

No. 612,074.

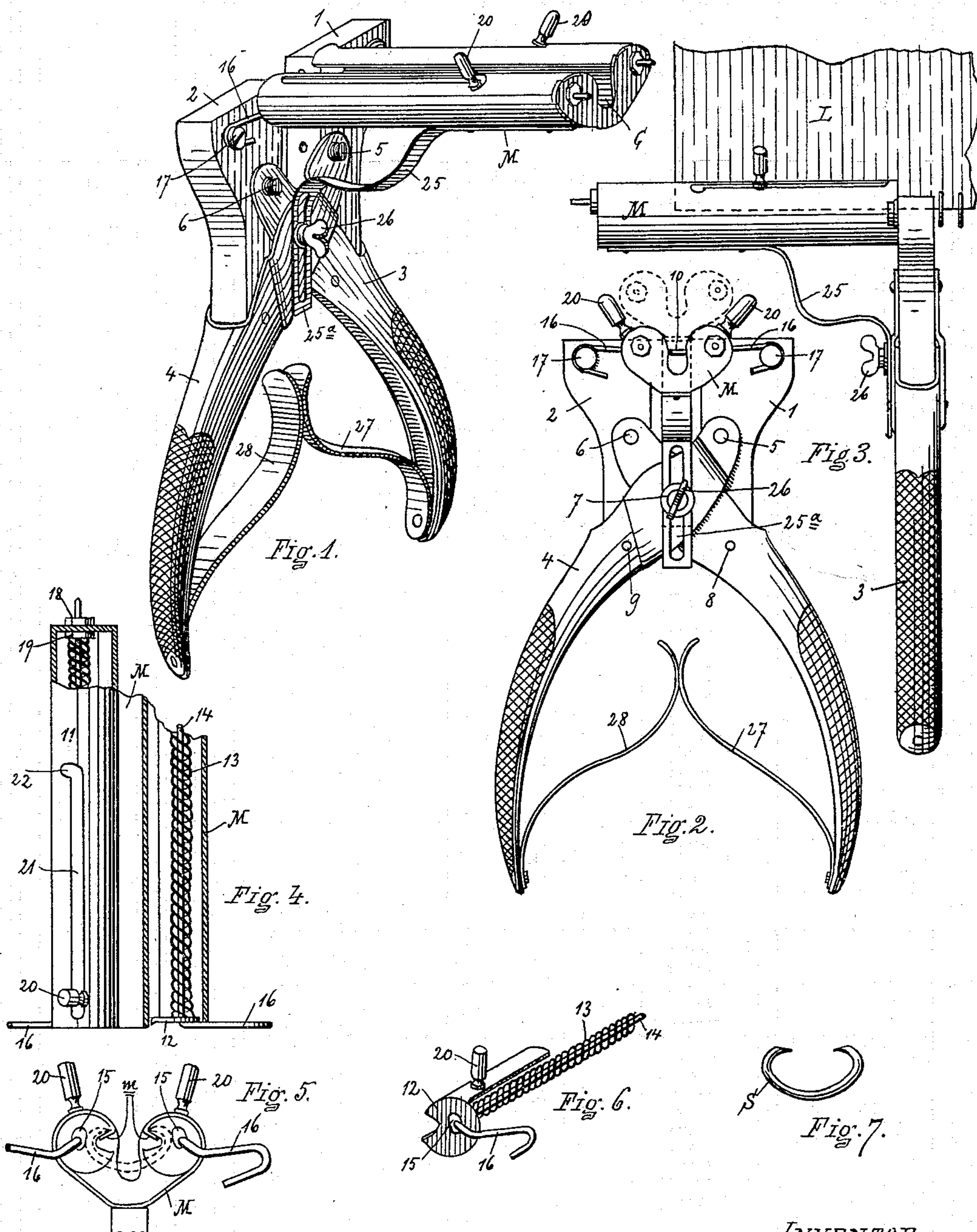
Patented Oct. 11, 1898.

