(No Model.)

G. F. NEWELL.

MITER CLAMP.

No. 371,349. Patented Oct. 11, 1887.

Fig. 1.

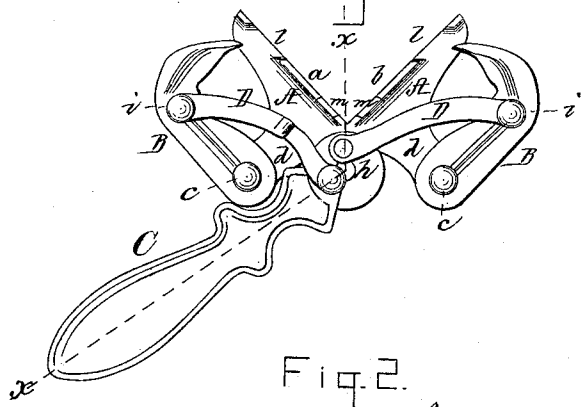


Fig. 2.

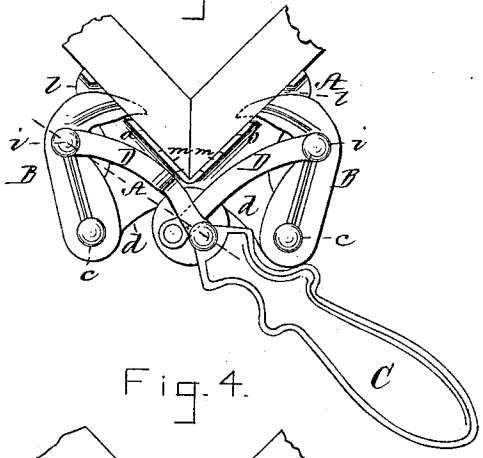


Fig. 3.

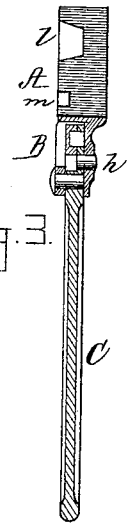
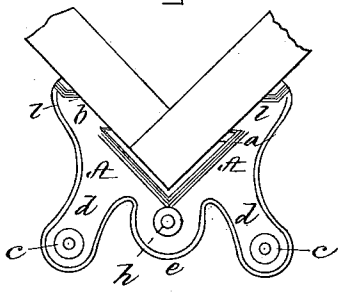


Fig. 4.



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UNITED STATES PATENT OFFICE.

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MITER-CLAMP.

SPECIFICATION forming part of Letters Patent No. 371,349, dated October 11, 1887.

Application filed May 1, 1886. Serial No. 200,808. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. NEWELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented a Miter-Clamp, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan representing my clamp in a position for receiving two contiguous portions of a frame to be joined together. Fig. 2 is a plan of the same with the two contiguous corner-pieces locked together by the jaws of the clamp; Fig. 3, a section on the line *x x* of Fig. 1. Fig. 4 represents the corner of a frame formed by joining two pieces, the line of contact being right-angular, instead of forty-five degrees, as represented by the joint in Fig. 2.

This invention consists in a simple and effectual device for clamping and retaining in position the contiguous portions of a mitered frame—for instance, a window, door, looking-glass, picture, or other frame, or the contiguous sides of a box-bracket, &c.—where a corner is to be formed by joining and securing two portions together, said clamp being conveniently employed for rigidly keeping the parts in their desired position while a nail, screw, clasp, or other fastening is being applied at the joint, or after cement, glue, or other adhesive substance has been laid on the surfaces in contact.

In the said drawings, A represents a casting of the form seen, having two open rests or supports, *a b*, whose bearing-surfaces are located at right angles to each other for the reception of the two portions of a miter-frame, (forty-five degrees,) Fig. 2, or square (ninety degrees) frame, Fig. 4, to be joined together.

B B are a pair of movable jaws having their outer or gripping ends pointed, each jaw being pivoted at *c* to an arm, *d*, of the casting. Equidistant between these arms *d d* is a curved portion, *e*, to which is pivoted, at *h*, the inner turned-down end of a movable handle, C.

D D are two links which connect the pivoted jaws with the inner end of the handle, the outer end of each link being pivoted to its jaw at a point, *i*, intermediate of the pivot *c* and the gripping-point, the inner end of one link being secured to the turned-down end of the handle and the inner end of the other link to a part of the handle slightly raised above the plane of the turned-down end, this construction being necessary to allow the links to be moved without interference with each other. An opening, *l*, is formed in each rest *a b* for the pointed end of the contiguous jaw to pass inside the plane of the surface on which a portion of the frame bears.

The parts of the clamp being in the position shown in Fig. 1, the two portions of the frame to be united to form one of the corners are placed on the clamp-rests *a b*, with their surfaces in contact, when the handle C is moved to the right and the parts assume the position seen in Fig. 2, the pointed ends of the jaws entering and taking firm hold of their contiguous portions of the frame to be joined together, said corner-pieces being thereby drawn down to the junction of the sides of the rests and clamped forcibly closer together, after which one or more nails, screws, clasps, or other fastenings are applied to the corner of the frame by introducing them through openings *m* in the rests, or the corner-pieces with cement, glue, or other adhesive substance previously applied to their surfaces in contact are held by the jaws of the clamp until the adhesive substance sets, the jaws at this time being in their locked position, the line drawn through the two pivotal points of either link passing slightly to one side of and above the center of the pivot *c* of the handle.

The clamp is removed by simply moving the handle to the left, when the jaws B B will release their grip upon the frame.

For the use of carpenters, joiners, cabinet-makers, &c., in the manufacture of window, door, looking-glass, picture, and mosquito-screen frames, brackets, boxes, &c., my within-described device is invaluable.

I claim—

1. A clamp for holding the contiguous miter or square-corner portions of a frame while being fastened together, consisting of the casting A, with its rests or supports *a b* and pivoted handle C, in combination with a pair of pointed movable jaws, B B, and a pair of

links, D D, for connecting the jaws with the handle, substantially as described.

2. As an improvement in clamps, a casting, A, a pair of movable jaws, B B, and a pair of links, D D, each connected with its jaw at a point intermediate of its pivot *c* and its gripping end, in combination with a pivoted handle, C, constructed to operate as set forth.

Witness my hand this 28th day of April, 1886.

GEO. F. NEWELL.

In presence of—
N. W. STEARNS,
H. W. STEARNS.