

No. 628,860.

W. H. SHEELEY.
CLAMP.

Patented July 11, 1899.

(Application filed Nov. 1, 1898.)

(No Model.)

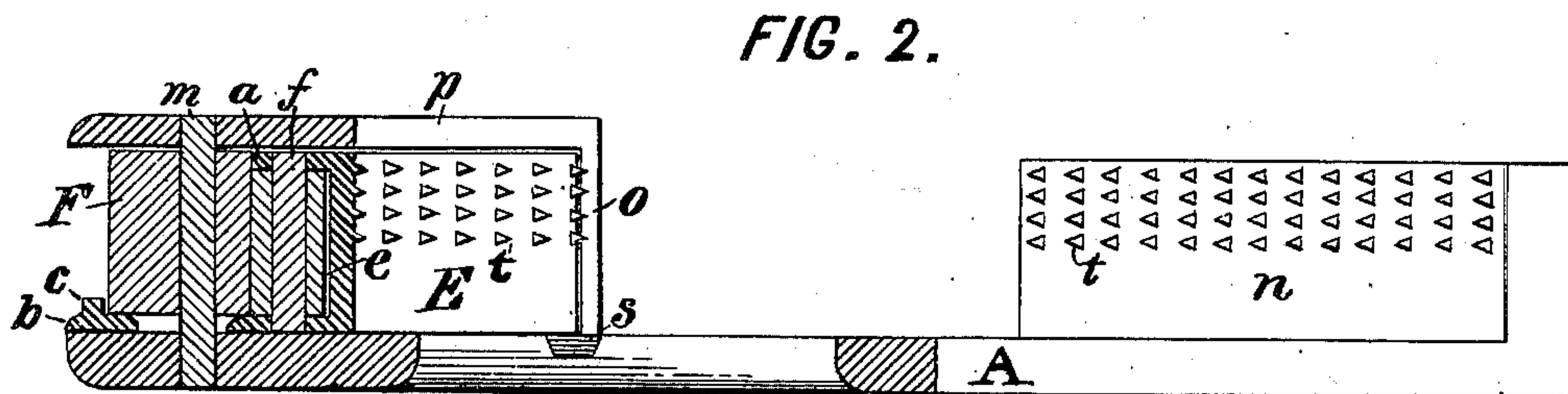
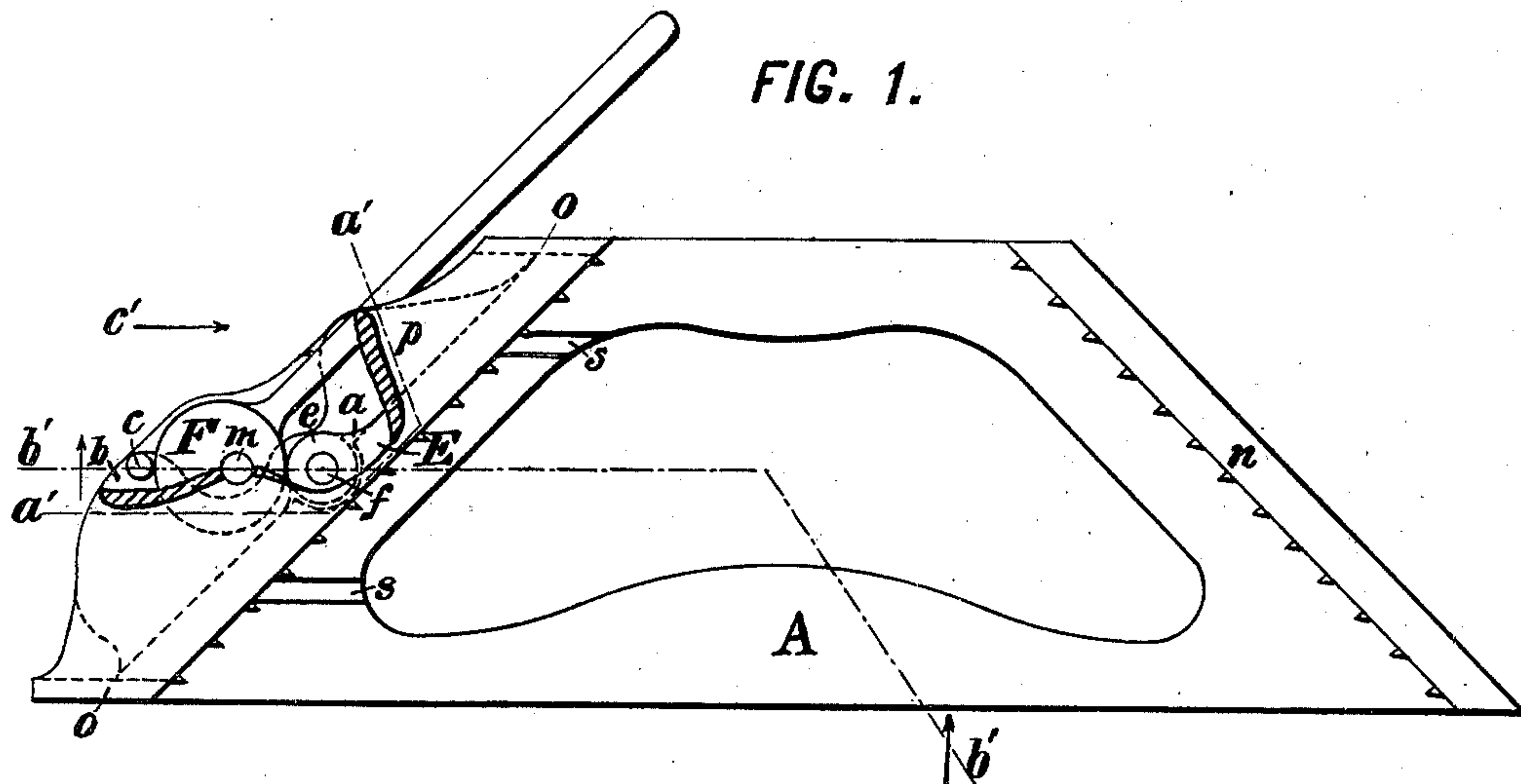
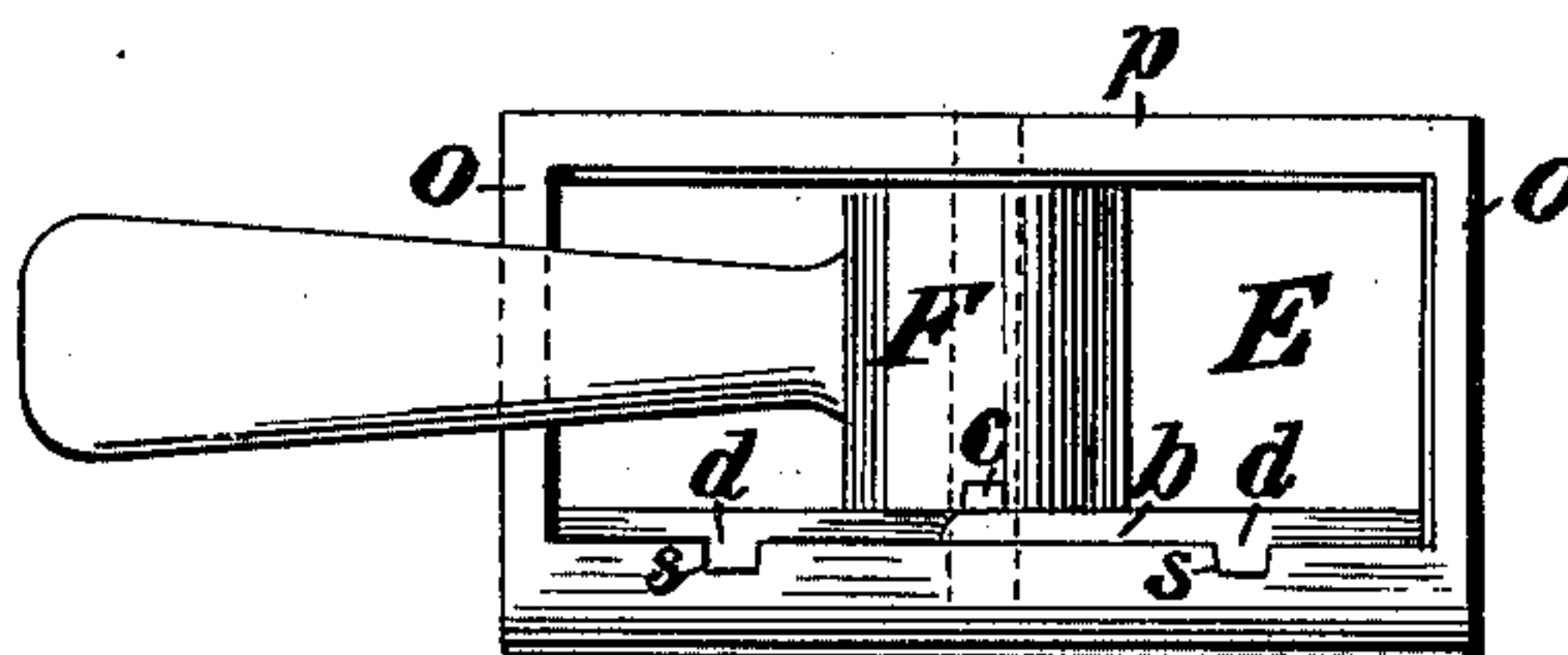