G. W. WEBB.  
MAGAZINE BELT FASTENER PLIERS.

(Application filed Jan. 17, 1898.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES  
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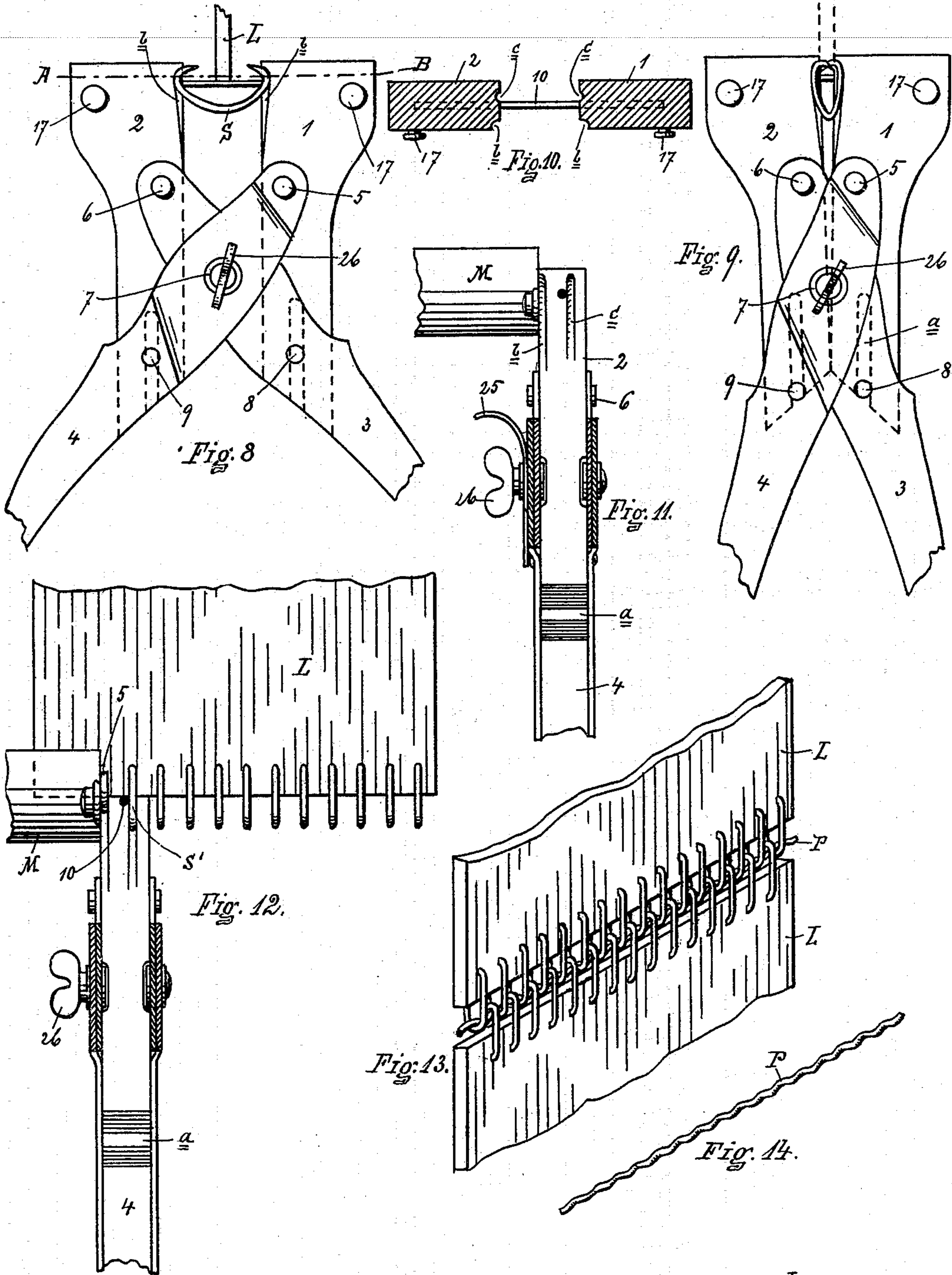
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# UNITED STATES PATENT OFFICE.

GEORGE W. WEBB, OF ILION, NEW YORK.

## MAGAZINE BELT-FASTENER PLIERS.

SPECIFICATION forming part of Letters Patent No. 612,074, dated October 11, 1898.

