(No Model.) 2 Sheets—Sheet 1.

J. W. DWIGGINS.

WIRE PICKET CRIMPER.

No. 549,113. Patented Nov. 5, 1895.

Fig. 1.

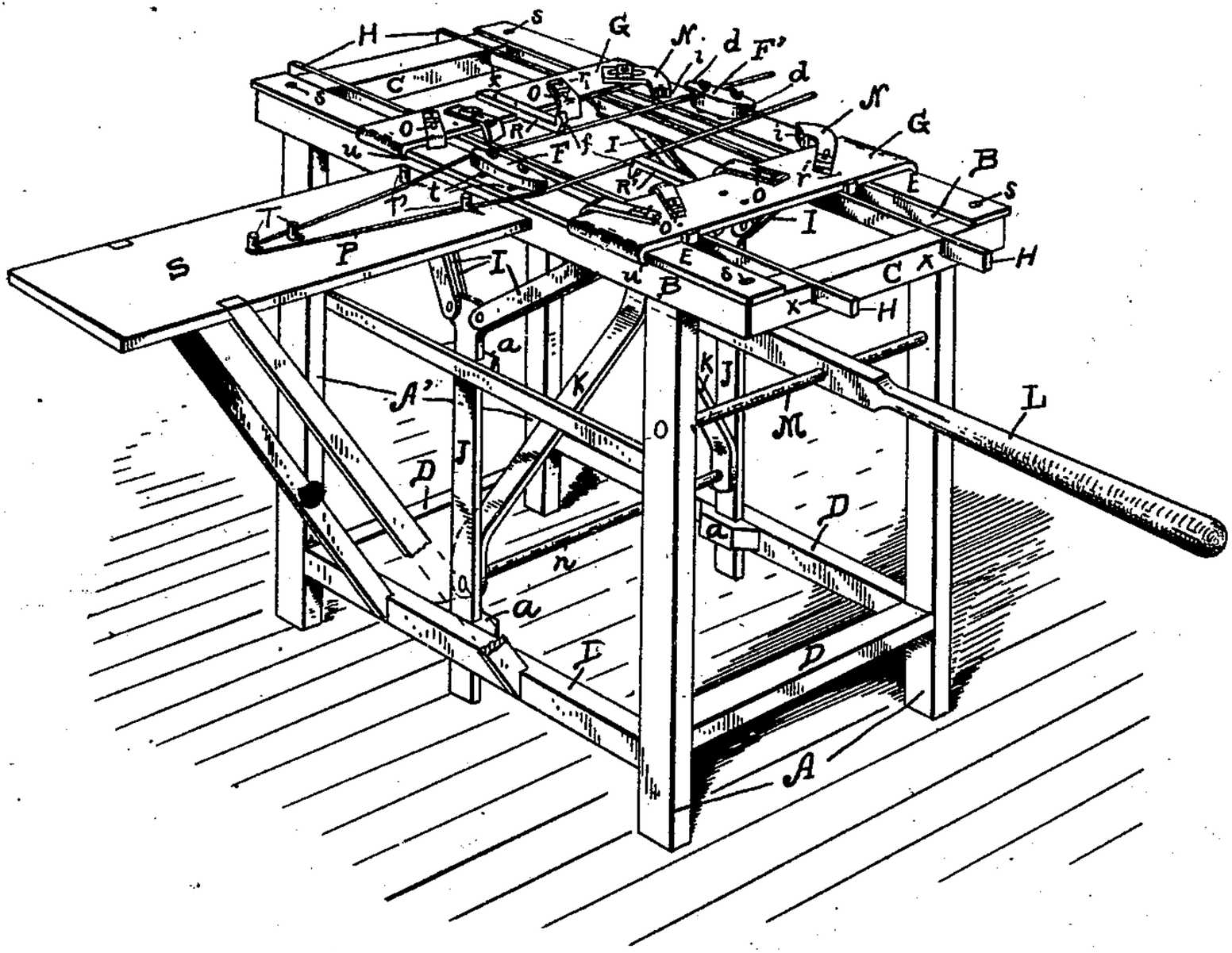


Fig. 2.

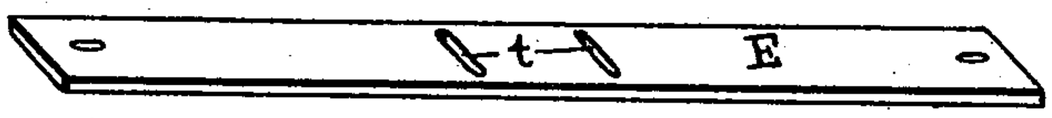


Fig. 3.

