

J. K. PRIEST & W. EARLE, Jr.  
BELT LACER.

No. 81,537.

Patented Aug. 25, 1868.

Fig. 1.

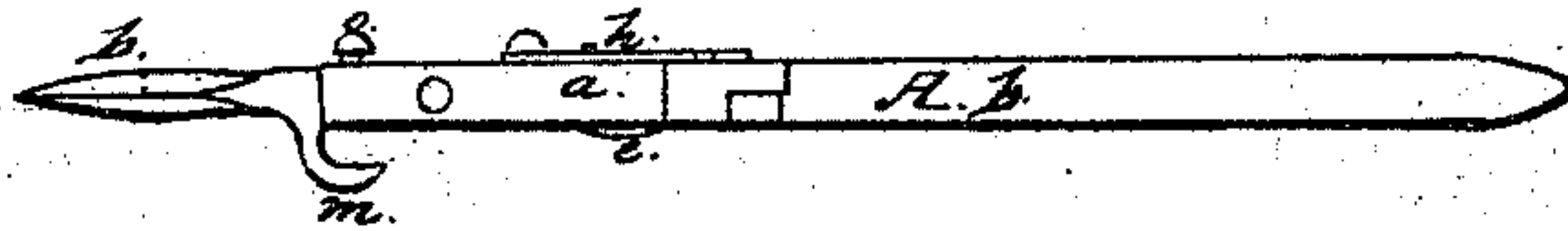


Fig. 2.

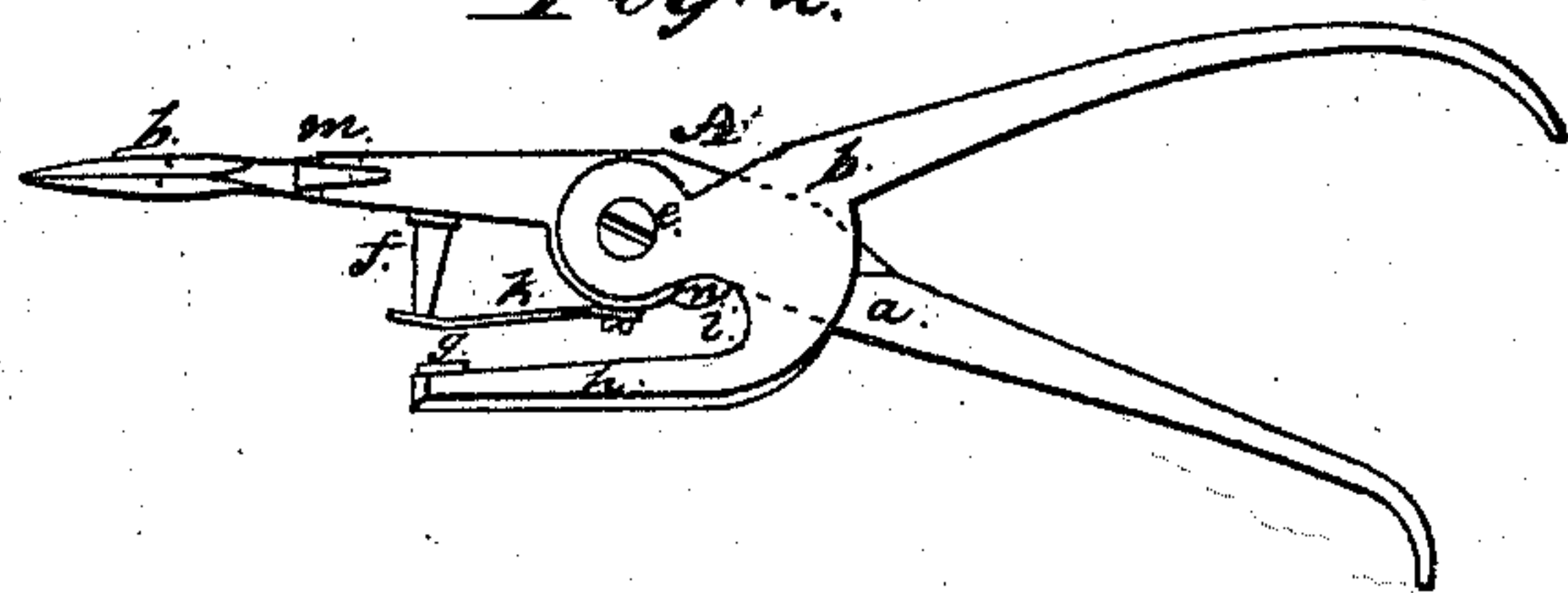


Fig. 3.