FIG. 3.



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WILLIAM H. SHEELEY, OF NEW YORK, N. Y., ASSIGNOR TO MARY SHEELEY
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CLAMP.

SPECIFICATION forming part of Letters Patent No. 628,860, dated July 11, 1899.

Application filed November 1, 1898. Serial No. 695,183. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SHEELEY, a citizen of the United States, residing in the city, county, and State of New York, have
5 invented a new and useful Clamp, of which the following is a specification.

My invention relates to an improvement in clamps for clamping mitered moldings—such as house-trim, picture-frames, and the like—
10 while the joint is being glued and comprises the novel features hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indi-
15 cate corresponding parts in all the figures.

Figure 1 is a top plan view of my device, with a portion of the framework broken away to show the mechanism. Fig. 2 is an eleva-
20 tion and partial section upon the line *b' b'* of Fig. 1, and Fig. 3 is an end view.

It is the present common practice to attach temporary blocks to mitered casings that are to be glued together, either by nailing or glu-
25 ing, so as to give a bearing-surface for the hand-screws, which are used to hold the parts together while being glued. This is both clumsy and expensive, as it takes considerable time to secure and free these blocks and
30 also to apply the clamps after they have been secured.

The object of my invention is to provide a simple and quickly-used device by which the two parts of the miter may be secured together
35 and held until the glued joint has set.

The frame of my device consists of a casting *A*, which is provided at one end with an upwardly-projecting flange *n*, preferably making an angle of forty-five degrees with the long
40 side of the frame, but projecting from the frame at an angle of ninety degrees. At the opposite end of the frame is a socket or pocket formed by the posts *O*, which are located at each side of the frame, and the connecting-
45 plate *p*. The face of this pocket opposed to the flange *n* makes an angle of forty-five degrees with the long side of the frame or of ninety degrees to the face of the flange *n*. These angles are the ones which would be
50 used in a clamp for securing two pieces which are to make an angle of ninety degrees with

each other. If the angle of the joint were changed, the angle of the faces would be correspondingly changed. The upper surface of the main frame has two longitudinally-ex-
55 tending grooves *s s*, adapted to form guide-ways for a movable block. This movable block *E* is formed so as to fit within the pocket formed by the frame, the two posts *O*, and the plate *p*. The under surface of this block
60 is provided with two ribs *d*, which fit within the grooves *s*. The block also has a friction-roller *e* journaled therein at substantially the middle of its length. This roller projects slightly from the rear side of the block.
65 Journaled in the frame *A* and the plate is a pivot-pin *m*, upon which is mounted an eccentric or cam *F*, provided with a working handle by means of which it may be turned upon its pivot-pin.
70

The sliding block *E* has an arm *b* extending rearwardly and provided with a pin *c*, lying immediately back of the eccentric or cam *F*. The working faces of both the sliding block *E* and of the flange *n* are provided with
75 pointed teeth adapted to engage the outer edge surfaces of the trim or molding which is to be held in place. By throwing the lever of the cam outward from the position shown in Fig. 1 it is evident that the sliding block *E*
80 will be forced toward the flange *n* by the engagement of the eccentric surface of the cam with the outer surface of the friction-roller *e*. The block is guided in the grooves *s*. This will serve to tightly bind the two pieces of
85 molding together. When the lever is thrown back to the position shown in Fig. 1, the surface of the cam *F* will engage the pin *c* and positively force the block outward. When the operating arm of the cam is thrown to a
90 position opposite that shown in Fig. 1, the cam will be held in place, as the center of the cam will be thrown a little beyond the line between the journal *f* of the friction-roller and the journal *m* of the cam. The cam will there-
95 fore be held securely in place until it is thrown back by hand. The clamps are left upon the molding a sufficient time for the glue to set and to hold the parts securely. The clamp herein shown and described may be quickly
100 applied and removed from the molding and occupies very little space, so that a large num-

ber of frames may be set up to dry in a comparatively small space. As many rows of teeth may be applied to the surface of the block E and flange n as necessary to properly engage and hold the molding.

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

1. A miter-clamp, comprising a frame having flanges projecting from one side thereof and extending at an angle with each other corresponding with the angle of the miter-joint, one of said flanges being of a skeleton construction, a block mounted to slide within the skeleton flange toward and from the other flange, an eccentric or cam journaled upon the frame back of said block, a friction-roller journaled upon the sliding block and engaged by the eccentric, and a projecting arm upon the block engaging the opposite side of the eccentric to withdraw the block, substantially as described.

2. A miter-clamp, comprising a frame having flanges projecting from one side and extending at an angle with each other, corresponding with the angle of the miter-joint, one of the flanges being of skeleton construction, a block mounted within said skeleton flange to slide toward and from the other flange, the frame and block having intermeshing guiding ribs and grooves extending in the

direction of sliding of the block, an eccentric or cam journaled upon the frame, a friction-roller journaled upon the sliding block and engaged by the eccentric, and a projecting arm upon the block engaging the opposite side of the eccentric to withdraw the block, substantially as described.

3. A miter-clamp, comprising a frame having two flanges projecting from one side and extending at an angle with each other equal to that of the miter-joint, one of the flanges being of a skeleton construction, the frame within this flange having grooves extending toward and from the other flange, a block having ribs fitting and sliding in said grooves and having its face at the same angle as the flange, an eccentric or cam journaled in the frame and flange and provided with an operating-handle, said cam-journals extending perpendicular to the plane of the frame, a friction-roller journaled in the sliding block and engaging said cam upon one side, the block having a rearwardly-extending arm provided with a pin or projection engaging the other side of the cam to return the block, substantially as described.

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