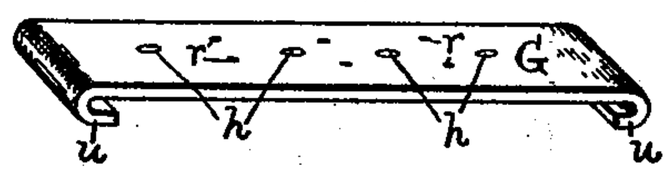


Fig. 4.

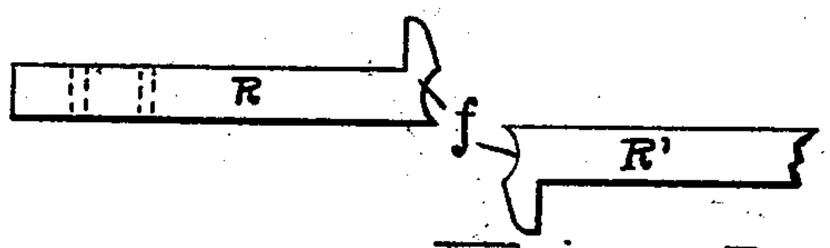


Fig. 5.

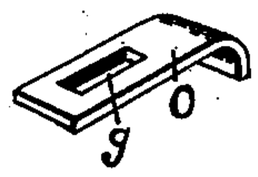


Fig. 6.

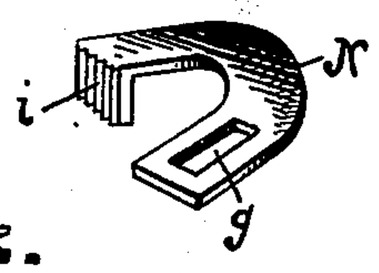


Fig. 7.

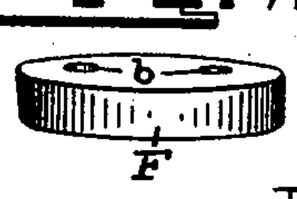


Fig. 8.

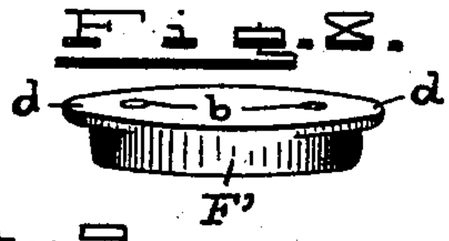
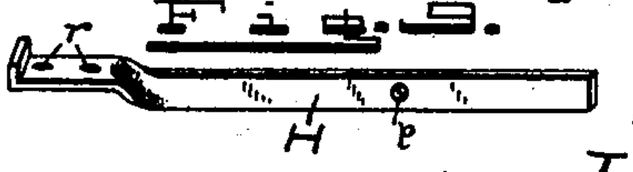


Fig. 9.



Witnesses:

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H. S. Barnes.

Inventor.

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By Heber S. Paramore.

ATTORNEY.

