(No Model.)

L. C. LOWDEN.

WIRE FENCE MACHINE.

No. 409,477. Patented Aug. 20, 1889.

Fig. 1.

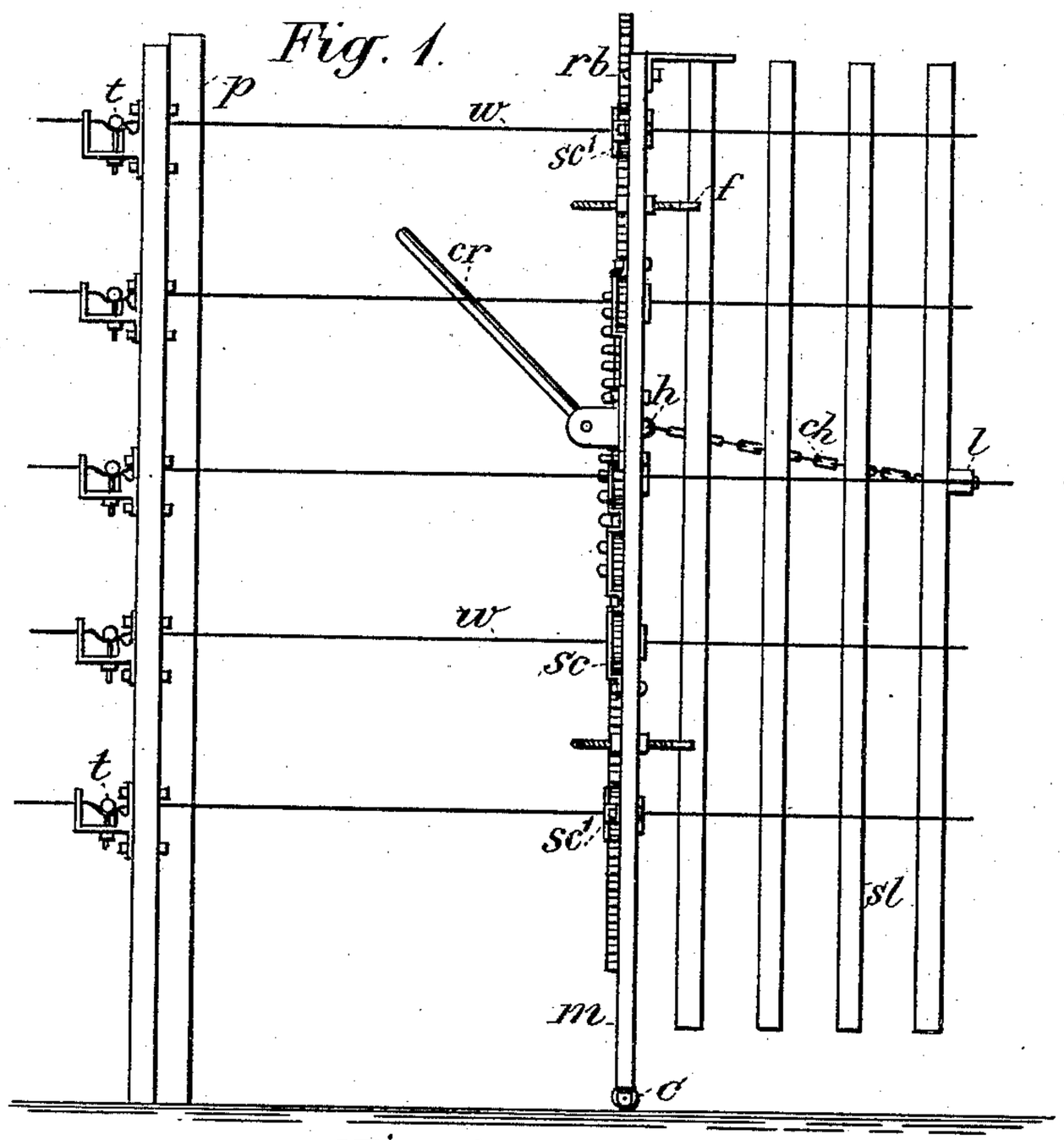


Fig. 4.

Fig. 2.

