No. 788,223. PATENTED APR. 25, 1905.

J. R. SIMPSON.

CARPENTER'S SQUARE.

APPLICATION FILED JUNE 11, 1904.

Fig. 3.

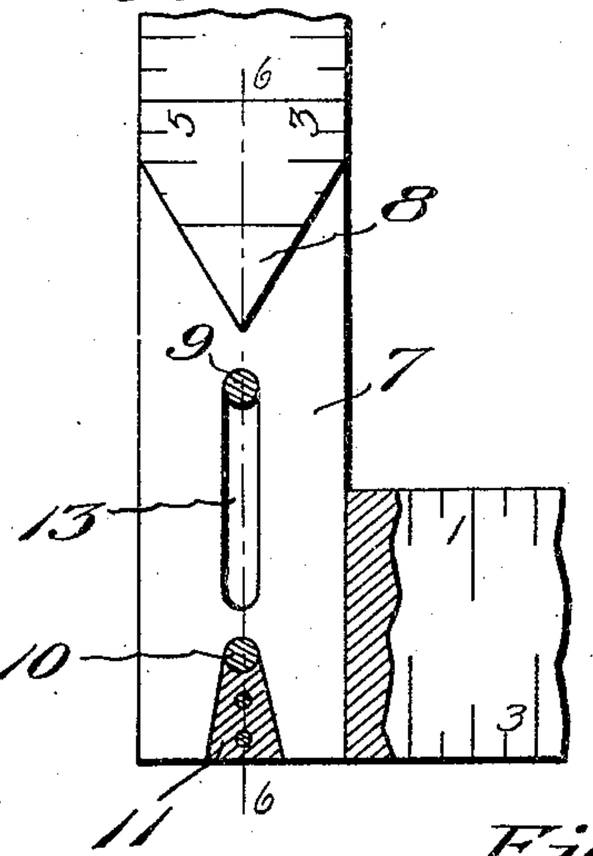


Fig. 4.

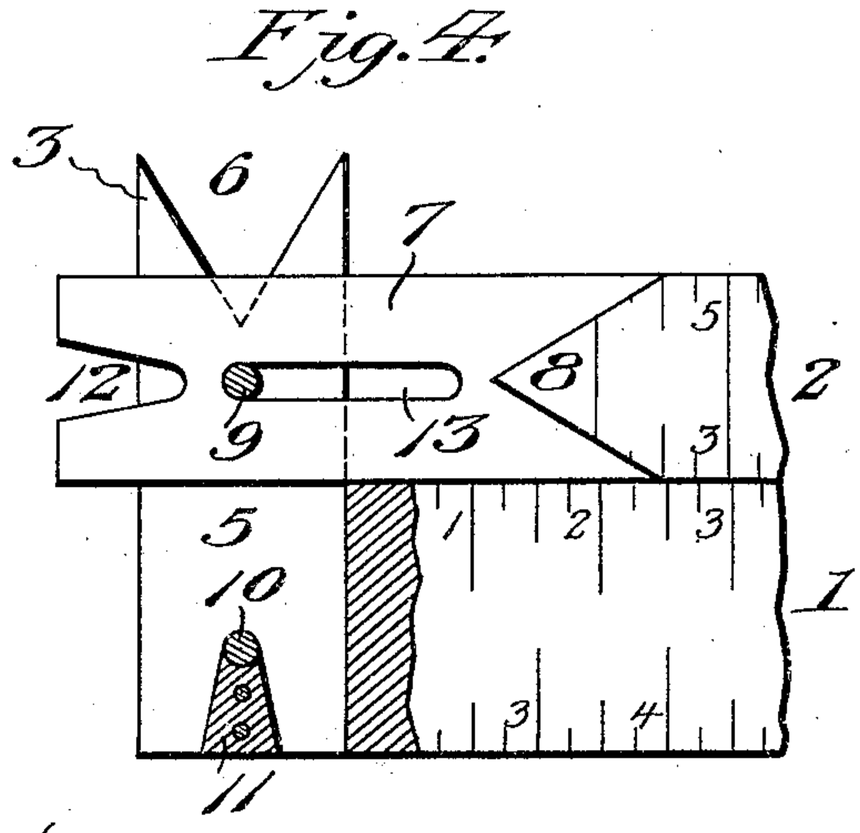


Fig. 1.