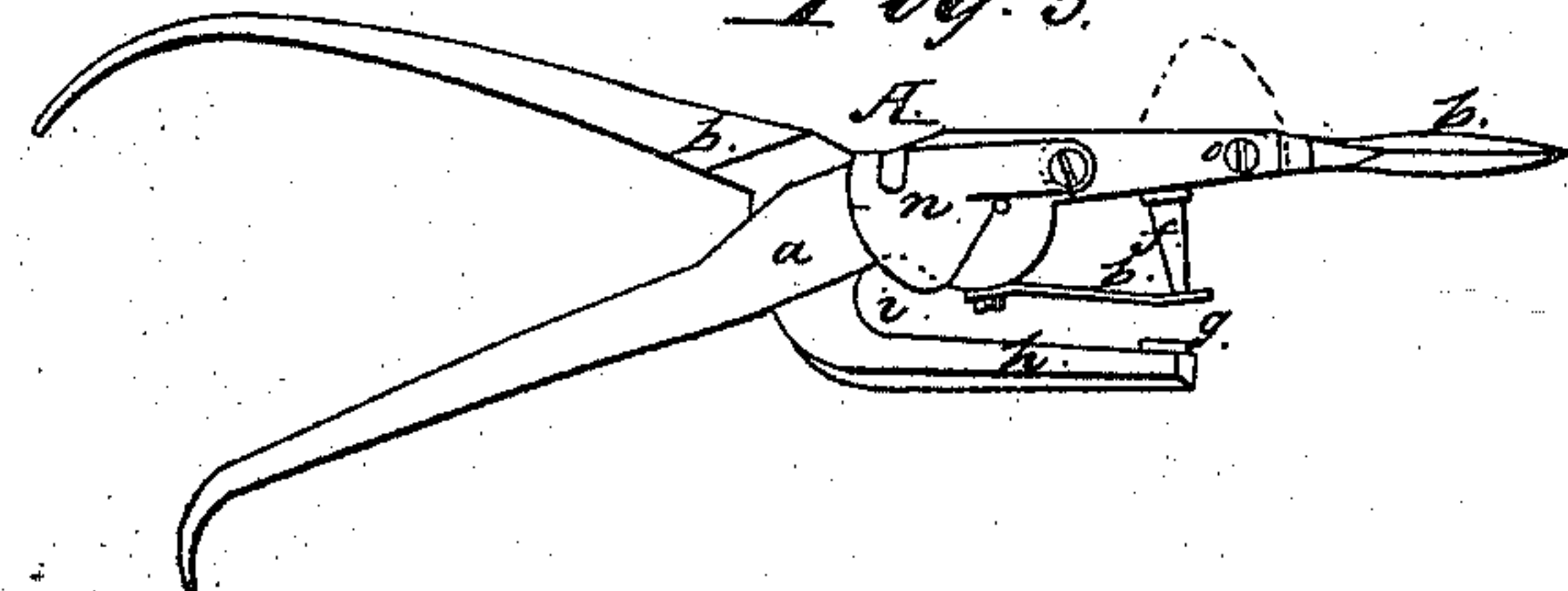


Fig. 4.