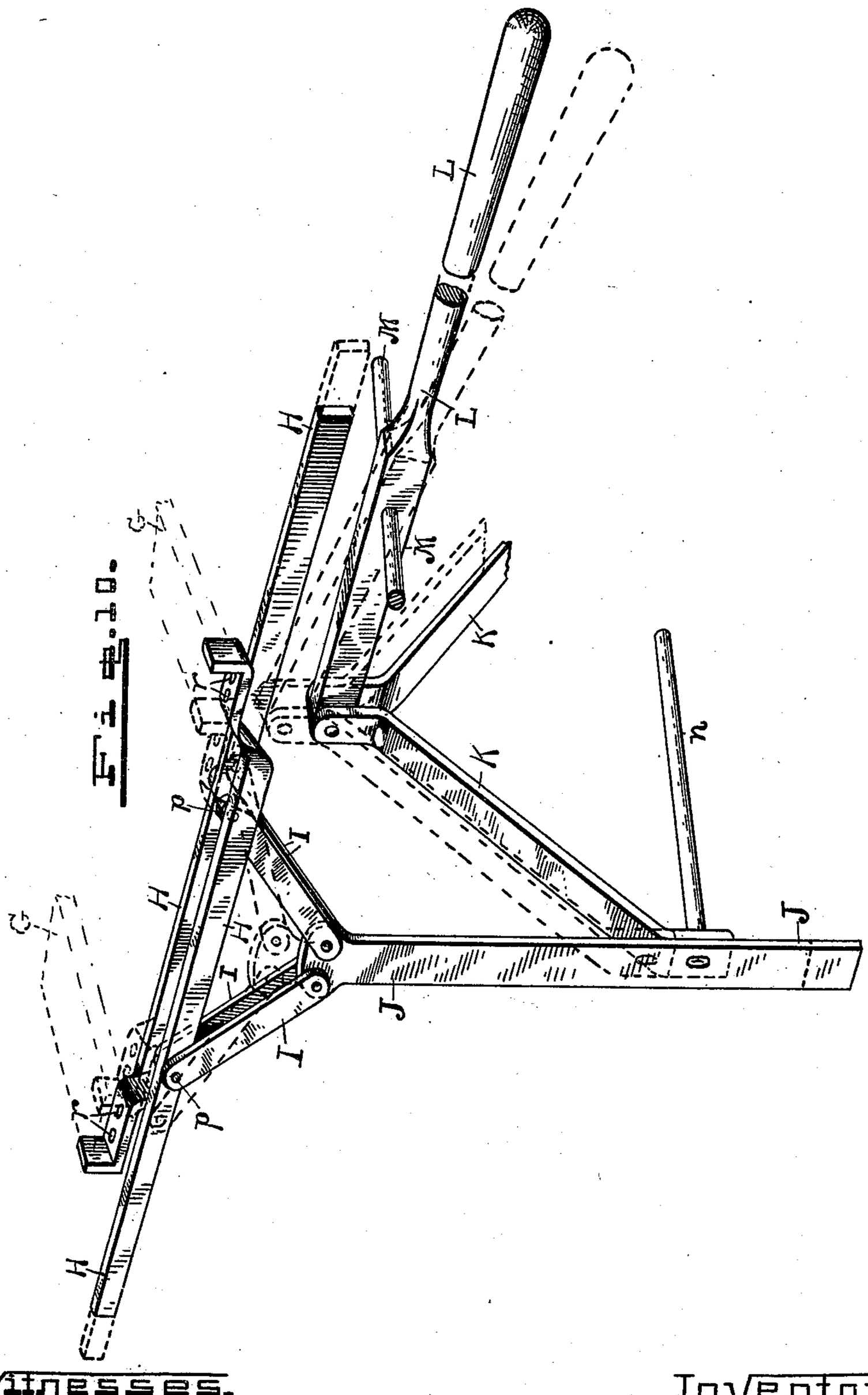
(No Model.)

2 Sheets—Sheet 2.

J. W. DWIGGINS.

WIRE PICKET CRIMPER.

No. 549,113. Patented Nov. 5, 1895.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN W. DWIGGINS, OF FRANKTON, INDIANA, ASSIGNOR OF TWO-THIRDS TO LEROY URMSTON AND JOHN D. GOODING, OF SAME PLACE.

WIRE-PICKET CRIMPER.

SPECIFICATION forming part of Letters Patent No. 549,113, dated November 5, 1895.

Application filed February 15, 1895. Serial No. 538,475. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. DWIGGINS, a citizen of the United States, residing at Frankton, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Wire-Picket Crimpers, of which the following is a specification.

My invention relates to improvements in wire-picket crimpers of that class wherein the crimping or forming mechanism is adapted to be actuated by means of a lever for the purpose of giving the desired conformation to a wire-fence picket; and the objects of my improvements are, first, to provide a machine whereby wire-fence pickets may be crimped quickly and uniformly at one stroke of the lever; second, to provide a means whereby the distance between the bends or crimps may be changed, and, third, a means for holding or retaining the picket in place during the operation. I attain these objects by means of the mechanism and devices illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the machine. Fig. 2 is a perspective view of one of the guide-plates. Fig. 3 is a perspective view of one of the slide-bars. Fig. 4 is a side view of the fingers. Figs. 5 and 6 are perspective views of the two kinds of adjustable formers. Figs. 7 and 8 are perspective views of the adjustable gages. Fig. 9 is a perspective view of one of the slide-arms. Fig. 10 is a perspective view showing the manner of connecting the operating parts, one side being shown.

Similar letters refer to similar parts throughout the several views.

The corner posts A and A′, the side pieces B, the end pieces C, and the lower braces D constitute the framework of the machine. Guide-plates E rest upon the side pieces B, and are attached thereto by means of screws *s*. Near the center of the guide-plates E are the slots *t*, through which the bolts securing the gages F and F′ are adapted to pass. The outer edges of the guide-plates E extend slightly beyond the side pieces B to allow the ends *u* of the side bars G to slide under the edges of said guide-plates. Slide-arms H—four in number—are riveted to the slide-bars at *r* and are pivotally connected to the levers I, by which they are moved, at *p*. The lower ends of the levers I are pivotally connected with the upper ends of the lifts J, which slide perpendicularly within the guides *a*. A rod *n* connects the lower ends of the lifts J just above the lower guides *a′* and passes loosely through the lower ends of the lifting-levers K. The upper ends of said levers K are pivotally connected with the end of the hand-lever L, which is supported by the journal M, extending between the corner posts A.