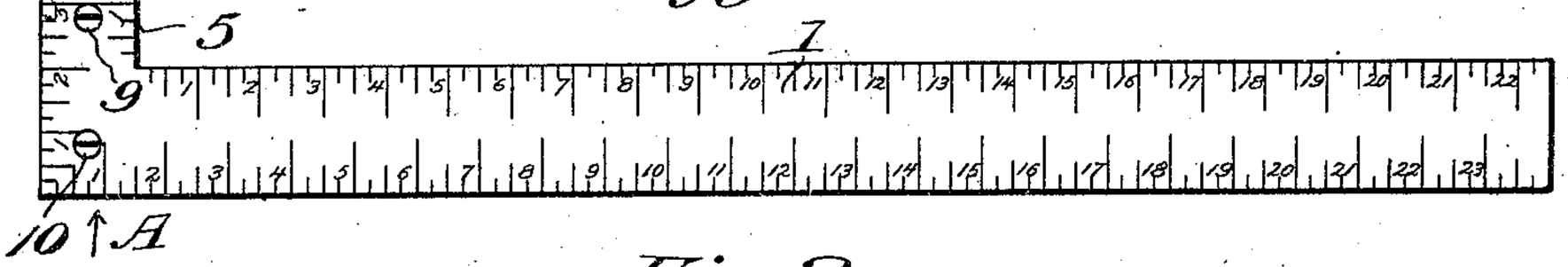


Fig. 2.

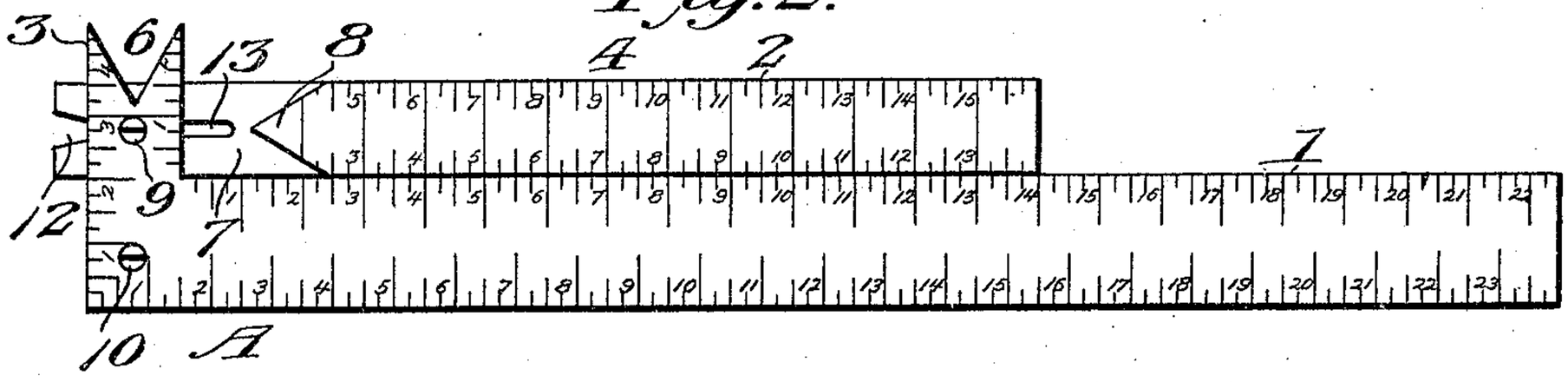


Fig. 5.

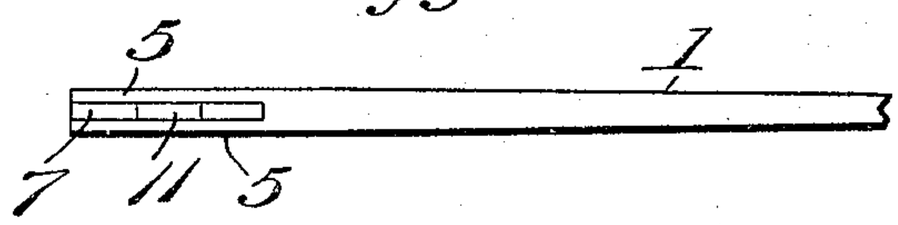
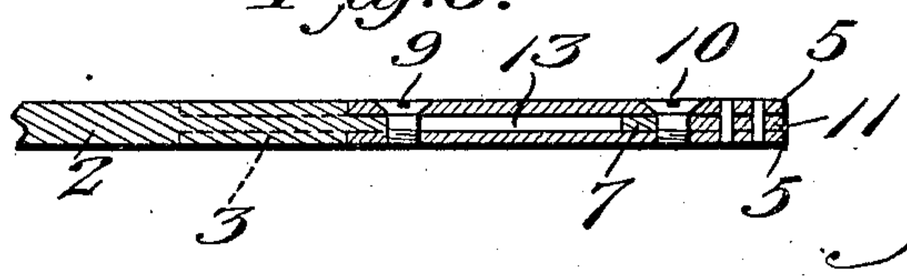


Fig. 6.



