

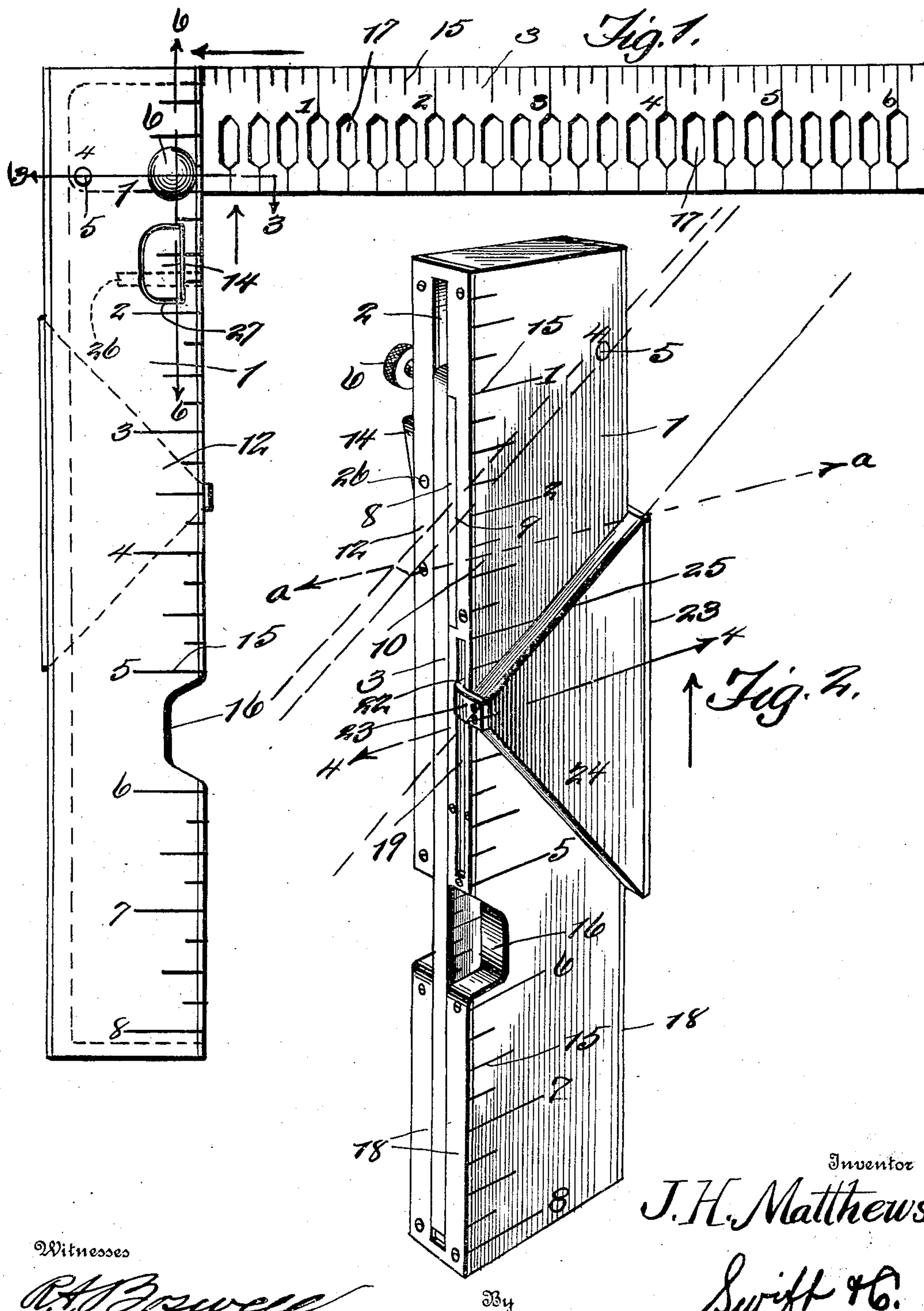
No. 854,659.

PATENTED MAY 21, 1907.

J. H. MATTHEWS.  
FOLDING SQUARE.

APPLICATION FILED FEB. 19, 1907.

