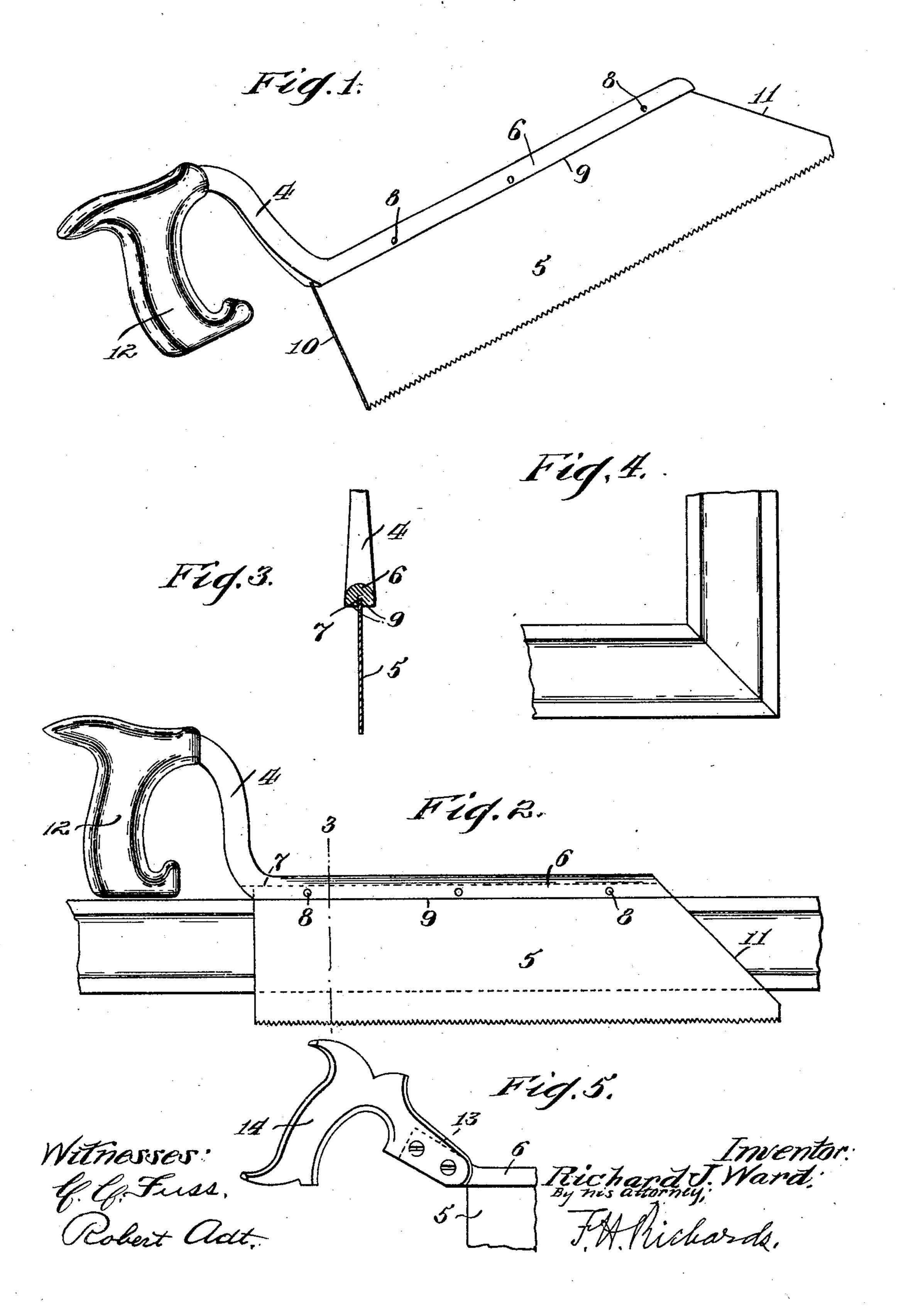
R. J. WARD.

COMBINATION SAW, SQUARE, AND MITER.

APPLICATION FILED MAY 5, 1905.



## UNITED STATES PATENT OFFICE.

RICHARD J. WARD, OF NEW YORK, N. Y.

## COMBINATION SAW, SQUARE, AND MITER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RICHARD J. WARD, a citizen of the United States, residing in the borough of Brooklyn, New York, in the 5 county of Kings and State of New York, have | invented certain new and useful Improvements in a Combination Saw, Square, and Miter, of which the following is a specification.