Application filed January 17, 1898. Serial No. 666,937. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. WEBB, of Ilion, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Magazine Belt-Fastener Pliers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

In the drawings, Figure 1 shows a perspective view of my magazine belt-fastener pliers. Fig. 2 shows a plan view of the same. Fig. 3 shows a side elevation of the tool or pliers in connection with a section of belt in position to be operated on by the pliers. Fig. 4 shows details of the magazine construction, partially in section. Fig. 5 shows the lower end of the magazine removed from the pliers proper. Fig. 6 shows details of one of the magazine-followers, the follower-spring and support for the spring, and the means for attaching it to the pliers. Fig. 7 shows one of the hooks or staples adapted to be used in the tool. Fig. 8 shows a plan view of the tool with the magazine removed and a staple in position in the tool preparatory to being placed in the belt in connection with the edge of the belt shown in position in the tool. Fig. 9 shows the same as Fig. 8 after the tool has been closed and the jaws brought together. Fig. 10 shows a section taken on line A B of Fig. 8. Fig. 11 shows a longitudinal section of the pliers in connection with a partial side elevation of the magazine. Fig. 12 shows the end of a belt partially provided with staples or fasteners as affixed by this tool in connection with the tool in position for operation thereon, the tool being shown in longitudinal central section. Fig. 13 shows the two ends of a belt provided with the staples as applied by this tool brought together and secured by a pin passing transversely of the belt. Fig. 14 shows the pin for uniting the two ends of the belt after being provided with the staples and being brought together, as shown in Fig. 13.

Referring to the reference letters and figures in a more particular description of the

device, 1 and 2 indicate the jaws of the tool, which in the tool as shown are arranged to move parallel between the pliers, known as "parallel-jaw" pliers. It may be noted, however, that parallel jaws are not essential to the construction, although preferable. The jaws 1 and 2 are mounted in the handles 3 and 4, which handles are respectively pivoted to the jaws 1 and 2 by pivots 5 and 6 and are pivoted together at their intersecting point at 7. The handles are also provided with cross-pins 8 and 9, which engage in slots *a* in the rear end of the jaws, as shown in dotted lines in Figs. 8 and 9, as is usual in parallel jaws. Secured in the end of one of the jaws and extending into a socket in the other jaw there is provided a gage-pin 10. In one edge of the jaws there is provided corresponding recesses *b b*, adapted to receive the staple or fastener S from the magazine and in the position shown in Fig. 8. In the face of the jaws on the opposite side of the gage-pin 10 from the staple-recesses *b* there is provided a pair of shallow grooves *c c*, adapted to receive the sides of the staple S in the final clench or closing of the staple, as shown in Figs. 9 and 12.

The magazine M is formed of sheet material in general contour of the shape of the staple shown in Fig. 7 and having its edges turned inwardly, as shown at *m*, and is adapted to receive the staples with the inwardly-turned ends or points hooking around the inwardly-turned edges *m* of the walls of the magazine, as shown in dotted lines in Fig. 5. Within the circular portions 11 11 of the magazine there are provided followers 12. The follower is actuated or forced toward the bottom of the magazine by a spring 13 in each part of the magazine, which spring is preferably coiled around a wire 14, the wire passing through an opening 15 in the head of the follower and then bent outward, forming a hooked end 16, adapted to engage on the projecting rivet or screw head 17 on each of the jaws and assist in securing the magazine in position and determining its location when the jaws are fully open. The wires 14 are secured to the magazine at the upper or head end by a pair of nuts 18 and 19, one located on the inside and one on the outside of the shell or head, as shown. The followers 12 are provided with a handle or knob 20, which



extends through the slot 21 in the shell of the circular portion of the magazine. This slot is provided at its upper end with an angle, as shown at 22, so that when the follower is forced toward the upper end of the magazine by means of the handle 20 in loading the magazine it may be secured in this position by rotating the follower and bringing the handle 20 into the offset or notch 22. The magazine is secured to the tools proper by a holding spring-arm 25, which has a slotted end 25<sup>a</sup>, which receives the screw carrying the thumb-nut 26 at the pivotal point between the handles, thereby supporting the arm and magazine. It will be noted that the magazine has between its two circular parts a groove G, which is provided for receiving the edge or, rather, end of the belt on which the tool is being operated. Between the handles 4 5 are provided a pair of springs 27 28 for throwing handles, and with them the jaws, into fully-open position.

