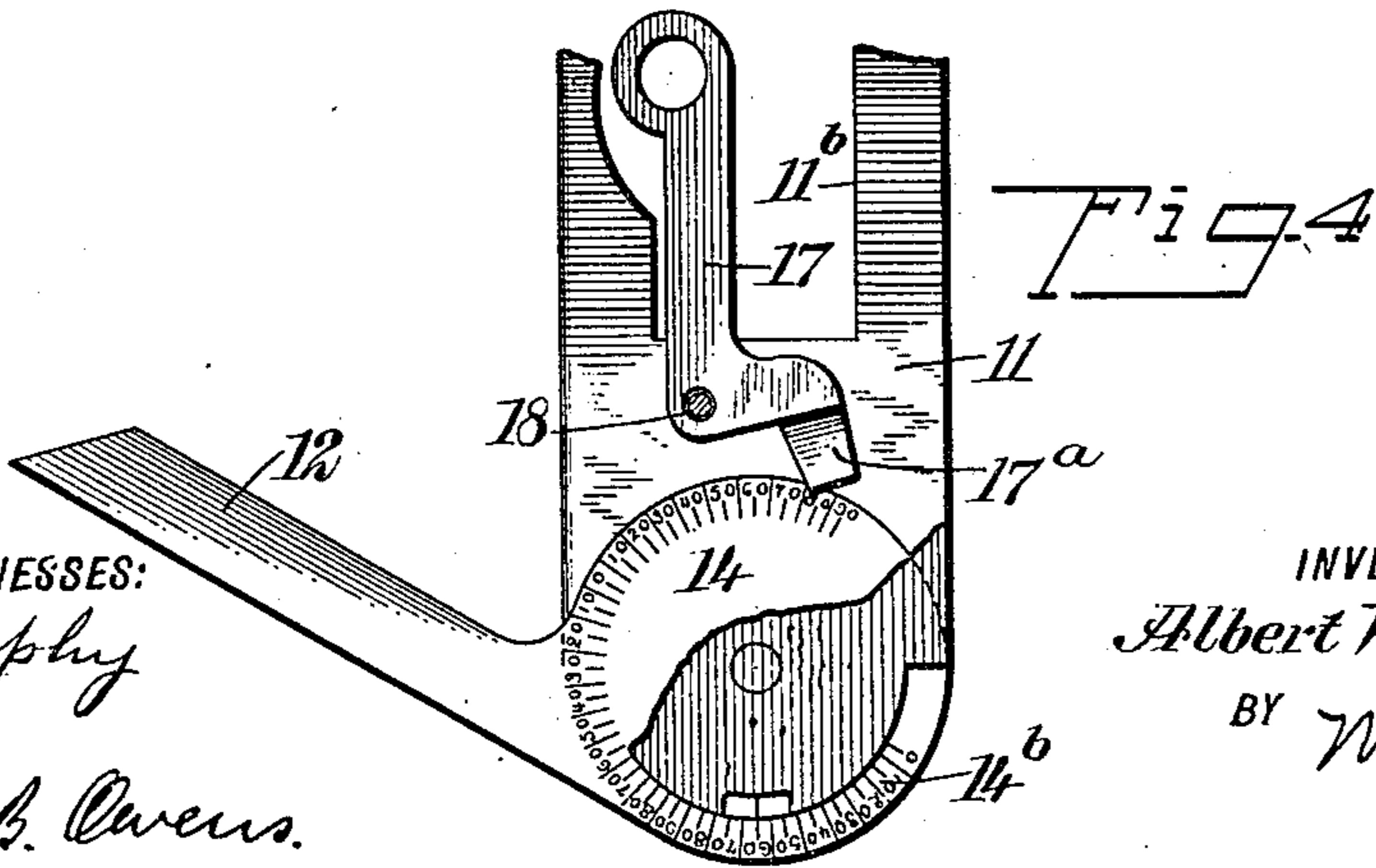
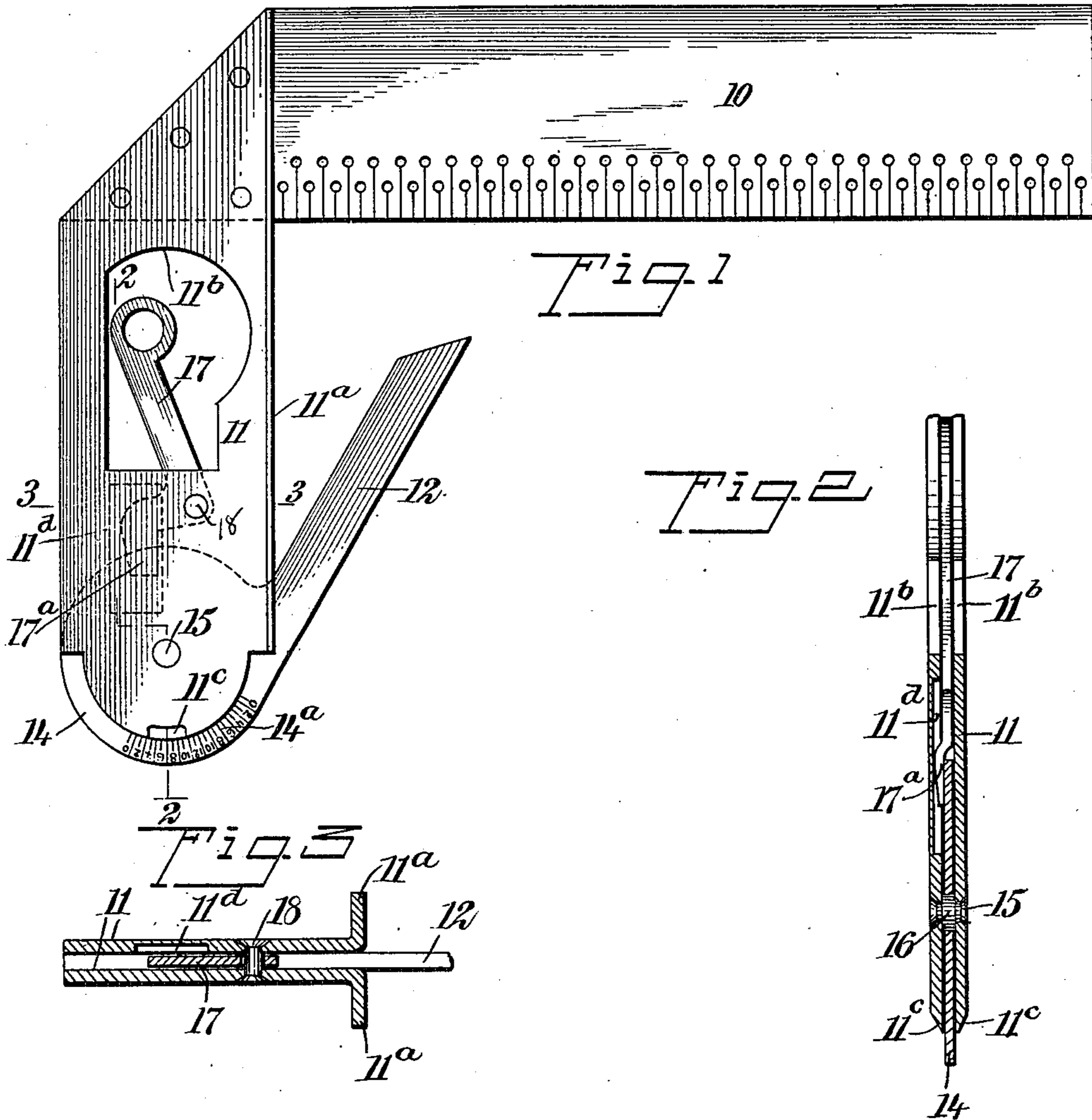