The end pieces C of the frame have the notches *x* cut in their upper faces, wherein the ends of the slide-arms H are adapted to slide when the machine is in operation. The slide-bars G are provided with the openings *h*, through which the bolts securing the formers N and O are passed for the purpose of securing them to the slide-bars. The formers N and O are provided with slots *g*, through which the bolts pass and whereby the formers may be adjusted laterally. The formers N are curved for the purpose of bringing the notched ends behind the gage F′ when the slide-bars are brought together. The object of the notches *i* on the formers N is to prevent the ends of the picket from slipping when pressure is being applied, and the projecting lugs *d* on the gage F′ prevent the ends of the picket from slipping above the gage when the formers N come in contact with it. The gages F and F′ are secured to the guide-plates by bolts passing through the openings *b* and through the slots *t* in the guide-plates. The fingers R and R′ are riveted to the slide-bars, R being fastened to the upper side of one of the slide-bars and R′ being fastened to the lower side of the other slide-bar for the purpose of allowing them to pass each other when the slide-bars are brought together. The ends of the fingers are provided with the depressions *f*, which receive and hold the picket, and as they pass each other cause the wires forming the picket to cross.

An extension leaf or table S is arranged at the side of the main frame and is suitably attached thereto for the purpose of forming a retaining device and support for the top of the picket while being formed or crimped. Pins T and T′ are inserted in the table S in a suitable manner.

Fig. 1 shows the machine ready for opera-

tion. The picket P, which may be a single piece of wire or braided or twisted wires, is cut to the desired length and bent in the middle until it is nearly double. In this condition it is ready for the machine and is placed in the position shown in Fig. 1.

It will be seen that the top of the picket is placed over one of the pins T, according to the length desired, between the pins T′, along the outer ends of the gage F, within the depressions *f* in the ends of the fingers R and R′, and along the outer ends and under the lugs *d* of the gage F′. A downward pressure on the hand-lever L causes the levers K to raise the lifts J. They in turn act upon the slide-arms H at the opening *p*, cause said slide-arms to move in opposite directions and at the same time to draw the slide-bars B, riveted to the ends of the slide-arms, nearer together. This causes the formers N and O to engage the picket at the desired points and produce the crimps or bends for which the formers are set.

It will be readily understood that a great variety of forms of pickets may be produced by adjusting the gages F and F′ in the slots *t* of the guide-plates and by adjusting the formers by means of the slots *g* cut therein. The formers N and O are adapted to press the picket on either side of the gages and fingers, so as to produce a sharply-defined bend at the desired point. When the hand-lever L is raised, the slide-bars move apart on the guide-plates and the picket is removed while the machine is ready to receive another, when the operation may be repeated.

Having described my improvements, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a wire picket crimper, the combination of guide-plates E, having slots *t*, the slide-bars G, having the adjustable formers N and O, and the fingers R and R′, with the slide-arms H, the levers I, the lifts J, the levers K, and the hand-lever L, substantially as shown and described.

2. The combination in a wire picket crimper of the framework consisting of the corner posts A and A′, the side pieces B, the end pieces C, and the lower braces D, with the operating mechanism consisting of the levers L and K, the lifts J, the levers I, the slide-arms H, the slide-bars G, the guide-plates B, the fingers R and R′, the formers N and O, and the gages F and F′, substantially as shown and described.

3. In a wire picket crimper having the operating devices consisting of levers L and K, lifts J, levers I, slide-arms H, and slide-bars G, the combination of the plain formers O, and the curved formers N, having the notches *i*, with the plain gage F, the gage F′, having the lugs *d*, and the fingers R and R′, all substantially as shown and described.

4. The combination in a wire picket crimper having a frame and means for operating wire crimping devices, of the slide-bars G, carrying the formers N and O, and the fingers R and R′, with the gages F and F′, substantially as set forth.

5. In a wire picket crimper, the combination of the adjustable formers N and O, and the adjustable gages F and F′ with the slide-bars G, the guide-plates E, the slide-arms H, and the operating levers I, J, K and L, all substantially as set forth.

6. The combination in a wire picket crimper, of the slide-bars G, having the bent ends *u*, and provided with the plain formers O, and the curved formers N, adjustable thereon, and the fingers R and R′, having the depressions *f*, riveted thereto; the guide-plates E, having the adjustable gages F and F′; the table S, having the picket retaining pins T and T′; the slide-arms H; the levers I; the lifts J; the guides *o;* the lifting levers K, and the hand-lever L, with the frame, consisting of the corner posts A and A′, the side pieces B, the end pieces C, and the lower braces D, all substantially as set forth.

In witness whereof I have hereunto set my hand, in the presence of two witnesses, at Frankton, Indiana, this 2d day of February, 1895.

JOHN W. DWIGGINS.

Witnesses:
J. E. KNIGHT,
H. M. KELTNER.