

(No Model.)

W. H. McAULEY.

CLAMP.

No. 302,346.

Patented July 22, 1884.

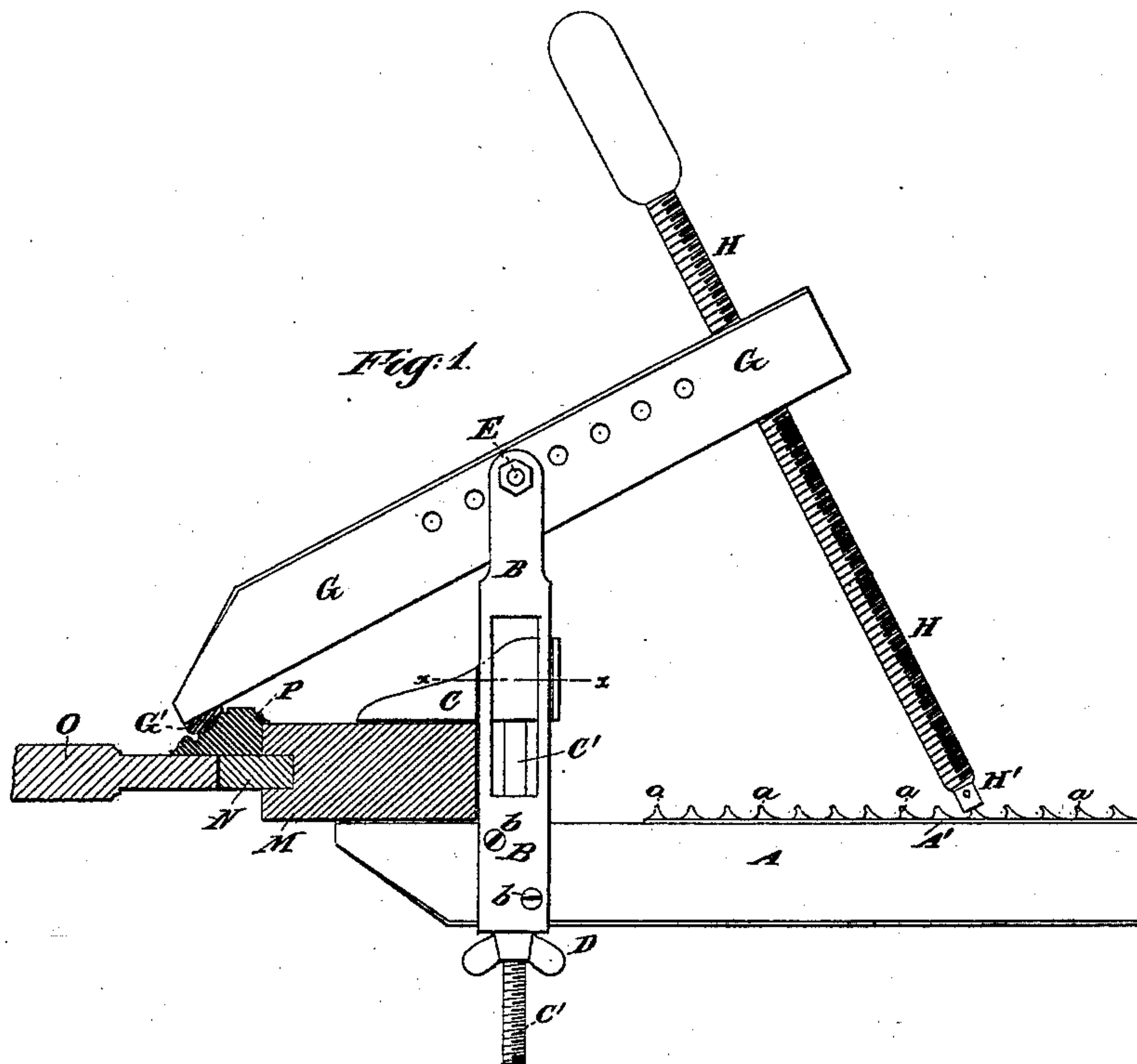


Fig. 4.



Fig. 2.

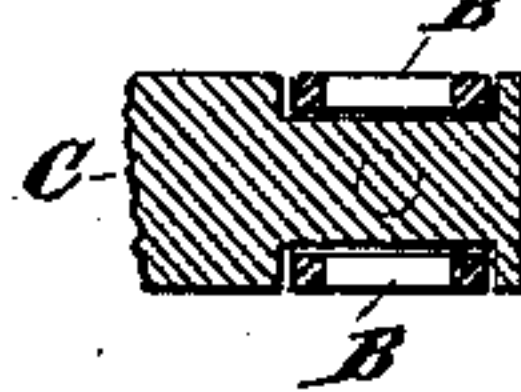


Fig. 3.