No. 825,727.

PATENTED JULY 10, 1906.

A. W. HIGHT.  
SQUARE.

APPLICATION FILED JAN. 18, 1905. RENEWED FEB. 27, 1906.



**WITNESSES:**

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# UNITED STATES PATENT OFFICE.

ALBERT WATSON HIGHT, OF BALLARD, WASHINGTON, ASSIGNOR TO  
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## SQUARE.

No. 825,727.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed January 18, 1905. Renewed February 27, 1906. Serial No. 303,204.

*To all whom it may concern:*

Be it known that I, ALBERT WATSON HIGHT, a citizen of the United States, and a resident of Ballard, in the county of King and State of Washington, have invented a new and Improved Square, of which the following is a full, clear, and exact description.

The invention relates to a carpenter's or other mechanic's square; and it resides particularly in a peculiarly-constructed beveling device applied to the stock of the square.

Reference is to be had to the accompanying drawings, which illustrate as an example the preferred embodiment of my invention, in which drawings like characters of reference indicate like parts in the several views, and in which—

Figure 1 is a side view of the square, showing the beveling device in operative adjustment. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 1, and Fig. 4 is a fragmentary view showing particularly the lock device for the beveling-arm.

10 indicates the blade of the square, and 11 the stock, which is formed of two plates, between which is riveted the end of the blade 10, these plates having at their inner edges flanges 11<sup>a</sup>, forming a flat surface to facilitate the use of the square. The plates forming the stock 11 are also formed with openings 11<sup>b</sup>, the purpose of which will hereinafter fully appear.