2 SHEETS—SHEET 1.



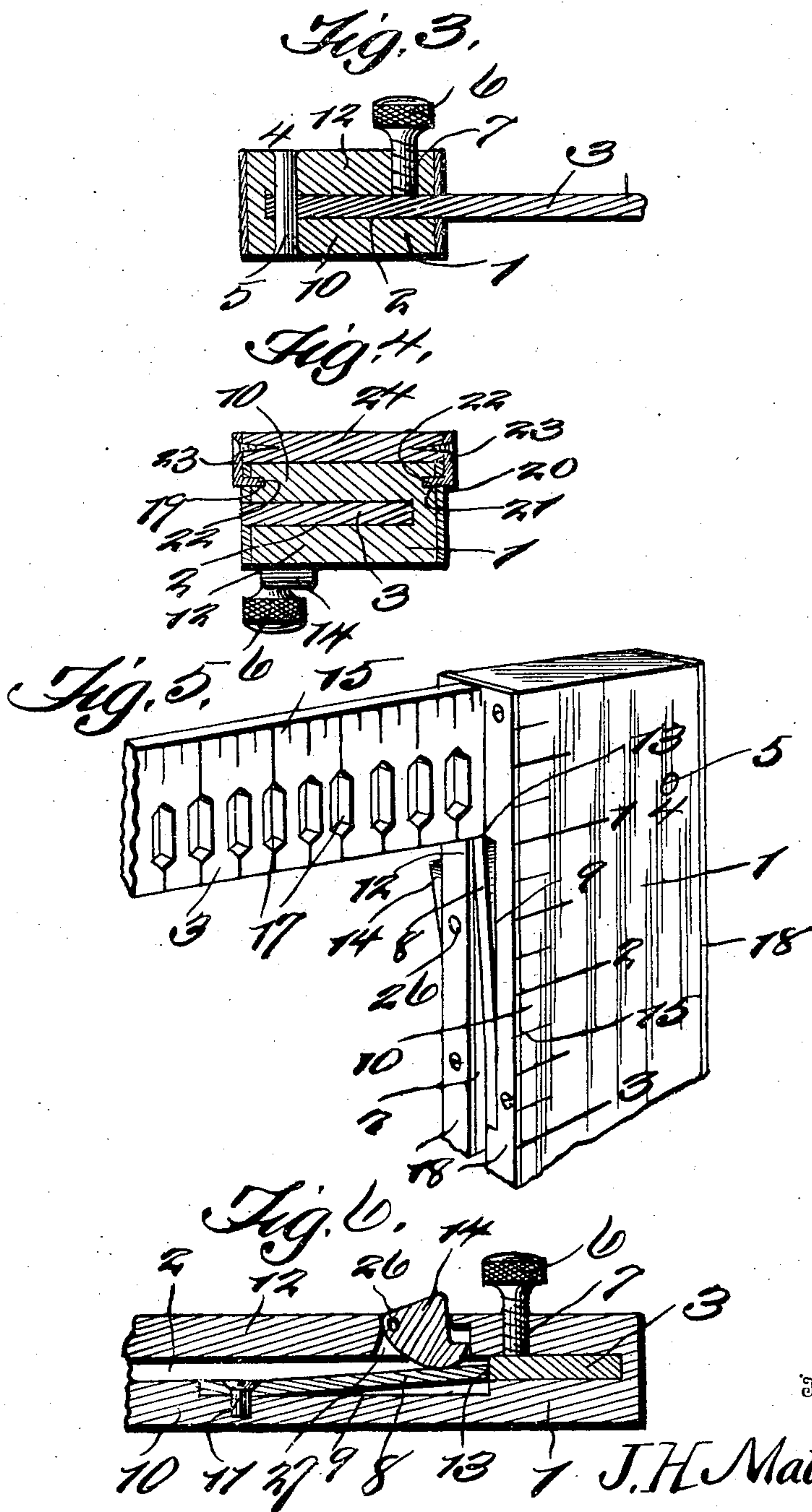
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# UNITED STATES PATENT OFFICE.

JOHN HENRY MATTHEWS, OF HOLLISTER, CALIFORNIA.

## FOLDING SQUARE.

No. 854,659.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed February 19, 1907. Serial No. 358,227.

*To all whom it may concern:*

Be it known that I, JOHN HENRY MATTHEWS, a citizen of the United States, residing at Hollister, in the county of San Benito and State of California, have invented a new and useful Folding Square; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a combined rule, square and miter instrument and the object thereof is to provide an efficient and useful device of this design which may be readily carried in the pocket, of the workman, when he is engaged upon staging or scaffolding, without the danger of the device falling out of his pocket, and thus making it necessary for the workman to descend to the ground for it.

A further object of the invention is to provide a device of this character whereby the blade may be set at various angles; furthermore, means for holding the blade at the angle set. The handle of the device is provided with a longitudinal recess to receive the blade when closed and provided upon the outer portion of said handle is an enlargement, of the desired shape by which a miter may be cut, this enlargement may be integral therewith or longitudinally movable thereon, as will be clearly evident.

The blade of the device is provided with suitable openings by which mortises and tenons may be cut, and also graduations upon each side thereof; the handle is provided with graduations also upon both sides thereof, and is bound by any suitable metal, upon the edges thereof, preferably brass.

This invention comprises further objects and combinations of elements which will be hereinafter more fully described, shown in the accompanying drawings, and the novel features thereof will be pointed out by the appended claims.

To obtain a full and correct understanding of the details of construction, combinations of features, elements and advantages, reference is to be had to the hereinafter set forth description and the accompanying drawings in connection therewith, wherein

Figure 1 is a perspective view of the device with the blade thrown open. Fig. 2 is a perspective view looking at the opposite side thereof, illustrating the mitering device, in this view the blade being closed. Fig. 3 is a sectional view on line 3—3 of Fig. 1. Fig. 4

is a sectional view on line 4—4 of Fig. 2. Fig. 5 is a detail perspective view. Fig. 6 is a sectional view on line 6—6 of Fig. 1.

