

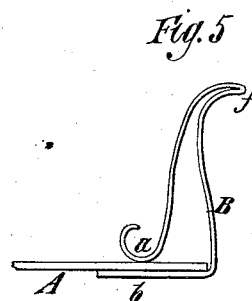
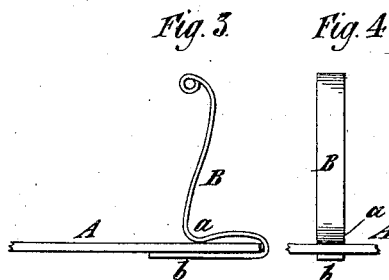
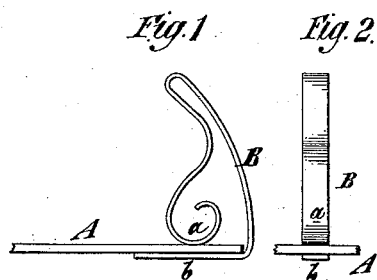
(No Model.)

C. A. NEEDHAM.

CLAMP FOR MANIPULATING PHOTOGRAPHIC PLATES.

No. 306,635.

Patented Oct. 14, 1884.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES A. NEEDHAM, OF NEW YORK, N. Y., ASSIGNOR TO E. P. NEEDHAM
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CLAMP FOR MANIPULATING PHOTOGRAPHIC PLATES.

SPECIFICATION forming part of Letters Patent No. 306,635, dated October 14, 1884.

Application filed April 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. NEEDHAM, of New York, in the county of New York and State of New York, have invented a certain
5 new and useful Improvement in Clamps for Use in Manipulating Photographic Plates in Developing them, of which the following is a specification.

The object of this improvement is to provide a clamp simple in construction, easy to
10 operate, and withal suitable for grasping a photographic plate, and serving as a handle whereby the plate may be manipulated in developing it without the operator getting his
15 hands in the chemicals which are used for developing the plate.

In the accompanying drawings, Figure 1 is an edge view of a clamp embodying my improvement, and a plate to which it is applied.
20 Fig. 2 is a side view of this clamp. Fig. 3 is an edge view of a clamp of modified form embodying the improvement, and a plate to which it is applied. Fig. 4 is a side view of this clamp, and Fig. 5 is an edge view of another
25 clamp embodying my improvement.

Similar letters of reference designate corresponding parts in all the figures.

Referring first to Figs. 1 and 2, A designates a photographic plate, and B designates a clamp applied thereto. This clamp consists of a
30 piece of resilient metal—such, for instance, as sheet-brass—bent double at about the middle, and having the ends bent to form two jaws, *a* *b*, one above the other. The jaws are rounded
35 at the ends, so that they may easily be slipped

over the edge of a photographic plate. The doubled portion will then serve as a handle, by grasping which the plate may be raised or lowered.

In Figs. 3 and 4 is shown a clamp B, which
40 may be made of a similar strip of metal. It is doubled to form two jaws, *a* *b*, adapted to grasp the edge of a photographic plate, and one end is bent upward above the jaw *b* so as to form a handle.

In Fig. 5 I have shown a clamp which is
45 very similar to the one shown in Figs. 1 and 2, the principal difference being that it has an outwardly-bent portion, *f*, where the strip of which it is formed is doubled. This outward-
50 ly-bent portion forms a handle.

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

A device for manipulating a photographic plate, consisting of an approximately-straight
55 portion, B, a portion, *b*, near one end of said straight portion, extending transversely thereto, and a portion, *a*, extending from said straight portion downward toward the portion
60 *b*, so as to nearly meet the same, and forming therewith a narrow opening through which a photographic plate may be slid sidewise or edgewise, the side edges of the device being in approximately the same plane, substantially as specified.

CHAS. A. NEEDHAM.

Witnesses:

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