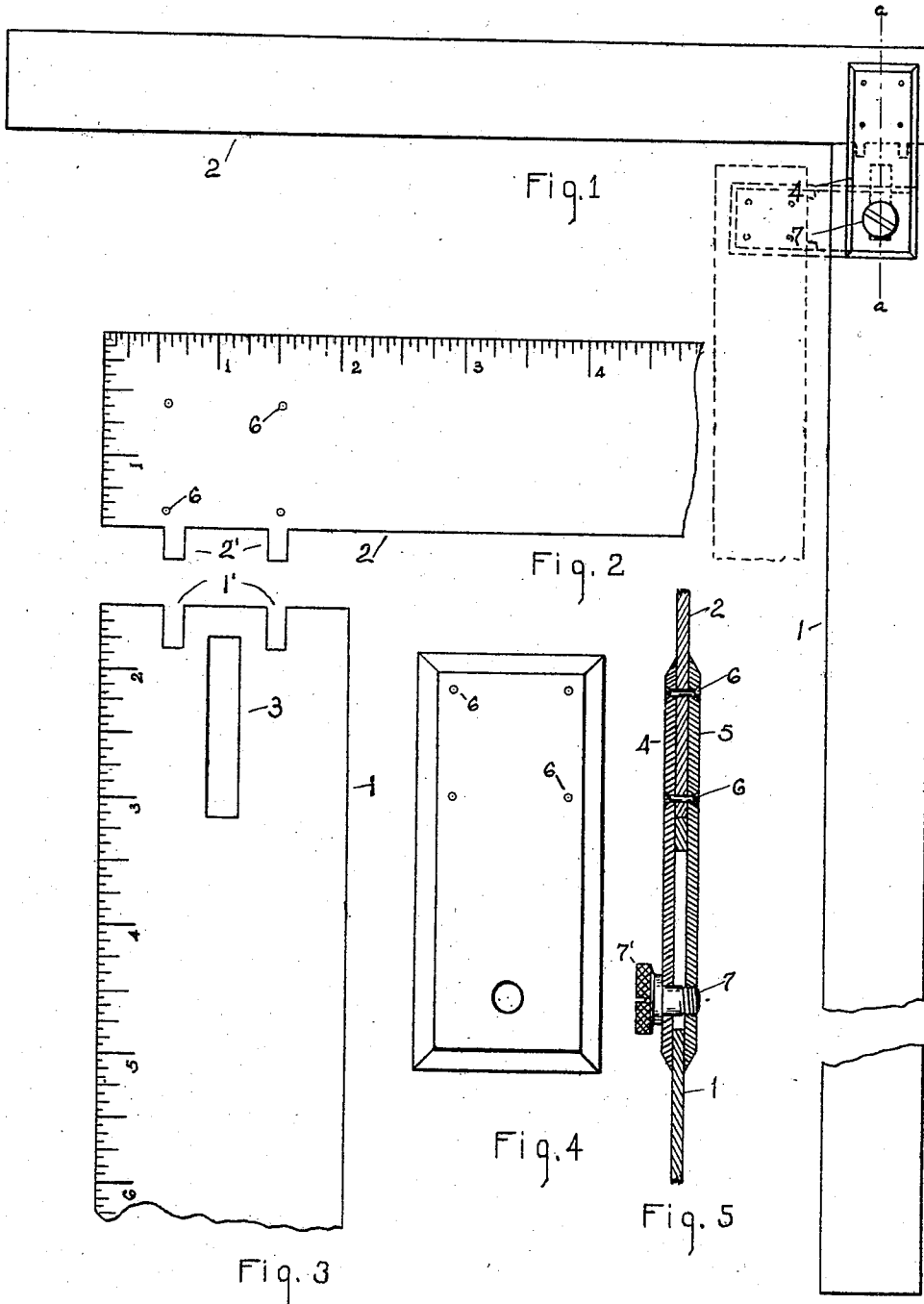


No. 879,703.

PATENTED FEB. 18, 1908.

A. C. WAECKER.
SEPARABLE SQUARE.
APPLICATION FILED AUG. 10, 1907.



WITNESSES:

Warren E. Willis.
Eugene V. Cogger,

INVENTOR.

Albert C. Waecker.
BY
Joshua R. Potts
ATTORNEY.

UNITED STATES PATENT OFFICE.