This invention has reference to a handsaw ro provided with means for using it both as a

square and as a miter.

One of the objects of the invention is to provide a form of saw that will answer the purpose of both a square and a miter without the use of additional members other than the backing-strip that is often attached to the back edge of a saw to prevent buckling of the blade.

A further object of the invention is to pro-20 vide an improved form of handle in such a saw which will be out of alinement of the free portion of the saw-blade, so as not to interfere with the use of the implement as a square or miter at an intermediate portion of 25 a long strip or board.

An embodiment of my invention is illustrated in the drawings accompanying and forming a part of this specification, whereon—

Figure 1 is a perspective view of the saw. 30 Fig. 2 is a side elevation showing the use as a square or miter. Fig. 3 is a section on the line 3 3 of Fig. 2, and Fig. 4 shows a miterjoint that can be readily marked off by it.

The blade 5 of the saw is provided with a 35 projecting portion or backing 6, that may be secured to it in any suitable manner and may project from either or both sides of the blade. In the present instance the backing-strip 6 is provided with a slot 7, extending throughout 40 its length, into which the saw-blade is inserted and secured in any suitable manner. may be done by screws or rivets 8, passing through registering apertures in the two members. The backing-strip has its side 9 45 on both sides of the saw-blade arranged at | back edge, one end of the saw-blade extendright angles to the adjacent face of the sawblade.

The end 10 of the saw-blade is rectilinear and arranged at a right angle to the face 9 of 50 the strip. The other end 11 of the saw-blade is arranged at an angle to the said side of more or less than ninety degrees. This angle \ is preferably forty-five degrees, so that the miter end can be marked or indicated on the 55 strip or board to be sawed.

In the use of the device it is laid on a board,

as indicated in Fig. 2, with one of the faces 9 engaging the edge of the board, as shown. Then either the right angle or the miter can be marked off with a pencil in the usual man- 60 ner.

A suitable handle is connected with the backing-strip 6, so as to be located above the latter and not interfere with its use as a square or miter. The backing-strip 6 is 65 shown as bent upward away from the blade at 4 and then given a curve or bend downward, making a somewhat U-shaped part. A suitable handle part 12 is secured to the end of the bent part. It will be observed that 70 when the saw is laid on a strip, as shown in Fig. 2, the handle does not intersect the plane of the engaging face 9 of the backing portion and does not strike or interfere with the strip to be squared or mitered.

Fig. 5 shows a slightly-modified form of handle in which the extension 13 of the backing-strip projects upward and rearward and has secured to it an angular handle portion 14, that does not intersect with the plane of 80

the face 9 of the backing-strip.

The tool is a labor-saving device applicable for use in various kinds of woodworking, but more especially for moldings, such as picturemolding, and wire molding, such as is used by 85 electrical workers, who often have to work in places where they cannot carry around with them many tools. This actually takes the place of three tools—a saw, miter-gage, and square.

Having described my invention, what I

claim is—

1. A saw-blade provided with a strip on its back edge, one end of the saw-blade extending at a right angle to the inner face of the 95 strip, the other end of the saw-blade extending from the inner face of the strip at an angle of forty-five degrees, and a handle secured to the said strip and free from the blade.

2. A saw-blade provided with a strip at its 100 ing at a right angle to the inner face of the strip, the other end of the blade extending from the inner face of the strip at an angle of forty-five degrees, and a handle secured to 105 said strip and arranged out of alinement with the free portion of the saw-blade.

3. A saw provided with a projecting portion on its back edge, having a plane face extending at right angles to the adjacent side of 110 the saw-blade, the blade having one end extending from said face at an angle of forty-

five degrees, and a handle secured to the saw and located on the opposite side of the plane of said face from the saw, whereby no portion of the handle is intersected by the plane of

5 said face of the projecting portion.

4. A saw comprising a strip having a longitudinal slot extending throughout one side, a blade having its back edge secured in the slotted portion of the strip, the blade having one end extending from the inner face of the strip at an angle of forty-five degrees, the strip at one end being bent upward away

from the blade and to the rear thereof, a handle portion secured to the bent portion of the strip, the handle and bent portion being out of alinement with the free portion of the sawblade.

Signed at Nos. 9 to 15 Murray street, New York, N. Y., this 3d day of May, 1905.

RICHARD J. WARD.

Witnesses:

FRED. J. DOLE, HENRY E. GREENWOOD.