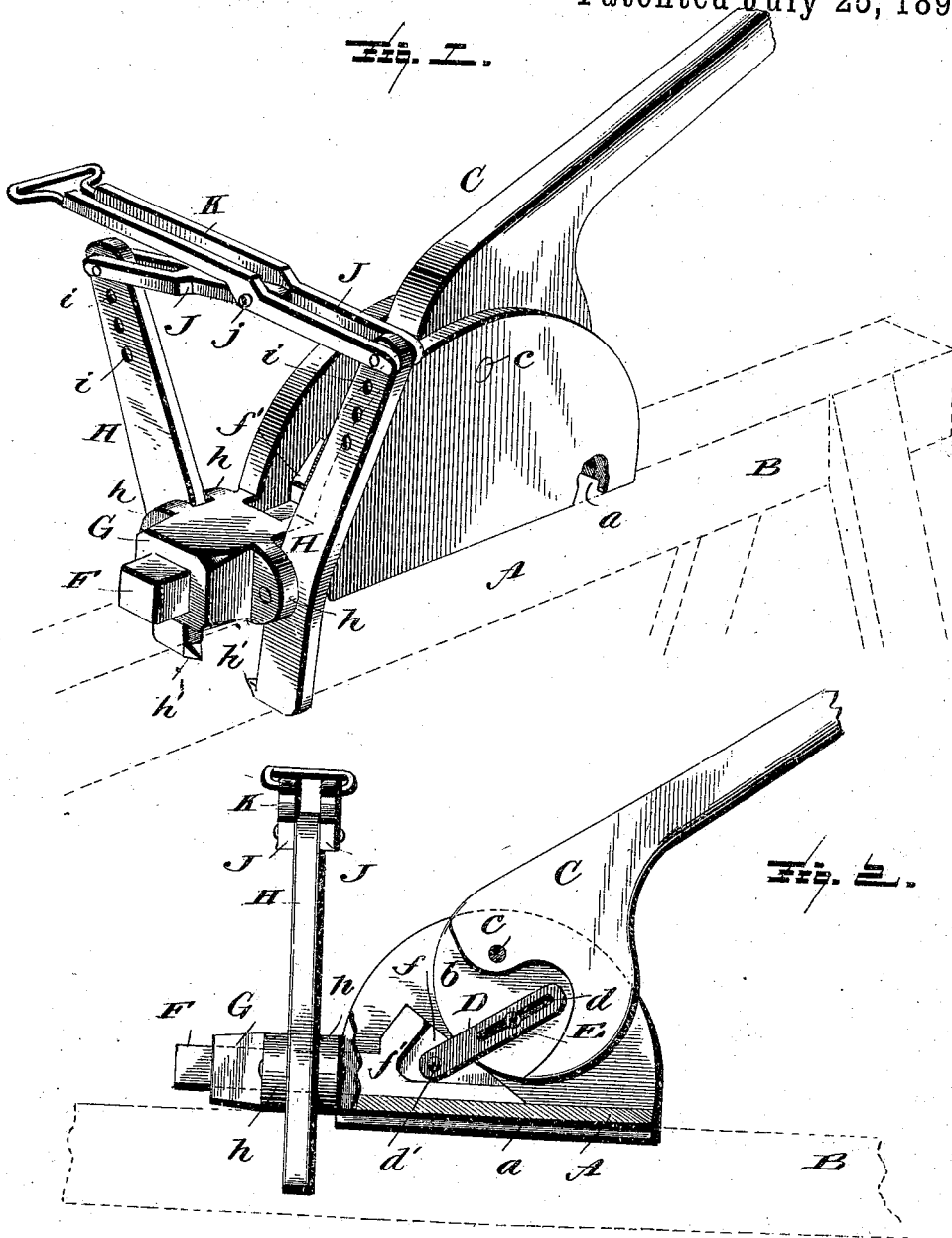


(No Model.)

J. F. HARVEY.
CLAMP.

No. 501,936.