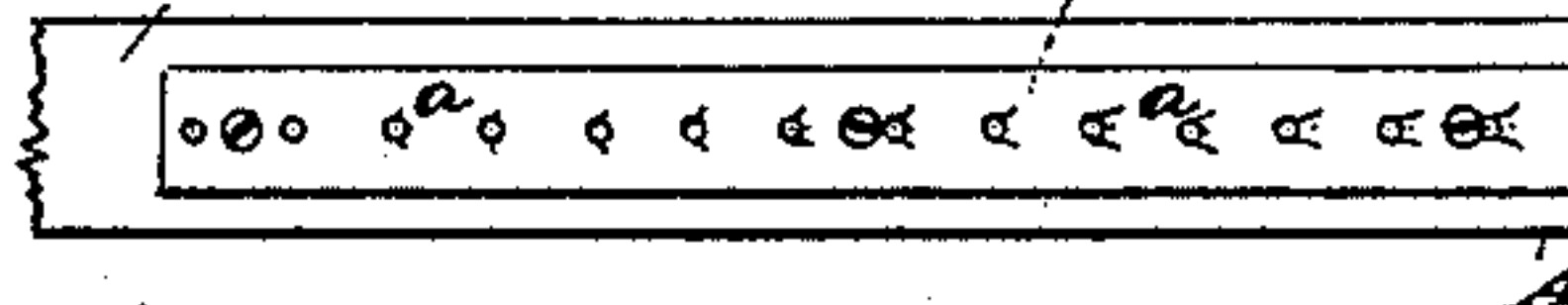


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM H. MCAULEY, OF NEW YORK, N. Y.

CLAMP.

SPECIFICATION forming part of Letters Patent No. 302,346, dated July 22, 1884.

Application filed December 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. MCAULEY, of New York city, in the State of New York, have invented certain new and useful Improvements relating to Clamps; and I do hereby declare that the following is a full and exact description thereof.

The invention may be used for various purposes; but it is more particularly intended for pressing moldings into place in the angles between the panels and the stiles of doors, shutters, and analogous paneled constructions, and holding them there, if necessary, until the glue is set. It applies the pressure in the direction desired, and may be very conveniently attached and separated from any desired point on the edge of a door or shutter.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification. Figure 1 is a side elevation representing the device applied to the edge of a door, the latter being shown in cross-section. Fig. 2 is a section through the clamp and jaw and its guiding-brackets on the line *xx* in Fig. 1. Fig. 3 is a plan view of a portion of the main bottom piece of the clamp. Fig. 4 is a section through the screw at and near the foot. Fig. 5 is an end view of the screw.

Similar letters of reference indicate corresponding parts in all the figures where they occur.

A is the base-piece, and B brackets, of wrought-iron or other suitable material, in the form of a strap, encircling A, and secured by screws *b*. A' is a plate of iron or steel, secured upon the upper surface of A, and presenting a series of points, *a*, on its upper surface.

C is a clamping-piece fitted to traverse between the brackets B, and be guided thereby. It is operated by a cylindrical rod, C', rigidly attached and extending through a hole in A. A considerable length of the rod C' is screw-threaded, and receives a thumb-nut, D, by turning which the clamping-piece C can be brought forcibly down toward A, clamping the stile M of the door between the parallel surfaces presented.

E is a pivot connecting the upper ends of the brackets B, and serving as a fulcrum for a

lever, G, through which is tapped a long screw, H, which may be of wood, having a concave shoe, H', of iron or steel, adapted to engage on one of the points *a*, and allow the shoe to be operated forcibly without danger of the foot slipping.

In using the invention, the screw H is slackened, and the clamp applied upon any desired portion of the edge of the door by turning the thumb-nut D. The surfaces of the molding P which are to apply against the stile M and against the fillet N are properly coated with glue and applied in the required position, and, planting the foot of the screw H on the most convenient point *a*, the screw is forcibly turned, causing the clamp-lever G to exert a pressure with its rounded bearing-surface G' against the molding P. The force is applied in the direction indicated by the arrow, so that it not only holds the molding P in firm contact with the fillet N, but also in such contact with the perpendicular adjacent surface of the stile M.

A number of my clamps may be applied close together to exert a great force on the molding. In most cases it will suffice to have a few of the clamps distributed evenly along the edge of the door to be treated. It will be understood that a similar or a different molding will ultimately be applied on the opposite side of the panel to fit in the angle between the fillet and the stile on that side. Under ordinary conditions the panel O will be left unglued, and will be free to expand and contract, as usual, while it is held reliably in place by the moldings.

The lever G is provided with a number of holes, each adapted to receive the bolt E. This allows the angle at which the lever stands and works to be changed within wide limits.

The brackets B are represented with considerable openings in the sides. These may be dispensed with and the brackets made solid, if preferred.

Modifications may be made without departing from the principle or sacrificing the advantages of the invention. I can make cavities in the plate A', instead of raising projections *a* thereon; but such cavities are liable to be filled with sawdust, glue, and the like. I much prefer the projections or spurs *a*, adapted severally to engage in the hollow in the foot of the screw. The block which presents the

rounded bearing-surface G' may be attached either permanently or temporarily to the lever G, if desired; but for most cases it may be inserted as a separate block.

5 I claim as my invention—

1. In combination with the base A, having engaging means, *a*, the frame B, secured to such base, and the movable clamp C, a lever, as G, pivoted to the frame B, and a screw, H,
10 operating through said lever and against a portion of the base to give a clamping-pressure to said lever in a direction oblique to the plane of the main clamp, as set forth.

2. The combination of the base A, having

plate A', with teeth *a*, the frame B, and movable clamp C, of the lever G, having bearing-shoe G', the pivot E, and the screw-rod H, all arranged and operating as and for the purpose set forth. 15

In testimony whereof I have hereunto set my hand, at New York city, N. Y., this 8th day of December, 1883, in the presence of two subscribing witnesses. 20

WM. H. MCAULEY. [L. S.]

Witnesses:

JAS. H. MONCKTON,
WILLIAM CAMPBELL.