ALBERT C. WAECKER, OF WILMINGTON, DELAWARE.

SEPARABLE SQUARE.

No. 879,703.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed August 10, 1907. Serial No. 388,018.

To all whom it may concern:

Be it known that I, ALBERT C. WAECKER, a citizen of the United States, residing at Wilmington, in the county of Newcastle and State of Delaware, have invented certain new and useful Improvements in Separable Squares, of which the following is a specification.

This invention relates to squares and more particularly to thin metal squares, such as are used by mechanics, and others, in laying off their work; the objects of my invention are, to provide such squares having means, combined therewith, whereby they may be disjointed, or folded, thus rendering them more readily portable, as when folded, they occupy a relatively small space.

A further object is to lessen the expense in construction from that of the form commonly used, made as it is from a single piece of metal, and finally, to provide such squares having means for disjointment, yet which do not need to be completely separably detached for the purpose of folding.

The invention consists in certain novel features of construction, and combination of parts, hereinafter fully described and shown in the accompanying drawings, in which;

Figure 1. is a side elevation of a complete square, built in accordance with my improvements. Fig. 2. is a partial plan view of the short blade of the square, near the joint end. Fig. 3. is a similar partial plan view of the joint portion of the long blade of the tool. Fig. 4. is a plan of one of the connecting plates, and Fig. 5. is a sectional view, drawn to an enlarged scale, taken on line *a-a*, of Fig. 1.

Like parts are designated by like characters, throughout the several views.

A square made in accordance with my invention consists of two principal parts, a long and a short blade, connected at right angles to each other, and in such way as to form a rigid joint while in use.

The long blade, indicated by the numeral 1, may be of any preferred length, width and thickness desired, usually when combined, giving a straight surface of 24 inches in length; the blade 2, corresponds with the blade 3, in thickness, but is usually shorter and narrower; both have straight, parallel edges, and are usually provided with graduations for convenience.

Near one end of the short blade 2, I pro-

vide two projections as at 2', which may be of the same thickness, but preferably somewhat wider than the thickness of the material of which the square is made; these projections are adapted to enter and fit closely into the recesses 1', formed in the abutting end of the long blade 1, of the square, but somewhat shorter than the depth of the recesses so that the projections will not bottom therein; central with the long blade, and near the same end, I form an elongated aperture 3, the use of which will be later described.

On both sides of the square, at the joint of the blades, I secure plates 4 and 5, the same being riveted, or otherwise rigidly secured, to the blade 2, by the rivets 6; the plates 4 and 5, extend beyond the contacting edge of the blade 2, and are adapted to receive the end of the blade 1, having the opening 3, disposed in such manner that a screw 7, passing freely through the plate 4, may work freely within the slot; the screw 7, may have a knurled or corrugated head as 7', allowing it to be operated by the thumb and finger, and is further provided with a slot, as shown, for a screw driver; its operation is to draw the two plates tightly together, it being screw-threaded into the plate 5, binding the blade 1, disposed between plates after the manner of a tongue, and securely holding it in position against the plate 2; at the same time the projections 2', in the recesses 1', serve to locate and maintain the two parts rigidly, in lateral relation, one to the other, against accidental displacement.

In order to fold my square it is necessary only to loosen the screw 7, move the blade 1, away from, or out of connection with the blade 2, whereupon it may be turned parallel therewith, swiveling on the screw 7, and secured by it in that position, if preferred.

While it is possible to entirely withdraw the screw 7, it is by no means necessary, therefore there are no loose parts to become lost, entailing vexation and annoyance on the part of the operator.

I am aware that detachable squares have long been in existence, hence I do not claim the principle broadly as my own, but

What I do claim and desire to secure by Letters Patent is:

A separable square comprising two blade members having square ends, adapted to be secured together at right angles to each other, the end of one member having spaced

recesses and a slot formed therein, and the side edge of the other member, adjacent its end, being provided with spaced projections adapted to fit in said recesses, the member
5 with the projections having plates secured to its sides extending over said projections and provided with apertured ends, the aperture of one of said plates being threaded, and
10 a thumb screw extending through said apertures and slot of the adjacent member where-

by said members can be locked at right angles to each other or parallel to each other.

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

ALBERT C. WAECKER.

Witnesses:

M. L. GILBERT,
C. F. DEYHLE.