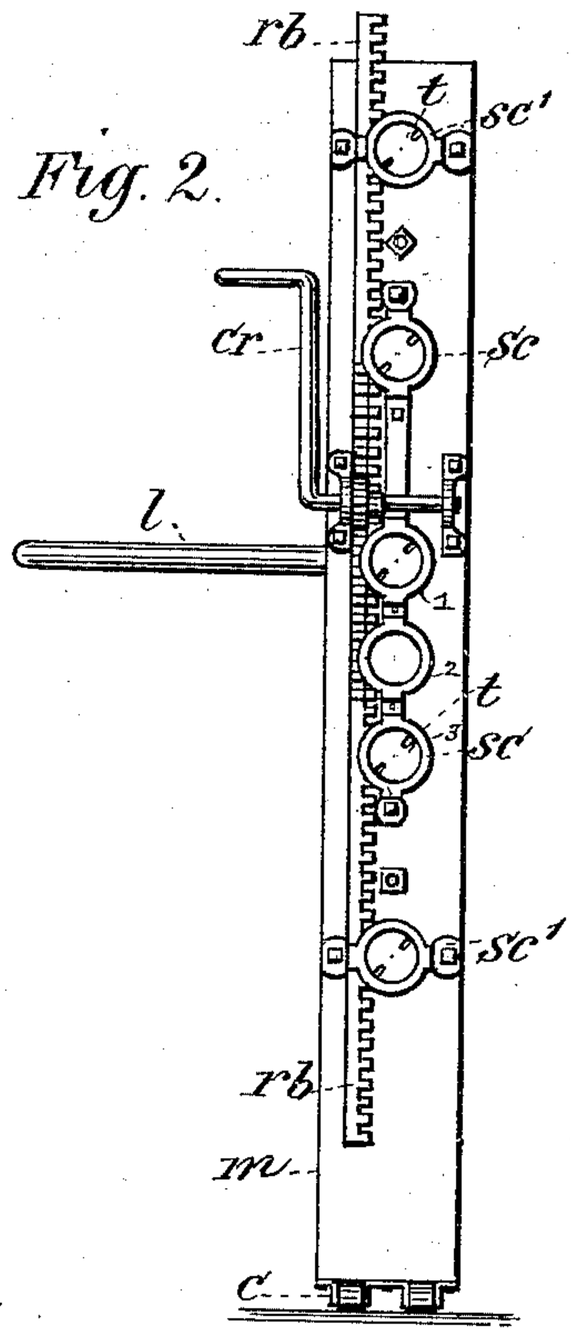


Fig. 3.

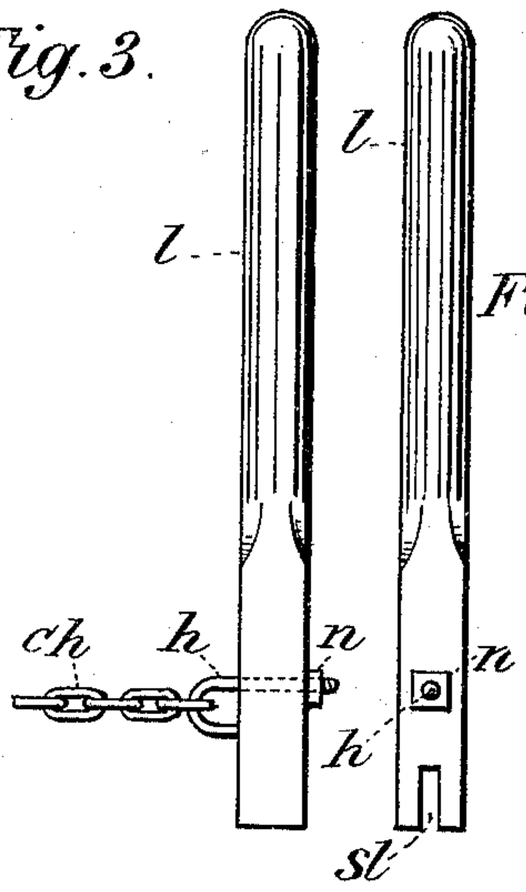


Fig. 5.

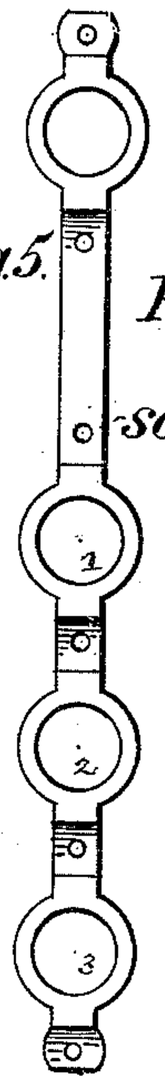


Fig. 6.

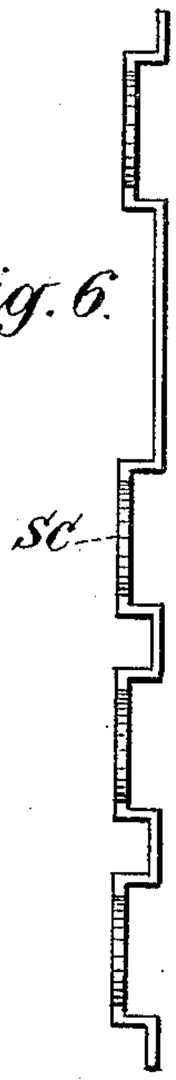


Fig. 7.

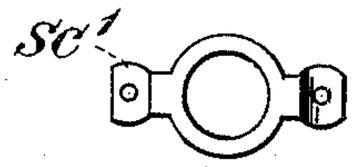
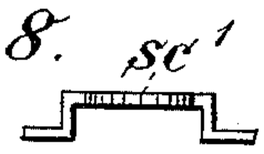


Fig. 8.



WITNESSES.

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UNITED STATES PATENT OFFICE.

LEONIDAS C. LOWDEN, OF INDIANAPOLIS, INDIANA.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 409,477, dated August 20, 1889.