Patented July 25, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES FRANKLIN HARVEY, OF GREENBRIER, ARKANSAS.

CLAMP.

SPECIFICATION forming part of Letters Patent No. 501,936, dated July 25, 1893.

Application filed April 6, 1892. Serial No. 427,989. (No model.)

To all whom it may concern:

Be it known that I, JAMES FRANKLIN HARVEY, a citizen of the United States, residing at Greenbrier, in the county of Faulkner and State of Arkansas, have invented certain new and useful Improvements in Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in clamps designed primarily for use by cabinet makers and carpenters but applicable to any and all uses to which it may be put. It has for its objects among others to provide a simple and cheap clamp which can be actuated with ease and more quickly than the old-fashioned screw clamp. The novelty consists in the peculiar combinations, and the construction, arrangement and adaptation of parts, all as more fully hereinafter described, shown in the drawings and then particularly pointed out in the claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of my improved clamp in position for use, with a portion broken away. Fig. 2 is a side view with the bed piece in section.

Like letters of reference indicate like parts in both views.

Referring now to the details of the drawings by letter, A designates a bed-plate or piece having a longitudinal groove forming ears between which the lever is pivoted, and its under face is formed with a longitudinal groove *a* to embrace the top piece of a trestle B or other support.

C is the lever pivoted at *c* on a pivot held in the ears of the bed piece and between which ears the lever works. The lever has a cam head as seen in Fig. 2 and this head is formed with a recess *b* the inner wall of which is upon a compound curve as seen in Fig. 2 to permit the necessary movement of the bar or link D which is provided with a longitudinal slot *d* in which works a pin or screw E held in the recess of the cam-head of the lever and its

other end is pivotally connected as at *d'* in the recess *f* of the head *f'* of the clamping pin or bar F. This pin or bar F is designed to slide loosely between the front portion of the ears of the bed plate and through a socket G upon the front of the said bed plate as seen best in Fig. 1. The cam head of the lever works on the inclined face of the head of the pin or bar as seen in Fig. 2. The socket G of the bed plate is formed with ears *h* upon each side and between these ears are pivoted the clamping arms H the shorter portions of which extend below the pivots and are provided with prongs *h'* as seen in Fig. 1. Their upper portions are provided with a plurality of holes *i* to permit of changing of the leverage and removably pivoted in any of these holes are the arms J which are pivotally connected together as at *j* and one set extended to form a handle K by which they may be operated.

The operation is as follows:—The bed plate is slid upon the trestle or other support and the handle K is placed in the position in which it is shown in Fig. 1 which forces the lower ends of the clamping arms H together and forces their prongs into the sides of the trestle and holds the device thereto as seen in Fig. 1. When the arms J are straightened they will hold the clamping arms in their closed position. The work to be clamped is placed in position, being held at the other side in any suitable manner, and when ready the lever is thrown down and by reason of the engagement of its cam head with the head of the pin the latter will be forced outward and force the work tightly where it may be held as long as desired. A reverse movement of the lever draws the pin inward by reason of the connection thereof with the lever by the link.

The device is simple, cheap of manufacture and in practice has proved most efficient for the purposes for which it is intended.

What I claim as new is—

The combination of the bed plate having the longitudinal groove *a* and upwardly extending separated ears, a socket piece formed with said bed plate having outwardly extending ears, a sliding bar having a stem mounted in the socket piece and having its inner head located between the ears of the bed plate and

provided with an inclined surface, a lever piv-
otally held between the ears of the bed plate
and provided with a cam head, a link con-
necting said head with the slide bar, the arms
5 H pivoted in the ears of the socket piece and
provided at one end with points and at the
other end with a series of holes, and the arms J
pivotally connected at their outer ends with

the arms H and at their inner portions with
each other, substantially as herein described. 10

In testimony whereof I affix my signature in
presence of two witnesses.

JAMES FRANKLIN HARVEY.

Witnesses:

HIRAM S. MILLIS,

W. M. LYON.