

(No Model.)

J. E. LLOYD.
GLAZIER'S DIAMOND.

No. 442,062.

Patented Dec. 2, 1890.

Fig. 1.

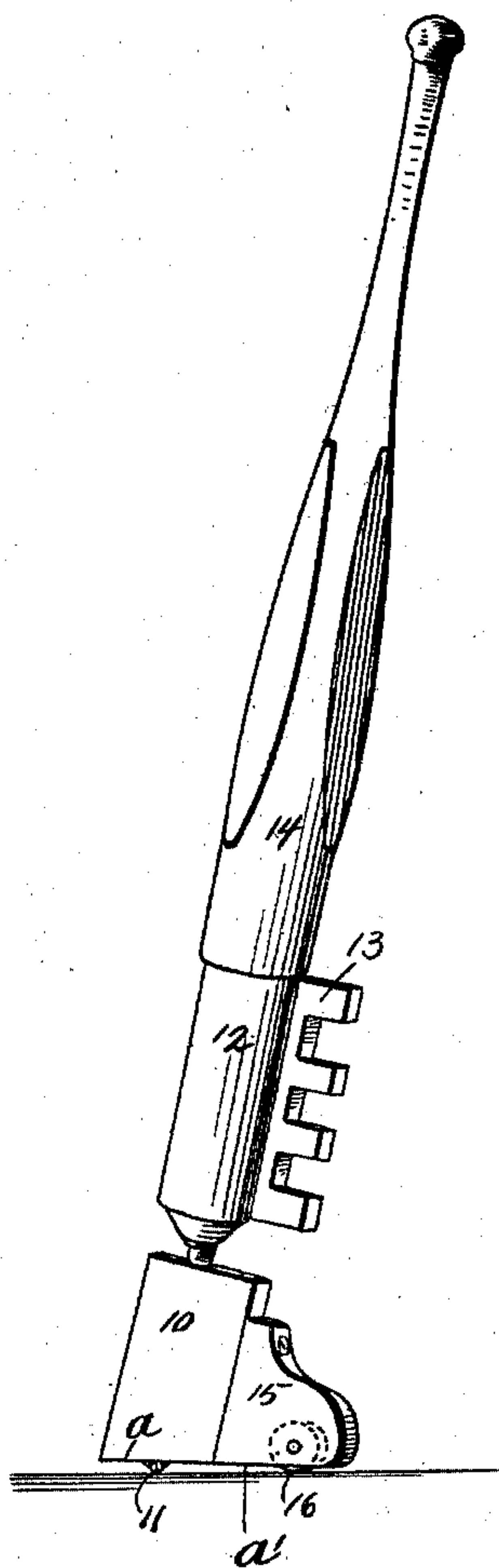
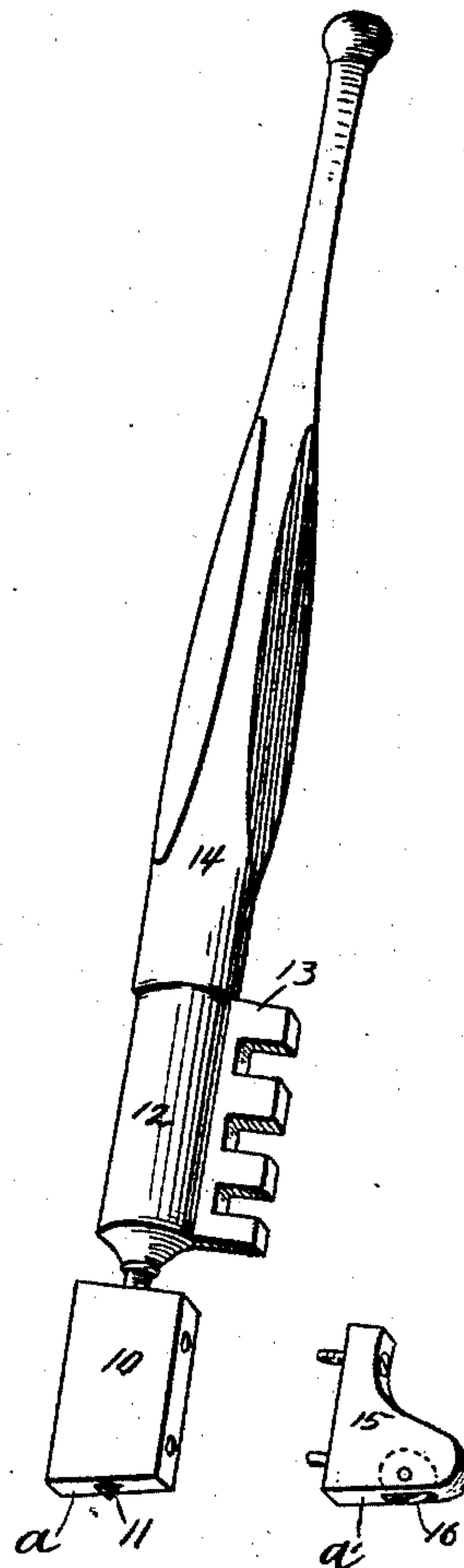