The beveling device comprises an arm 12, formed of sheet metal and adapted to fit when inactive between the plates 11 of the stock, so as to interfere in no way with the use of the instrument as a square. The beveling device also comprises a disk 14, forming a body or hub, which is fitted between the plates forming the stock and held to turn therein by means of a rivet or pin 15, and, if desired, a bushing 16. (See Fig. 2.) The beveling-arm 12 may be swung out to active position, as shown in Fig. 1, or it may be thrown in so that it lies between the parts of the stock and does not interfere with the use of the blade 10 as a simple square. The two plates forming the stock 11 have reduced or tapered edges 11<sup>c</sup>, (see Figs. 1 and 2,) which are adapted to read, respectively, on the scales 14<sup>a</sup> and 14<sup>b</sup> on opposite sides of the hub or body 14 of the beveling device. The scale

14<sup>a</sup> is intended to permit the use of the beveling-arm in the same manner that an ordinary carpenter's square is used to determine bevels the principle being essentially the same as that disclosed in the patent to Clements, No. 725,614, granted April 14, 1903, and the scale 14<sup>b</sup> is an ordinary scale in degrees of a circle. In this manner the bevels may be determined either by circle-degrees or by the ordinary carpenter's practice, as preferred. The peripheral parts of the body 14 of the bevel project beyond the adjacent edges of the plates forming the stock 11, and thus expose the several scales.

In order to lock the beveling device in any desired adjustment, an elbow-lever 17 is fulcrumed on a pin 18, the elbow-lever lying between the plates forming the stock 11 and one arm of said lever being exposed through the openings 11<sup>b</sup>, so as to facilitate the operation of the lever. The other arm of the lever has an offset portion 17<sup>a</sup>, which operates in a cavity 11<sup>d</sup>, formed in one of the plates of the stock 11. (See the dotted lines in Fig. 1 and the full lines in Fig. 2.) This offset portion 17<sup>a</sup> is arranged to enter between one of the plates of the stock and the body 14 of the bevel, so as to bind the hub or body 14 against the stock and prevent movement of the beveling-arm.

When using the instrument as a square, the beveling-arm is pushed in between the plates of the stock and interferes in no way with said use of the instrument. In order to use the beveling-arm, the elbow-lever should be operated to relax the pressure of the offset part 17<sup>a</sup> on the beveling-arm, and then the beveling-arm should be drawn out to the adjustment desired, either of the scales 14<sup>a</sup> or 14<sup>b</sup> being referred to to determine the adjustment. After the desired adjustment is secured the beveling device should be locked by the elbow-lever, as before explained.

Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the terms of my claims.

Having thus described the preferred form of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A square comprising a stock formed of

two side plates spaced apart, a blade attached to one end of the stock, a beveling device pivotally mounted adjacent to the other end and adapted to fold between the side plates of the stock, a lever lying between said side plates of the stock and fulcrumed thereon, and having an offset end received in a cavity in one of the side plates of the stock, said cavity being adjacent to a part of the beveling device to permit the offset portion of the lever to enter the cavity and engage between the wall thereof and said part of the beveling device to lock the beveling device in position.

2. A square comprising a stock formed of two side plates spaced apart, a blade attached to one side of the stock, a beveling device comprising an essentially circular hub or body, and a tangentially-projecting beveling-arm, said hub or body being located at the end of the stock opposite the blade and between the side plates thereof, and the arm being capable of projecting out from the stock and of movement into the space between the side plates of the stock intermediate the ends thereof.

3. A square comprising a stock formed of two side plates spaced apart, a blade attached to one side of the stock, a beveling device comprising an essentially circular hub or body, and a tangentially-projecting beveling-arm, said hub or body being located at the end of the stock opposite the blade and between the side plates thereof, and the arm being capable of projecting out from the stock and of movement into the space between the side plates of the stock intermediate the ends thereof, a part of the edge of the circular hub of the beveling device being extended beyond the corresponding end of the stock and provided with a scale adapted to read with reference to the stock to determine the position of the beveling device.

4. A square comprising a stock formed of two side plates spaced apart, a blade at-

tached to one side of the stock, a beveling device comprising an essentially circular hub or body, and a tangentially-projecting beveling-arm, said hub or body being located at the end of the stock opposite the blade and between the side plates thereof, and the arm being capable of projecting out from the stock and of movement into the space between the side plates of the stock intermediate the ends thereof, and a lever fulcrumed between the side plates of the stock and having an offset end lying in a cavity in one of the side plates, said cavity being located adjacent to said hub of the beveling device to permit the offset portion of the lever to be wedged between the wall of the cavity and the hub of the beveling device.

5. A square having a stock formed of two plates lying in parallel planes and spaced from each other, a blade held between the plates at one end of the stock, a beveling device comprising an essentially-circular hub or body, and a beveling-arm projecting tangentially therefrom, the hub of the beveling device being arranged between the plates of the stock at the end opposite the end having the blade, means for mounting the beveling device to swing around the center of the hub, the edge of the hub of the beveling device projecting beyond the adjacent end of the stock, and said edge being formed on each side with a scale reading with reference to the stock, and a device located between the plates of the stock intermediate the ends thereof and coacting with the hub of the beveling device to lock the beveling device in the desired position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT WATSON HIGHT.

Witnesses:

V. A. MARSHALL,  
L. B. WALTERS.