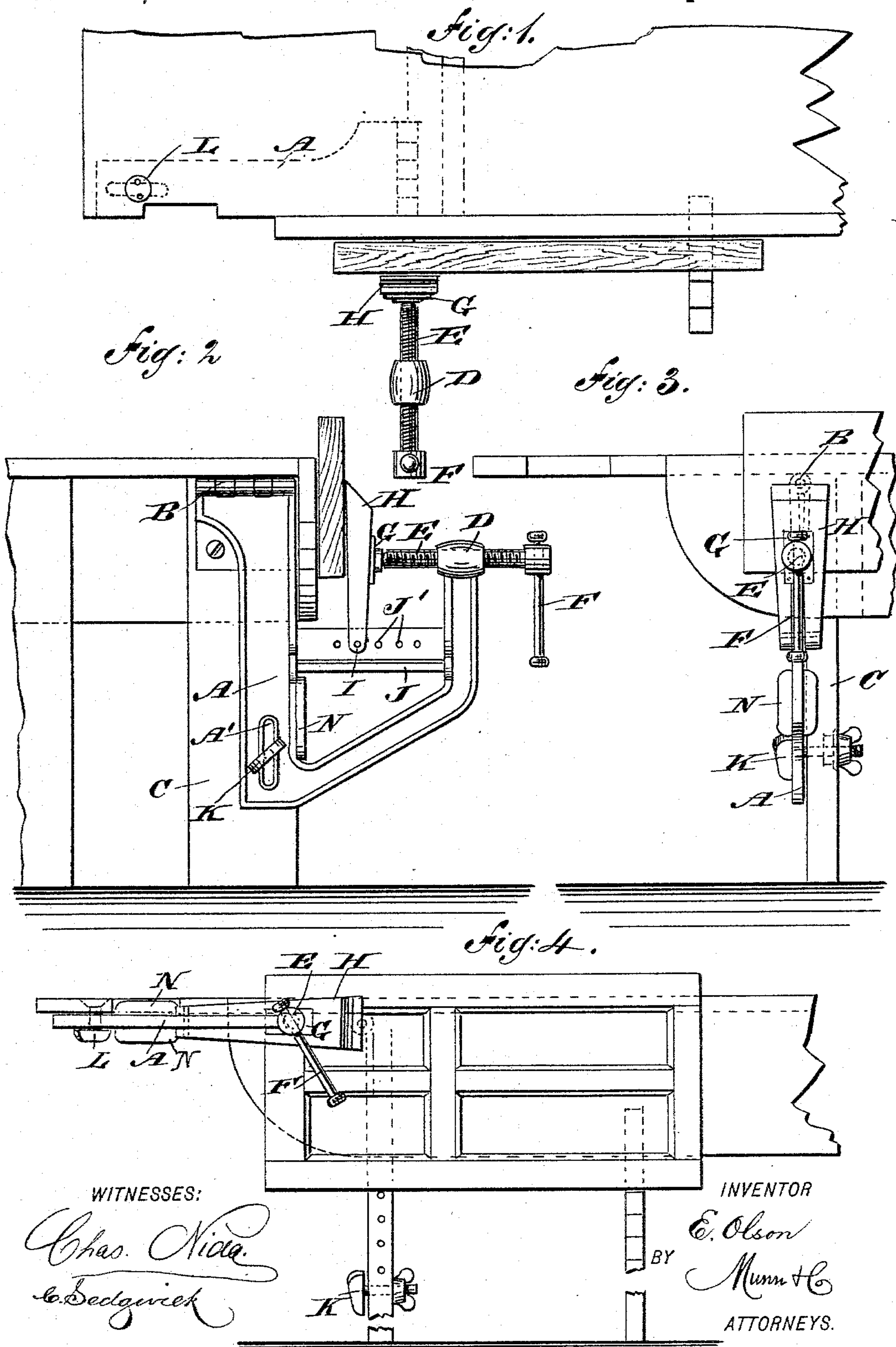


(No Model.)

