

No. 882,395.

PATENTED MAR. 17, 1908

J. LARSEN.
MACHINE FOR SOLING FOOTWEAR.
APPLICATION FILED NOV. 28, 1906.

Fig. 1.

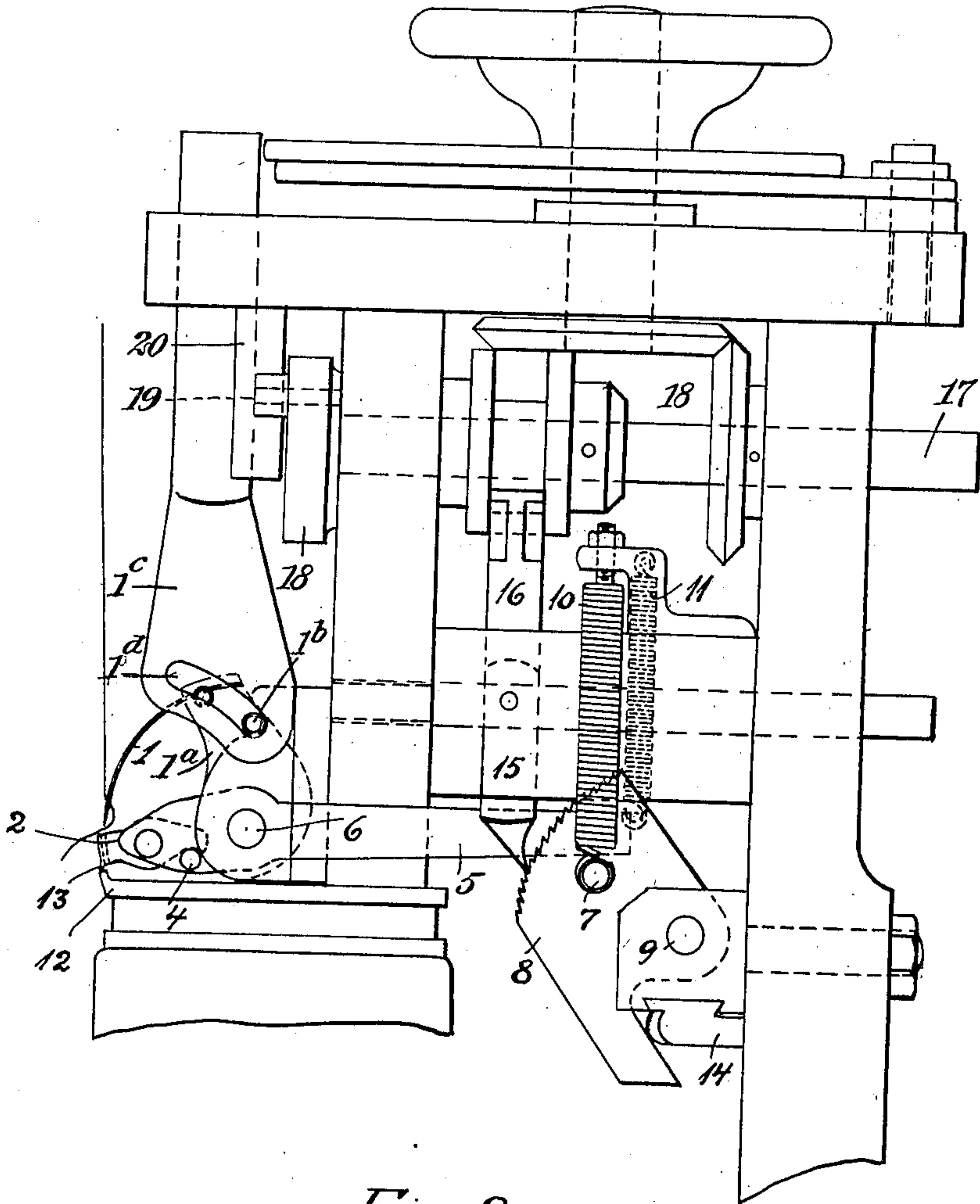
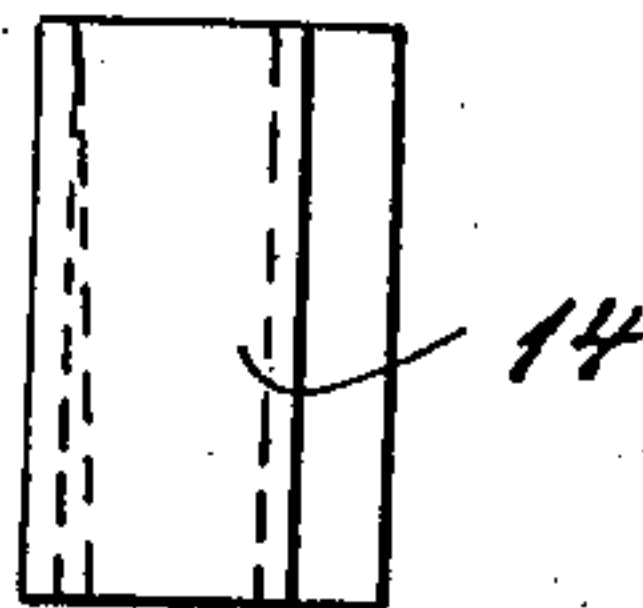


Fig. 2.