The magazine is shifted from its normal position on the jaws to the position shown in dotted lines in Fig. 2 by loosening the thumb-nut 26 and closing the jaws together, so as to disengage the hooked arms 16 from the headed pins 17 and moving the magazine to the position shown in dotted lines. When the followers 12 are then moved into their upper position and secured by the handles 20 engaging in the notches 22, the magazine is then loaded with a number of staples S when in the form shown in Fig. 7 by placing them into the lower open end of the magazine when in inverted position. The magazine is then placed back in its normal position on the jaws, as shown in full lines in Fig. 2 and the other figures, and secured by tightening the thumb-nut 26. The followers 12 are then released and allowed to force the staples toward the jaws. The tool is then in readiness for use and is operated as follows: With the jaws in the open position, as shown in Fig. 8 particularly, the tool is brought against the end of the belt, beginning adjacent to one edge or the other, and the gage-pin 10 against the end of the belt. A staple having been automatically fed into the recesses *b b* in the sides of the jaws from the magazine, when the jaws are fully opened they are closed together by closing the hand, driving points of the staple into the leather, and nearly, but not completely, closing the staple. The jaws are then allowed to open to their full extent, receiving another staple from the magazine in the recesses *b b*. The tool is then withdrawn from the end of the belt and moved along, so that the partially-driven staple, which is indicated by S' in Fig. 12, takes its position in the depressions or recesses *c c* in the jaw with the pin 10 against the side of this particular staple and against the end of the belt. This regulates the distance between the staples, as well as the distance from the end of the belt at which the points of the staples will engage, and when the tool is now closed the staple,

as S', previously partially driven, is clenched to its final position, while the staple which is received from the magazine is partially driven. This operation is continued until the tool has passed clear across the end of the belt. After placing the final staple in its partially-closed position, as indicated by S<sup>2</sup> in Fig. 12, the jaws are not allowed to fully open, in which case a staple is not fed from the magazine, but the jaws may be used to clench the last partially-closed staple. In practice the two meeting ends of the belt L are provided with sets of staples driven by this tool, as shown in Fig. 13, which are lapped by one another, as shown in this figure, and a crimped pin P is inserted, securing the two ends of the belt together, as desired.

It is evident that changes and variations in and from the construction described other than those herein mentioned may be made without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a belt-staple tool, the jaws having staple-recesses *b, b* and a gage-pin, substantially as set forth.

2. The combination in a belt-pliers of the jaws having staple-recesses *b, b* and *c, c* and the gage-pin extending between the jaws, substantially as set forth.

3. In a belt-pliers the combination of the jaws having staple-recesses in and open to the sides of the jaws and a magazine feeding into the said recesses, substantially as set forth.

4. In a belt-staple tool, the jaws having a gage-pin extending between them, and staple-recesses *b, b* arranged at the side of the gage-pin, substantially as set forth.

5. The combination in belt-pliers of the opening and closing jaws adapted to receive belt-staples sidewise, a headed projection on the side of each jaw, a staple-magazine having parts engaging with said projections, whereby the magazine is properly centered or located on the jaws to discharge the staple when the jaws are fully open, substantially as set forth.

6. In a belt-staple tool, the opening and closing jaws having staple-recesses in, and opening to the sides of the jaws, and a gage-pin in the face of the jaws arranged to afford an available working face at the side of the pin, substantially as set forth.

7. A magazine for belt-staple pliers having a groove or recess extending longitudinally of the magazine and adapted to receive the edge of the belt while the same is in the pliers, in position for being operated upon, substantially as set forth.

8. In a magazine belt-staple pliers, the combination of the jaws, the handles for operating the same, a magazine adapted to feed into the side of the jaws and secured at the pivotal point of the handles, substantially as set forth.



9. In a belt-staple tool, the opening and  
closing jaws having staple-recesses in, and  
opening to the side of the jaw, a gage-pin ar-  
ranged in the face of the jaws to afford an  
5 available working face on the jaw at the side  
of, and in front of the pin, substantially as  
set forth.

In witness whereof I have affixed my signa-  
ture, in presence of two witnesses, this 11th  
day of January, 1898.

GEO. W. WEBB.

Witnesses:

JOHN V. SCHMIDT,  
FRANK A. SCHMIDT.