Fig. 2.



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GLAZIER'S DIAMOND.

SPECIFICATION forming part of Letters Patent No. 442,062, dated December 2, 1890.

Application filed August 27, 1890. Serial No. 363,217. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. LLOYD, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Glaziers' Diamonds, of which the following is a full, clear, and exact description.

My invention relates to an improvement in glaziers' diamonds, and has for its object to provide an attachment readily applied to the ordinary diamond, whereby it may be as conveniently and efficiently used by an inexperienced person as by the most proficient, which attachment is capable of removal when desirable.

The invention consists in the novel construction and combination of these several parts, as will be hereinafter fully set forth, and pointed out in the claim.

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

Figure 1 is a perspective view of the tool, illustrating the same in position for use and having the improvement applied; and Fig. 2 is a similar view to Fig. 1, the improvement being represented as separated therefrom.

Glaziers' diamonds as at present constructed are exceedingly difficult to handle advantageously by persons not thoroughly understanding their manipulation, as unless the tool is held at a certain angle to the glass the diamond cuts very imperfectly, or not at all. The usual angle at which the diamond is held with relation to the glass to be cut is forty-five degrees.

The prime object of the invention is to so construct the tool that the moment the diamond is placed upon the glass and pressure is exerted thereon the handle and block will automatically assume the proper angle for successful work.

The tool is of the ordinary construction—namely, a block 10, in which the diamond 11 is set, a socket 12, attached to the block, breakers 13, usually secured to the socket, and a handle 14. The under face of the block in which the diamond is secured is beveled, as shown at *a*, the bevel being downward in the direction the handle should lean when the tool is in operation. At one side of

the diamond-block an auxiliary block 15 is adapted to be attached, the under face *a'* whereof is so inclined as to constitute a continuation of the downward bevel of the under face of the block, as shown in Fig. 1, and near the outer end of the auxiliary block, in a suitable recess prepared in its under face, a friction-wheel 16 is pivoted. The angle of inclination of the under face of the diamond-block and auxiliary block is so calculated that when the diamond and friction-wheel are both in engagement with the surface to be operated upon the handle of the tool will be at the required angle for performing smooth and perfect work. The auxiliary block may be screwed to the diamond-block or attached thereto in any other manner permitting of its ready removal.

It is obvious that when an auxiliary block constructed as described is used in connection with the diamond-block the most inexperienced person will be enabled to successfully use the tool, and that the friction-wheel may be omitted and the auxiliary block itself be projected downward at one end to bear against the glass; but the friction-wheel is preferably employed, as it materially assists in the manipulation of the tool, not only facilitating its movement over the glass, but acting also to a great extent as a guide.

As the attachment does not constitute an integral portion of the tool, it may be readily removed when any extension of the diamond-block would interfere with the manipulation of the tool, which may happen when there is little room for its movement.

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

The combination, with the diamond-block of a glazier's tool, having a beveled under face, of a removable auxiliary block having its under face beveled, constituting a continuation of the inclination of the corresponding surface of the diamond-block, a friction-wheel journaled in the auxiliary block, and means, substantially as described, for detachably uniting the two blocks, as and for the purpose set forth.

JOHN E. LLOYD.

Witnesses:

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