Making renewed reference to the accompanying drawings, wherein similar reference characters indicate corresponding parts in the several illustrations, by figures, 1 designates the handle of the device, provided with a longitudinal recess 2, designed to receive the blade 3 which is pivoted, as at 4, to one end of the said handle, and within the recess thereof. This pivot comprises a pin 5, which extends through the handle, and, is positioned to one side of the middle of the handle, as shown. The blade is designed to be set at various angles, and, to hold the blade at the angle set, a thumb screw 6 is provided, which is threaded into an aperture 7, of the handle, as shown, and is opposite the pivot thereof.

To hold the blade open at right angles to the handle, a spring 8 is provided, which is fixed in a recess 9, upon the inner face of the lower member 10 of the handle, by means of a screw 11; the free end of this spring has a tendency to spring toward the upper member 12, of the handle, as shown, so as to allow the end thereof to engage the edge of the blade, as at 13, for the purpose above set forth.

To release the blade so as to allow it to be closed, a thumb piece 14 is provided, which is pivoted by means of a pin 26, within a slot 27; this thumb piece is of the shape shown, and is designed to engage the upper face of the spring 8, so that when pressure is applied thereon, by the hand of the operator, the free end of said spring will be disengaged from frictional contact with the blade, thus rendering it possible to close the said blade within the recess 2, as will be clearly evident from the drawings.

The handle and blade upon each face thereof are provided with suitable graduations 15, as clearly shown in the drawings; the handle is also provided with finger spaces 16, so as to allow ready access to the blade, for opening the same. The blade is provided with a plurality of suitable openings 17, by which mortises or tenons may be cut, as will be clearly understood. The handle upon the edges, as at 18, is bound by any suitable metal, preferably brass, and upon one of these edges to one side of the longitudinal recess 2 is an additional recess 19, of considerable less depth than the recess 2, and upon



the opposite edge of the handle, as at 20, is a longitudinal recess 21, similar to the recess 19; these recesses 19 and 21 are designed for the purpose of receiving the intumed portion 22, of the plates 23, carried by the mitering device 24, which is movable upon the handle but preferably this mitering device is designed to be integral with said handle. To obtain a miter upon a piece of timber, molding or upon any other desired object, the same is placed as shown in Fig. 2 so as one edge of the same lies adjacent to one of the angles 25 of the mitering device, after which a line *a a* is drawn by a pencil and any suitable rule, as a guide, by which the saw for cutting the miter is guided, as will be clearly observed from the drawings. The proportions of the handle and the blade are such as to allow the workman, to whom the device is useful, to carry the same in his pocket, such proportions may be changed, as desired to suit the requirements, in the manufacture of the above set forth device.

It is to be understood that various changes and modifications may be employed in the construction and embodiment thereof, combinations of features, and elements, without in any way departing from the spirit and scope of the invention covered by the claims thereof; it being understood that whatever variations or modifications are employed must fall within the scope of the appended claims.

From the foregoing, the essential features, elements and the operation of the device, together with the simplicity thereof, will be clearly apparent, and, when manufactured in accordance with the invention, an inexpensive market will be easily obtained therefor.

Having thus fully described the invention, what is claimed as new and useful by the protection of Letters Patent, is:—

1. In a combined square, rule, and mitering instrument, the combination with the handle and blade, the said handle being composed of an upper and lower member, the lower member having a recess in its inner face, a spring secured in said recess in such a manner to allow the free end thereof to fric-

tionally engage the blade, while the upper member is provided with a slot, a thumb piece pivoted in said slot so as to frictionally contact the upper surface of the spring for releasing the spring from contact with the blade, said handle having a raised portion used in mitering, said blade being provided with mortises and tenons openings, as and for the purpose specified.

2. In a combined square, rule and mitering instrument a handle having a longitudinal recess, a blade designed to be received by said recess in said handle, a raised portion, movably mounted upon said handle used in mitering, said blade being provided with mortises and tenons openings.

3. In a combined square, rule and mitering instrument, the combination with a handle and blade, a spring carried by the handle for holding the blade at a right angle to the handle, said handle being composed of an upper and lower member, the upper member having a slot, and a thumb piece pivoted in said slot for releasing the spring from frictional contact with the blade.

4. In a combined square, rule and mitering instrument, the combination with the handle and blade, said handle having a recess, a leaf spring secured therein for holding the blade at a right angle to the handle, said handle being composed of an upper and lower member, the upper member having a slot; and a thumb piece pivoted in said slot, for releasing the spring.

5. In a combined square, rule and mitering instrument, a handle, a blade fulcrumed thereto, a spring carried by the handle to contact with said blade, said handle having a slot a thumb piece pivoted in said slot, for releasing said spring from contact with the blade.

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

JOHN HENRY MATTHEWS.

Witnesses:

GEORGE IRVING BULLOCK,  
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