No. 749,112. PATENTED JAN. 5, 1904.

W. STEERS, SR.

CARPENTER'S FOLDING SQUARE.

APPLICATION FILED JULY 16, 1903.

NO MODEL.

Fig. 1.

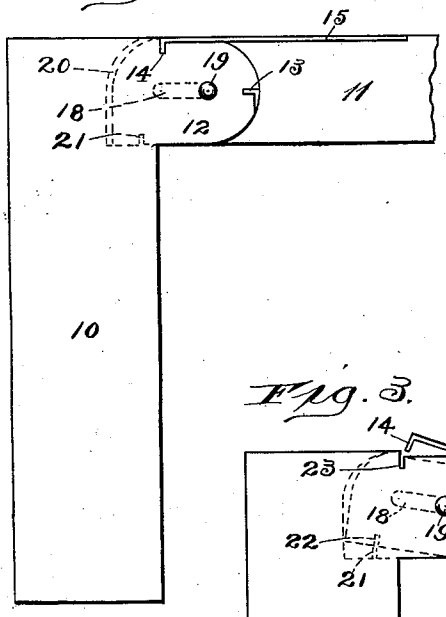


Fig. 2.

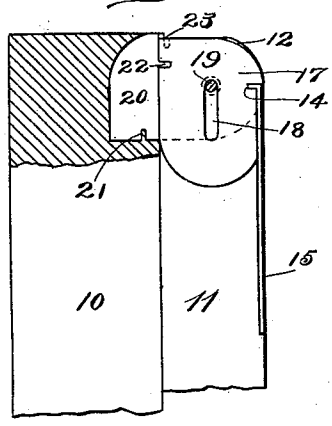


Fig. 3.

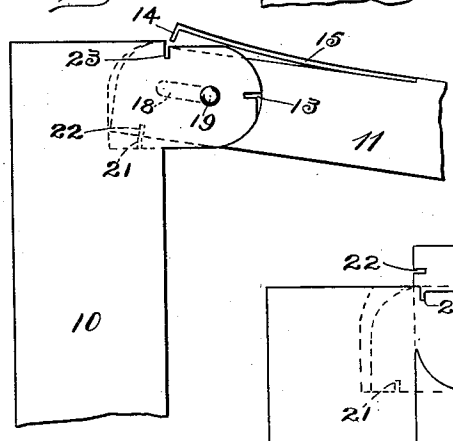


Fig. 5.

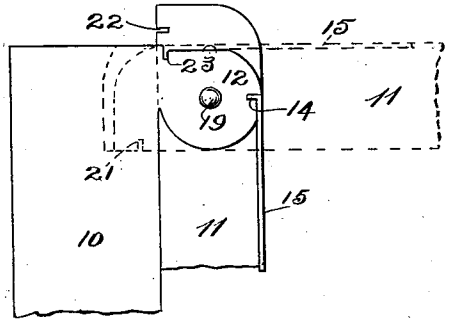
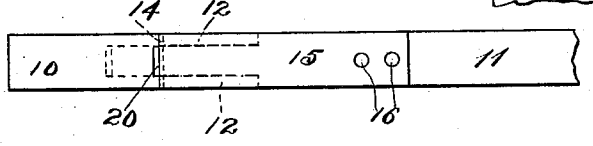


Fig. 4.



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No. 749,112. Patented January 5, 1904.

UNITED STATES PATENT OFFICE.

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CARPENTER'S FOLDING SQUARE.

SPECIFICATION forming part of Letters Patent No. 749,112, dated January 5, 1904.

Application filed July 16, 1903. Serial No. 165,741. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STEERS, Sr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Carpenters' and Joiners' Folding Squares, of which the following is a specification.

This invention relates to improvements in a square, such as is used by carpenters, joiners, masons, and other mechanics; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide a square the members of which may be folded together, so that it can be placed in a tool-box without projecting therefrom, and which shall be simple and inexpensive in construction, strong, and durable, with its parts so arranged that the members comprising the blades of the square may be locked or firmly held either in their extended or folded positions.

