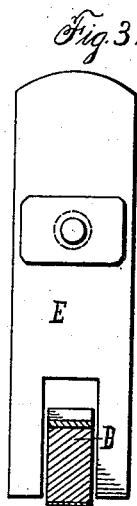
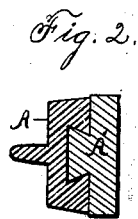
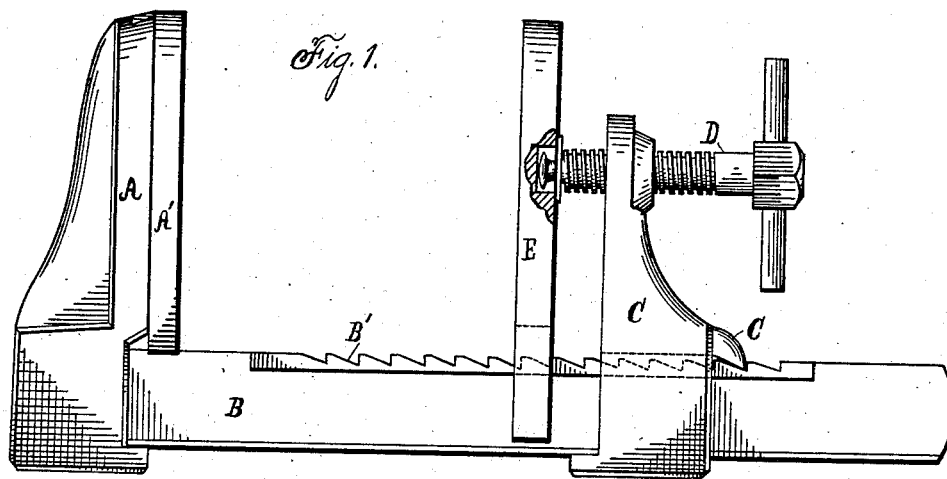


(No Model.)

W. H. CLOUD.  
CLAMP.

No. 267,152.

Patented Nov. 7, 1882.



WITNESSES

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# UNITED STATES PATENT OFFICE.

WILLIAM H. CLOUD, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO  
JAMES V. CAMPBELL, JR., OF SAME PLACE.

## CLAMP.

SPECIFICATION forming part of Letters Patent No. 267,152, dated November 7, 1882.

Application filed July 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. CLOUD, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Hand-Clamps; and I declare the following to be a full, clear, and exact description thereof, such as will enable others skilled in the art to which my invention pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists in the combinations of devices and appliances hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a hand-clamp embodying my invention. Fig. 2 is a cross-section by a horizontal plane passed through the stationary jaw; Fig. 3, a cross-section by a vertical plane passed through just back of the loose bearing-plate.

It is the object of my invention to produce a hand-clamp of simple construction which can be brought quickly against the object to be clamped and adapted to engage the said object, although it may present an inclined face to the movable jaw.

A is a stationary head, of metal.

A' is a removable face-block, of wood, dovetailed or otherwise secured to the stationary jaw.

B is a guide-bar projecting out at right angles to the stationary jaw. It may be made of metal, solid with the stationary jaw A, or may be secured to the said jaw, and be formed of wood with metallic facings and a metallic ratchet-bar upon its upper edge.

B' is the ratchet-edge.

C is a sliding jaw embracing the right-angular arm B, as shown, and provided with a stationary pawl, C', which engages the ratchet B'.

D is a clamp-screw tapped through the movable jaw, and at its extremity swiveled, as shown, into a loose bearing-plate, E. The bearing-plate E is forked at its lower end, as shown in Fig. 3, so as to straddle loosely the right-angular guide-bar B. This prevents it from rotating with the screw, while it is free to oscillate vertically and laterally to conform to any peculiar configuration of the article clamped.

The pawl C' may or may not be formed rigid

with the movable jaw C; but if formed rigid therewith, which is the preferable method, as shown, the orifice through the jaw should be sufficiently large to permit of a disengagement of the pawl from the ratchet by tilting the jaw forward.

The operation of the device is apparent from the drawings, and is as follows: The device to be clamped is placed between the stationary jaw and the loose bearing-plate E. The movable jaw is then slid forward over the ratchets until the bearing-plate presses against the interposed article. The clamp-screw is then run in, which forces the bearing-plate against the article, and the bearing-plate yields to conform to the article.

I am aware that hand-clamps have been made with two stationary jaws, with a clamp-screw tapped through one of the jaws and provided with a swiveled bearing at its end; but that bearing has not been made of large dimensions, as shown in my drawings, and with means for preventing its rotation with the screw, and consequent marring of the surface of the article clamped.

I am also aware that it is not new to cause one clamp to move forward over a ratchet until it comes in contact with the article clamped. I do not therefore claim broadly either of these constructions; but

What I do claim is—

1. A hand-clamp consisting of a stationary jaw with a ratcheted guide-arm extending at right angles therefrom, a sliding jaw embracing said ratchet-arm and provided with a pawl adapted to engage the ratchet, and a clamp-screw tapped through the sliding jaw and provided at its end with a loose bearing-plate swiveled therewith, substantially as described.

2. The combination, with the stationary jaw and right-angular ratchet guide-arm, the sliding jaw, and clamp-screw, of a loose bearing-plate swiveled at the end of the screw and loosely engaged at its lower end over the guide-bar, whereby rotary motion is prevented, substantially as described.

WILLIAM H. CLOUD.

Witnesses:

CHARLES F. BURTON,

CHARLES H. CAMPBELL.