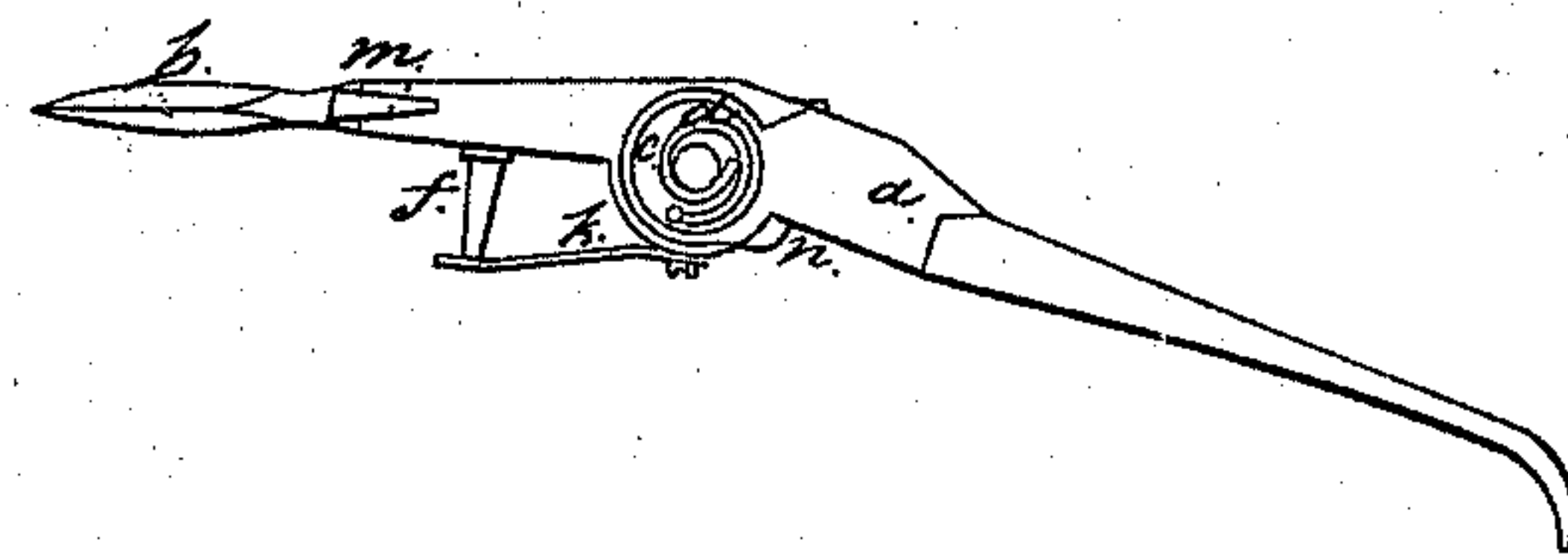
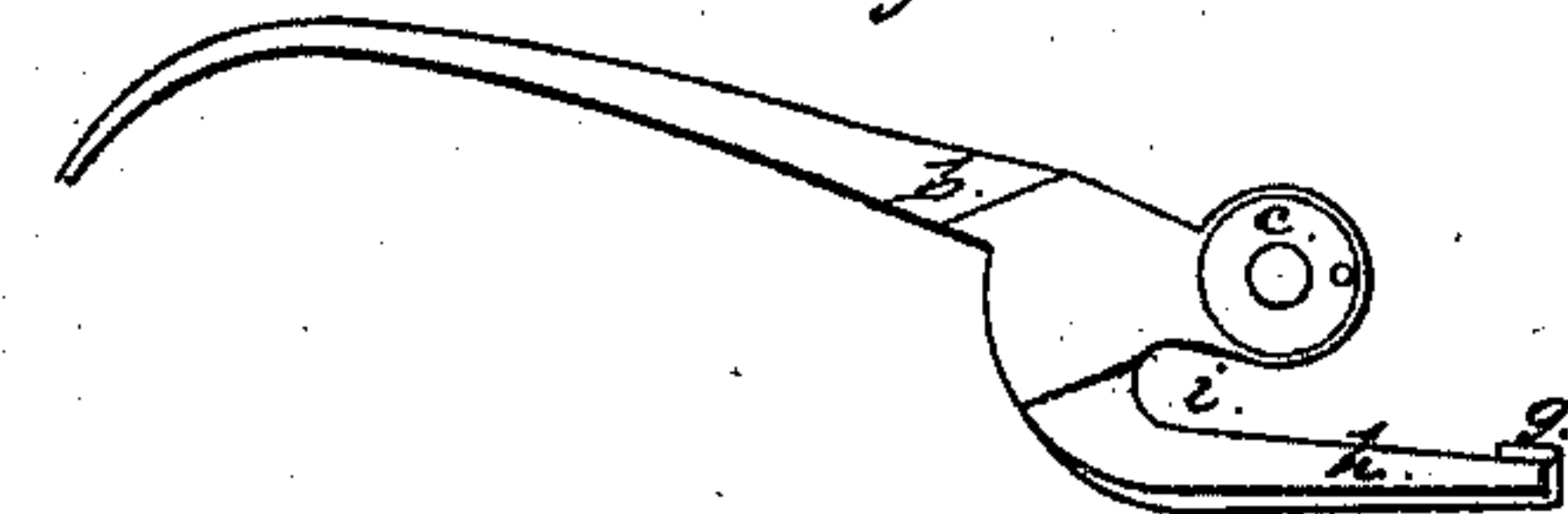


Fig. 5.