Inventor

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No. 788,223. Patented April 25, 1905.

UNITED STATES PATENT OFFICE.

JOHN R. SIMPSON, OF CHICAGO, ILLINOIS.

CARPENTER'S SQUARE.

SPECIFICATION forming part of Letters Patent No. 788,223, dated April 25, 1905.

Application filed June 11, 1904. Serial No. 212,177.

To all whom it may concern:

Be it known that I, JOHN R. SIMPSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Carpenters' Squares, of which the following is a specification.

This invention relates to a carpenter's steel square, which is generally made with two limbs, one being about two feet long, while the other has a length of sixteen inches. A tool of this size and shape is unhandy to carry with other tools and difficult to secure in an ordinary hand tool-box. To overcome this objection, I have devised a square one limb of which is to be folded so that it may lie against the other limb for ease of transportation without sacrificing the rigidity or trueness of the square when opened for use.

The construction is such that the square may be opened or folded very quickly, and when opened the movable limb is so connected to the stationary one by interlocking parts that it is held perfectly true and free from "play" where the members are joined.

In the accompanying drawings, Figure 1 is a face view of my improved folding square ready for use. Fig. 2 is a similar view of the square folded. Fig. 3 is an enlarged detail view, partly in section, illustrating the joint between the two arms of the square when open. Fig. 4 is a like view showing the square folded. Fig. 5 is an edge view of the square looking in the direction of the arrow A, Fig. 1. Fig. 6 is a sectional view on the line 6 6 of Fig. 3.

The square comprises two limbs 1 and 2, the limb 1 being the longer. The limb 2 is made in two parts 3 and 4, pivoted together so that the part 4 may fold against the limb 1, as clearly represented in Fig. 2. The part 3, which is quite short and integral with the limb 1, is centrally mortised, as at 5, the mortise extending to the outer edge of the limb 1. (See Figs. 3 and 4.) The end of the part 3 has a notch 6, preferably V-shaped, cut therein, for a purpose hereinafter described. The lower end of the part 4 of the limb 2 is made with a tenon 7 to fit snugly within the notch 5 and has formed thereon shoulders 8 of V or other shape, which are adapted to enter the notches 6 when the square is open for use, as may be seen in Fig. 1.

The numerals 9 and 10 indicate tightening-screws which pass through the part 3 in the central line of the limb 2, while 11 indicates a steady-block riveted or otherwise fastened within the mortise below the screw 10. The sides of the steady-block are by preference tapered. The tenon 7 has a tapered notch 12, formed in its lower end and adapted to fit over the steady-block 11 and screw 10, and a central longitudinal slot 13, through which the screw 9 passes.

When the square is in operative position, the shoulders 8 and notch 12 on the part 4 of the limb 2 engage, respectively, with the V-shaped notches 6 on the part 2, and the steady-block 11 being held rigidly in this position by tightening the screws 9 and 10. To fold the square, the screws are loosened and the part 4 drawn endwise until the lower end of the slot 13 strikes the pin 9. In this position the shoulders 8 are drawn out of the notches 6 and the notch 12 released from the steady-block 11. The part 4 may now be turned on the screw 9 as a pivot until it rests against the limb 1, as shown in Fig. 2. The screws 9 and 10 may now be tightened to hold the part 4 in folded position. It is unnecessary to describe the manner of opening the square; this will be readily understood from the above description.

The notches 6 and the shoulders 8 are not necessarily made V-shaped, as shown in the drawings; but I consider that form preferable to others, as the parts so shaped not only fit together snugly at all times and hold the part 2 in a true line, but they are less liable to wear, a result which would be liable to throw the square out of true.

Having thus described the invention, what is claimed as new is—

A folding square having one limb divided into two parts, one of said parts being integral with the other limb and having an end provided with a notch having inclined walls and a mortise, screws in said part extending

across said mortise, and a steady-block having inclined sides or faces, and the other part of said first-named limb having a tenon on its end provided with a longitudinal slot and having a notch adapted to engage said steady-block, and inclined shoulders on said part to interlock with the notch on the first-mentioned part, one of said screws passing through said slot and forming a pivot for the second part of said limb.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN R. SIMPSON.

Witnesses:
W. F. HERMANN,
BERNARD MCNEIL.