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UNITED STATES PATENT OFFICE.

JULIUS LARSEN, OF COPENHAGEN, DENMARK.

MACHINE FOR SOLING FOOTWEAR.

No. 882,395.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed November 28, 1906. Serial No. 345,439.

To all whom it may concern:

Be it known that I, JULIUS LARSEN, a citizen of the Kingdom of Denmark, and a resident of Copenhagen, Denmark, Silkegade 13, manufacturer, have invented new and useful Improvements in Machines for Soling Footwear, of which the following is a specification.

My invention relates to improvements in machines for soling footwear.

The essential in my invention consists in the press-pedal and the movement of this.

The invention is shown in the accompanying drawing which shows a form of execution of the invention.

Figure 1 is a side elevation of the device complete; Fig. 2 is an elevation showing the wedge member.

The press-pedal 5 consists of a double-armed lever journaled on the bolt 6. One end of this lever supports a loose needle-guide 2 which is provided with a channel for the circular shaped needle 1. The bottom front-edge of this part has a lip 13, but with each machine follow several loose pieces having differently shaped bottom-edges suitable to the different kinds of work the machine is required to do. Another bolt 4 serves as a guiding bolt for the loose piece 2. The press-pedal 5's innermost long arm is resting against a bolt 7 on the ratchet-piece 8 turnable on a bolt 9. The ratchet 8 is kept in the upper position by a powerful spring 10, while another much weaker spring 11 is in connection with the press-pedal. The needle 1 is supported by a rocking needle holder 1^a, having the form of a cam and provided with a roller 1^b. A heel 1^c is provided with an arcuate slot 1^d into which the roller 1^b extends.

During the making of the stitch and the tightening of the thread, the shoe must be firmly fixed, and this is accomplished by pressing downward the end of the press-pedal and the needle-guide fixed thereon, so that the shoe is resting between the stitch-plate 12 and the edge 13, a very great pressure being exercised by the powerful spring 10 pressing the innermost end of the press-pedal upwards.

While the feeding device, after the stitch is made and before a new stitch is started, is moving the shoe, the press-pedal must only exercise a slight pressure on the shoe, and this is accomplished by the pawl 15; fixed on the arm 16 actuated from the shaft,

pressing the ratchet-piece 8 downwards by overcoming the pressure of the spring 10. The press-pedal is now only exposed to the pressure of the weak spring 11, and the pressure on the shoe is now so light that the transporter can move the shoe with ease.

In order to prevent the needle from getting stuck in the leather during fast sewing and thereby at the up-stroke lift the shoe by overcoming the resistance of the spring, the arrangement is made, that the ratchet-piece 8 may be locked in the position shown in the drawing by means of a wedge 14 entering underneath a projection on the ratchet-piece and keeping it locked until the needle is free of the leather.

What I claim, and desire to secure by Letters Patent, is:

1. The combination of a lever provided with a long arm and with a short arm, a needle guide engaging said short arm, means for normally maintaining said long arm in a predetermined raised position and for tensioning said long arm, a movable shoe, and means for locking said lever during the movement of the needle.

2. The combination of a lever provided with a long arm and with a short arm, a needle guide engaging said short arm, a movable member for sustaining said long arm, a spring for normally sustaining said member and the said long arm of the lever in a predetermined position means for moving the said member to overcome the tension of the said spring, and a spring weaker than the first mentioned spring and exerting tension on said long arm of the lever, for the purpose set forth.

3. The combination of a lever provided with a long arm and a short arm, a needle guide for engaging said short arm, a ratchet member mounted to turn and provided with means for sustaining said long arm, a spring for maintaining said ratchet member in a predetermined position, a pawl for engaging and moving the ratchet member against the tension of said spring, and a spring weaker than the first mentioned spring, and exerting tension on the said long arm of the lever.

4. The combination of a lever provided with a long arm and with a short arm, a needle guide engaging said short arm, a movable member for sustaining said long arm, a spring for maintaining said member in a predetermined position, and a wedge for locking the said movable member, in said position.

5. The combination of a stitch plate, a lever provided with a long arm and a short arm, a needle guide for engaging the short arm, a member mounted to turn, a bolt on the said member and on which the long arm of the lever rests, a spring for holding the said member and bolt in raised position, to cause the work to be firmly held between the needle guide and the stitch plate, during the movement of the needle and the forming of the stitch, means for moving the said mem-

ber to overcome the tension of said spring on the long arm of the lever, and a weaker spring exerting tension on the long arm of the lever.

Signed by me at Copenhagen, Denmark, this 13th day of November, 1906. 15

JULIUS LARSEN.

Witnesses:

CHARLES HUDE,
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