E. OLSON.  
BENCH CLAMP.

No. 494,882.

Patented Apr. 4, 1893.





# UNITED STATES PATENT OFFICE.

ERIK OLSON, OF NEIHART, MONTANA.

## BENCH-CLAMP.

SPECIFICATION forming part of Letters Patent No. 494,882, dated April 4, 1893.

Application filed August 10, 1892. Serial No. 442,657. (No model.)

*To all whom it may concern:*

Be it known that I, ERIK OLSON, of Neihart, in the county of Meagher and State of Montana, have invented a new and Improved Bench-Clamp, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved bench clamp, which is simple and durable in construction, very effective in operation, and arranged to be readily moved into the desired position for conveniently clamping the article in place on the front of the bench.

The invention consists of certain parts and details, and combinations of the same, as will be hereinafter described and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement. Fig. 2 is a side elevation of the same. Fig. 3 is a front view of the same; and Fig. 4 is a similar view of the same, but in a different position.

The improved bench clamp is provided with a frame A, approximately made U-shape, as shown in Fig. 2, one end being provided with a hinge B, for attaching the frame to a post C, held under the work-table of the bench, and preferably forming part of the same. On the outer end of the frame A is formed a nut D, in which screws the transversely-extending screw E, provided at its outer end with a suitable handle F, for conveniently screwing the screw E inward or outward for clamping the article in place, as hereinafter more fully described.

The inner end of the screw E is adapted to abut against a metallic plate G, secured on an arm H, adapted to clamp the article in place against the side of the bench. This clamping arm H has a pivot I, adapted to engage one of the apertures J' formed in a transversely-extending arm J, connecting the ends of the frame A with each other. By moving the pivot I farther inward, smaller objects can be conveniently clamped by the clamping arm H, and by moving the pivot farther outward large objects may be clamped.

By thus adjusting the pivot I of the clamping arm H, the clamping face of the said arm can always be brought in proper position for properly engaging the article to be clamped.

In order to hold the frame A in position on the post C, I provide a clamping bolt K, engaging the said post and passing with its head through a slot A', arranged vertically in the rear arm of the frame A, as will be readily understood by reference to Figs. 2 and 3. When the bolt is in place it is slightly turned so that the head of the bolt extends across the slot as shown in Fig. 2.

In order to hold the frame A in a horizontal position as shown in Fig. 4, a similar clamping bolt L, is provided, passing through the slot A' and engaging a projecting end of the bench table, so as to lock the frame A in place. On the rear arm and at each side of the frame A is formed a lug N, adapted to engage a recess in the front edge of the bench table at the time the frame is swung into a horizontal position, as shown in Fig. 4, so as to prevent lateral displacement of the frame.

It will be seen that the object can be readily clamped, no matter in what position the frame A is, and the latter can be conveniently swung into a horizontal or vertical position, according to the size of the object under treatment.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A bench clamp comprising the approximately U-shaped frame having a hinge joint at the upper end of its inner arm to permit the frame to be swung vertically into a horizontal position and a clamping screw extending transversely through the upper end of the outer frame arm, substantially as set forth.

2. A bench clamp comprising the approximately U-shaped frame, having a hinge joint at the upper end of its inner arm to permit the frame to be swung vertically into a horizontal position, a pivoted clamping arm mounted in the frame and a screw extending through the outer member of the frame into engagement with said arm, substantially as set forth.

3. A bench clamp comprising the approximately U-shaped frame provided with an ap-

ertured cross bar and having a hinged joint  
at the upper end of its inner arm to permit  
the frame to be swung from a vertical to a  
horizontal position, means for preventing the  
5 frame from swinging, a clamping arm pivot-  
ally connected at its lower end with the cross  
bar at any desired aperture and a screw ex-

tending through the outer frame arm into en-  
gagement with the said clamping arm, sub-  
stantially as set forth.

ERIK OLSON.

Witnesses:

FREDERICK NICKOLOS DEICHERT,  
ALBERT YOHANSEN.