Another object of the invention is to so construct the device that when the members are folded together there will be no projecting portion at their joint to be marred or injured by other tools.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a face view of a portion of a square embodying my invention, showing its members in their extended positions. Fig. 2 is a face view, partly in section, showing portions of the members comprising the square folded together. Fig. 3 is a fragmental face view of the square, showing the parts in the act of being folded. Fig. 4 is a plan view of Fig. 1; and Fig. 5 is a face view of a portion of the square, showing a modification in its construction and illustrating the members folded together by continuous lines and extended by dotted lines.

Like numerals of reference refer to corresponding parts throughout the different views of the drawings.

The reference-numeral 10 represents the longer member or blade, and the numeral 11 represents the shorter member or blade, both of which may be provided with a scale representing feet, inches, and fractions thereof. These blades may be made of any suitable size, length, and material, but preferably of metal. The member 10 is provided at one of its ends (which I will term its "upper" end) with two lateral extensions 12, which have their free ends rounded and formed with a recess 13 to receive a projection 14 on the free end of a spring 15, which is secured to the upper edge of the member or blade 11 by means of rivets 16 or otherwise. As is clearly shown in Figs. 1, 2, and 4 of the drawings, the extensions 12 are located a slight distance apart and parallel with one another, so as to receive the inner end of the shorter member, which end is reduced or formed with a tenon 17, having a slot 18 for the reception and operation of a pivot-pin 19, which passes through the extensions 12 and pivotally secures the shorter member 11 to the longer one.

By reference to Fig. 2 of the drawings it will be seen that the member 10 has in its upper portion a recess 20, which communicates with the space between the extensions 12 and is for the reception and operation of the inner end of the shorter member. Extending upwardly from the lower wall of the recess 20 is a lug 21, which is used to engage a recess 22 in the lower edge of the tenon 17 of the shorter member when said member is extended, thereby serving to assist in securing it in the said position. The extensions 12 are each provided with a recess 23 in their upper edges to receive the projection 14 on the spring 15 when the shorter member is in its raised position.

In Fig. 5 I have shown a modification, which consists in forming the extensions 12 substantially circular and employing a shorter member without the slot 18 used in the other construction. In this modification it is apparent that the shorter member when folded to the position shown by continuous lines in Fig. 5

will project somewhat beyond the end of the longer member; but otherwise the operation and construction of the parts are the same as shown in Figs. 1 to 4, inclusive, and above set forth.

From the foregoing and by reference to the drawings it will be seen and clearly understood that when the members 10 and 11 are in the positions shown in Fig. 1 they will be firmly held by means of the spring 15, which is countersunk in the upper edge of the member 11 and the upper edges of the extensions 12, and by means of the lug or projection 21, which engages the recess 22 in the tenon or reduced portion 17 of the shorter member. When it is desired to fold the members together, the spring 15 is released from the recesses 23 in the extensions 12, when by turning the member 11 on the pivot 19 it is evident that the slot 18 will permit it to slide downward, so that its upper end will be about flush with the upper edges of said extensions. When thus folded together, the spring 15 will engage the recesses 13 in the free ends of the extensions and firmly hold the members together.

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

1. A folding-square, comprising two members, one of said members being provided at one of its ends with a recess and two parallel and lateral extensions, said extensions having recesses in their free ends and upper edges, the other member being movably secured between said extensions, and a spring secured to the edge of said member and having a projection to engage the recesses in the extensions, so that the members may be fixed at right angles to one another as well as when they are folded together, substantially as described.

2. A folding square, comprising two members, one of said members being provided at one of its ends with a recess and two parallel and lateral extensions, said extensions having recesses in their free ends and upper edges, the other member having near one of its ends a slot and in its edge a recess and located between said extensions, a pin passing through said slot and secured in the extensions, a projection located in the recess of the first-named member, and a spring secured to the edge of the slotted member and having a projection to engage the recess in the extensions, substantially as described.

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