Application filed June 6, 1889. Serial No. 313,279. (No model.)

To all whom it may concern:

Be it known that I, LEONIDAS C. LOWDEN, of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Wire-Fence Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

My invention relates to the construction of machines for weaving wires about pickets in the construction of fences, and is an improvement upon the device for which Letters Patent were granted to me July 20, 1886, No. 346,052, and June 21, 1887, No. 365,312, and will be understood from the following description.

In the drawings, Figure 1 is a view of the machine set up in the field for operation. Fig. 2 is a front view of the machine itself with my improvement attached. Fig. 3 is a side view of the lever and chain connected thereto for forcing the picket up into the bight of the wire. Fig. 4 is a back view of the same, showing the notch. Fig. 5 is a side view of my adjustable socket-clamp bar. Fig. 6 is an edge view of the same. Fig. 7 is a side view of the socket-clamp used at the top and bottom of the machine. Fig. 8 is an edge view of the same.

The machine consists of a main frame-work *m*, resting upon casters *c* for moving it about. *rb* is a rack-bar which gears with cogs formed on the twisters *t*, one side of this rack-bar being provided with a toothed portion standing at right angles to the main teeth of the rack-bar, these side teeth engaging with those of the pinion operated by the crank *cr*. The twisters are set through holes in the frame and have eyes on each side through which the fence-wires *w* pass. All these parts are precisely like those shown in the Letters Patent hereinbefore mentioned, and reference is made to such Letters Patent for a full description thereof.

My improvement consists in a new means for confining the twisters in position in the frame, whereby the central ones are made adjustable to different positions, as hereinafter described. For this purpose I use at the top and bottom of the machine a socket-clamp *sc*,′ made in the shape shown in Fig. 7, the hole in the face of this socket-clamp being a little less in diameter than the spool of the twister, and when the latter is set in position the socket-clamp is set over it and bolted on either side through the frame in the manner shown in Fig. 2.

For confining the central twisters I use a continuous socket-clamp bar *sc* of the shape shown in Figs. 5 and 6, which is bolted to the frame at the top and bottom and also between the sockets. As will be seen, the upper part of this bar has a socket-clamp 4 and the lower part has three similar socket-clamps 1 2 3, set closely together, the central one 2 of these not having a twisting-spool inclosed, but set over a corresponding opening through the frame of the machine. This device, as will be seen, firmly confines the twisters in position, while at the same time it provides for the adjustment of either of the central spools or twisters. Thus, as shown in the drawings, the twisters are set for a five-wire fence; but if it is desired, as it sometimes is, to make a four-wire fence this may be readily accomplished by removing both the upper and lower (1 and 3) of the central group of twisters and inserting one of them in the central opening 2 in the socket-clamp bar, this being spaced equidistant between the upper clamp *sc* of the socket-clamp bar and the lower socket-clamp *sc*′, so that these three twisters will space the lower three wires of the fence equidistant from each other. This adjustment is readily accomplished by loosening the bolts holding the socket-clamp bar to the frame and pulling away one end thereof far enough for the removal of the extra twister, and the change to the central opening of the other one. I am thus able to combine in one machine without any derangement of the parts a four-wire or five-wire twisting mechanism, which was not possible under the former arrangement.

I also provide in this machine a lever *l*, having a notched opening or slot *sl* at its end, this lever being connected to a chain *ch*, which is in turn connected to a hook *h*, fastened at the left-hand side of the machine, as shown in Fig. 1. The object of this is to force the picket up into the bight of the wire, and it is accomplished by placing the slot of the lever

over the central fence-wire and then pulling upon the lever, and the upper end is forced inward as the lower one is pulled outward, and the picket is forced up into position. By revolving the crank *cr* the rack-bar is lifted and the twisters revolved in the manner described in my former applications, and the wire is twisted about the pickets in the ordinary manner.

t is the tension device, which is fully described and shown in the last one of the Letters Patent issued to me hereinbefore mentioned.

The pickets are gaged as to height by a stop bolted to the top of the machine in the manner shown in Fig. 1, this also being a feature shown in my former Letters Patent.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. In a wire-fence machine, a frame-work, a series of twisters revolving therein, socket-clamps *sc'*, bolted to such frame, for holding the upper and lower twisters in position, and a central socket-clamping bar *sc*, also bolted to such frame, having one or more extra socket-openings, allowing for the adjustment as to space of the twisters, in combination with means for revolving the twisting mechanism, substantially as shown and described.

2. In a wire-fence machine, a socket-clamping bar *sc*, having socket-openings 4 and 3 at its ends and a socket-opening 1 at its center, and an intermediate socket-opening 2 between the central and lower openings, substantially as shown and described.

3. The lever *l*, provided with a slot *sl* at its upper end, and the chain *ch*, connected to such lever and also to the machine-frame, substantially as shown and described.

In witness whereof I have hereunto set my hand this 31st day of May, 1889.

LEONIDAS C. LOWDEN.

Witnesses:
C. P. JACOBS,
E. B. GRIFFITH.