING, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE SINNING LASTING MACHINE COMPANY, OF SAME PLACE.

TACKING MECHANISM FOR LASTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 476,695, dated June 7, 1892.

Application filed October 26, 1891. Serial No. 409,892. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SINNING, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Tacking Mechanism for Lasting-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This is an improvement on the invention described in Letters Patent No. 456,225, granted to me July 21, 1891, for a lasting-machine. The present improvement relates to devices for actuating the hammer by which the tack is driven.

The novel features will be set forth in the claims.

Figure I is a side elevation, the parts being shown in normal position or with the hammer in its upper position and the sliding frame in its back position. Fig. II is an elevation of the opposite side to Fig. I, showing the sliding frame about to attain its forward position with the hammer still up but about to descend. Fig. III is a top view. Fig. IV is a front view.

1 is part of the fixed frame of the machine, within which the moving frame or carriage 2 has bearing, as shown in dotted lines in Figs. I and II. 3 is the hammer-rod, having bearing in the frame or carriage 2. The upper end of the hammer-rod is connected by a link 4 to the front end of a lever 5, fulcrumed at 6 to the standard 7 upon the sliding frame.

8 is a downward projection fixed to the lever 5.

9 is an arm, whose lower end is pivoted to a bracket 10 upon the fixed frame. The upper end of the arm is connected by a spring 11 to the upper end of a pivoted arm 12. This arm is connected to the fixed frame by a pivot 13. The arm 12 has a projection 14 extending downward from the pivot, against which bears the point of a screw 15. By turning the screw inward the lower end 14 of the arm is pushed forward and its upper end moved backward, thus increasing the tension of the spring 11. The arm 9 has a projection 9^a, that limits the backward movement of the arm by contact with the bracket 10. The rear end of the lever 5 has preferably an anti-friction roller 16, that comes in contact with the under side of a cam 17, that is fixed to the fixed frame 1. The construction is such that as the sliding frame moves backward the rear end of the lever 5 is forced down and the fore end of the lever raised, and as the sliding frame reaches its backward position the hammer-rod is raised to its highest position.

18 is a collar on the hammer-rod, having a circumferential flange 18^a.

19 is a dog pivoted at 20 to the sliding frame and adapted to engage the under side of the flange 18^a, so as to hold up the hammer-rod as the sliding frame is moving forward until the rod reaches a position directly over the tack, when the dog is drawn from beneath the flange by a device that will now be described. Upon the fixed frame 1 is a stop 21, that is preferably attached by screws 22, passing through a slot in the stop, so as to be adjustable.

23 is a pin on the side of the dog that comes in contact with the stop 21 as the sliding frame is about to reach its forward position, so that the continued forward movement of the frame draws the dog from beneath the flange 18^a and allows the hammer to descend into the position shown by dotted lines, Fig. II.

The means for forcing down the hammer when released from the dog will now be described. As the sliding frame moves forward the downward projection 8 of the lever 5 comes in contact with a projection 9^b of the arm 9 and swings the top of the arm forward, drawing out the spring 11, as seen in Fig. II, so that the spring tends to force the hammer downward. The blow of the hammer is completed by its momentum, the power of the spring being spent before the hammer reaches its lower position. As the sliding frame moves backward and the hammer is again raised the upper end of the dog 19 is carried beneath the flange 18^a by the contact of the pin 23 with a stop 24 upon the fixed frame. As the hammer reaches its upper position a projection 25 upon the lever 5 impinges upon a cushion 26, so as to limit the ascent.

27 is a spring pressing against the side of the dog 19, so as to steady its movements by simple friction.

I claim as my invention—

1. In a tacking mechanism for a lasting-machine, the fixed frame 1, sliding frame 2, having bearing therein, hammer-rod 3, and lever 5, having bearing in the sliding frame and connected together, projection 8 on the lever 5, the arms 9 and lever 12 on the fixed frame, connected by a spring 11, the cam 17 on the fixed frame, the flange 18^a on the hammer-rod, the pivoted dog 19 on the sliding frame, and stops 21 and 24 on the fixed frame, all constructed and adapted to operate substantially as set forth.

2. In a tacking mechanism for a lasting-machine, a fixed frame 1, a sliding frame 2, having bearing therein, the hammer-rod 3, lever 5, pivoted arm 9, and dog 19 upon the sliding frame, the cam 17 on the fixed frame, and a spring 11, connecting the arm 9 with the fixed frame, all constructed, arranged, and adapted to operate substantially as set forth.

CHARLES SINNING.

Witnesses:
SAML. KNIGHT,
A. M. EBERSOLE.