Witnesses;

S. N. Piper,  
J. R. Snow.

Inventor,

J. K. Priest & W. Earle Jr.

by their attorney,  
R. H. Eddy.

# United States Patent Office.

JOSEPH K. PRIEST AND WILLIAM EARE, JR., OF NASHUA, NEW HAMPSHIRE.

*Letters Patent No. 81,537, dated August 25, 1868.*

## IMPROVEMENT IN BELT-LACERS.

*The Schedule referred to in these Letters Patent and making part of the same.*

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that we, JOSEPH K. PRIEST and WILLIAM EARL, Jr., of Nashua, in the county of Hillsborough, and State of New Hampshire, have invented a new and useful Implement or Belt-Lacer, to be used in joining or lacing together the ends of machine-banding; and we do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, and

Figures 2 and 3 are side elevations of it.

The said implement is for facilitating the operations of joining the two end parts of a belt by a lacing run through holes made in them.

In the drawings, A denotes what is termed a crossed-lever punch, it being composed in part of two levers, *a b*, inner side views of which are exhibited in Figures 4 and 5. At their joint the two levers are chambered, as shown at *c*, to receive a spiral spring, *d*, which is placed in the chamber, and has its ends inserted in holes made in the two levers; that is, one end goes into a hole in one lever and the other into a hole in the other lever. The two levers are connected at their joint by a fulcrum-screw, *e*, which passes through one lever and the spring and screws into the other lever. The spring is for opening or moving the levers apart.

From the shorter arm of the lever *a*, a tubular punch, *f*, projects in manner as represented, and operates with a bed or anvil, *g*, extended from the shorter arm, *h*, of the other lever, *b*, and instead of extending the said arm *h* directly from the joint of the two levers, as is the custom in common crossed-lever punches, we project the said arm from its fellow longer arm and back of the joint, so as to extend underneath of and below it, and form a space or recess, *i*, below and in rear of it, as shown in the drawings, the same enabling a belt, when between the punch and bed, to extend back of the joint, thereby rendering the implement adaptable to wider belts than it would be were the arm *h* to extend from the joint.

There is pivoted to the lever *a*, at the joint, a movable jaw, *k*, so as to be capable of being turned around directly underneath and against the cutting-end of the punch *f*, as well as away therefrom, in order to operate with the anvil as jaws of pincers, to enable a person to seize, with the implement or belt-lacer, a lacing in order to draw it into place.

There also springs from the shorter arm of the lever *a* an awl or piercer, *t*, and a hook, *m*, they being arranged as represented. The piercer has the hook projected from it, and is provided with a tenon to enter a mortise in the arm *a*, a clamp-screw, *o*, inserted in the arm, serving, by pressure on the tenon, to hold the piercer in place. A knife, *n*, formed as shown in the drawings, is also pivoted to one side of the lever *a*, so as to be capable of being turned from the position shown in black lines to that exhibited by dotted lines, (see fig. 3.)

The said knife, piercer, and hook, will be found to be very convenient for use during the operations of removing an old lacing and substituting a new one.

We make no claim to a crossed-lever punch as usually made, nor do we claim the belt-lacer as described in the United States patent, No. 22,744, our belt-lacer differing in many particulars therefrom, especially such as we have hereinafter mentioned in our claims; but, in the above-described implement or belt-lacer—

We claim, as our invention, the following:

The combination of the movable jaw *k* with the crossed-lever punch A.

Also, the combination and arrangement of the hook *m* with the crossed-lever punch A.

Also, the arrangement of the hook so as to extend from the piercer.

Also, the combination and arrangement of the rotary knife *n* with the crossed-lever punch.

JOSEPH K. PRIEST,  
WM. EARL, JR.

Witnesses:

E. P. EMENSON,  
EDWARD PARKER.