

H. KNICKMANN.
 Tool for Removing Pintle from Hinge-Joint
 No. 206,580. Patented July 30, 1878

Fig. 1.

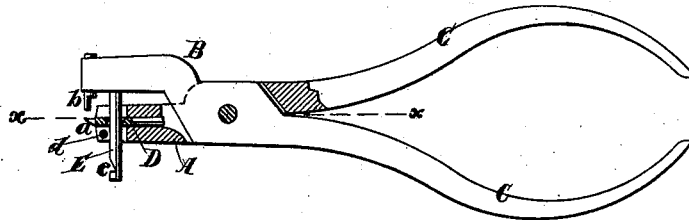


Fig. 2.

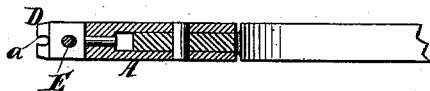
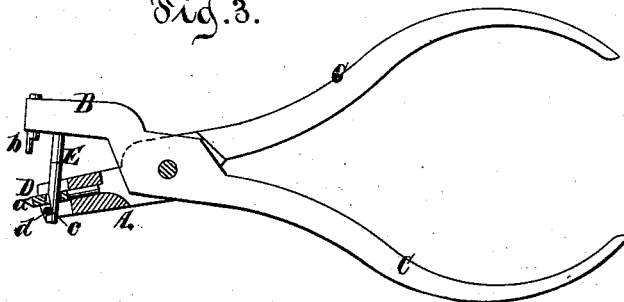


Fig. 3.



Witnesses
 Chas. Wahlers.

W. C. Hauff

Inventor.
 Henry Knickmann
 by his attys
 Van Santvoord & Hauff

UNITED STATES PATENT OFFICE.

HENRY KNICKMANN, OF EAST NEW YORK, N. Y.

IMPROVEMENT IN TOOLS FOR REMOVING PINTLES FROM HINGE-JOINTS.

Specification forming part of Letters Patent No. **206,580**, dated July 30, 1878; application filed July 5, 1878.

To all whom it may concern:

Be it known that I, HENRY KNICKMANN, of East New York, Kings county, and State of New York, have invented a new and useful Improvement in Tools for Removing Pintles from Hinge-Joints, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a side view of my tool, partly in section, showing the positions of the parts when the jaws are closed. Fig. 2 is a longitudinal section thereof in the plane *x x*, Fig. 1. Fig. 3 is a side view of the same, partly in section, when the jaws are opened.

Similar letters indicate corresponding parts.

My invention relates to that class of tools for which Letters Patent of the United States were granted to me May 7, 1878, No. 203,466.

It consists in arranging the notched base-plate of the tool to slide on its jaw and providing the other jaw, carrying the ejecting finger or fingers, with a rod which passes through a hole in the base-plate, so that when the jaws are opened or closed the base-plate is slid forward or backward by the action of the rod, and by this means the notches in said plate are brought opposite to the ejecting finger or fingers in any position of the jaws, whereby the operation of the tool is improved.

In the drawing, the letters A B designate the two jaws of my tool, these jaws being pivoted together, and each being provided with a handle, C. On the jaw A is arranged the base-plate D, in the front edge of which is formed a notch, *a*, while to the front part of the jaw B is secured a finger, *b*, which serves to eject the pintles from the hinge-joint to be acted on through the notch *a*.

In the example shown a single notch and ejecting-finger is used; but it is obvious that a greater number can be used, and also that a hole or perforation may be substituted for the notch.

The base-plate D is arranged in suitable ways on the jaw A, so that it is susceptible of sliding lengthwise on such jaw, and it is provided with a hole through which passes a rod, E, projecting from the jaw B in the direction of the jaw A. The rod E serves to control the position of the base-plate D; and when the jaws A B are closed the said plate is moved inward, as shown in Fig. 1, while, when the jaws are opened, the plate is moved outward, as shown in Fig. 3. The effect of this movement is that the notch *a* is held opposite to the finger *b* in any position of the jaws; or, in other words, the notch and finger are always in a corresponding plane to each other relatively to the axis of the jaws. I thus obtain a good support for the hinge-joint in the operation of removing the pintle therefrom, and render my tool available for joints of large size.

In order to prevent the complete withdrawal of the rod E, I form therein a ledge, *e*, and provide the jaw B with a cross-bar, *d*, against which this ledge strikes when the jaws are opened, as clearly shown in Fig. 3; but this can also be accomplished in other ways.

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

The combination, in a tool for removing pintles from hinge-joints, of two pivoted jaws, one provided with a sliding base-plate, D, having one or more notches or their equivalent, and the other provided with a rod, E, passing through a hole in said base-plate and provided with one or more ejecting-fingers, all adapted to operate substantially in the manner set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 25th day of June, 1878.

HENRY KNICKMANN. [L. s.]

Witnesses:

J. H. WAHLER,
E. F. KASTENHUBER.