W. W. WORD.

CORNER TROWEL.

APPLICATION FILED NOV. 30, 1920.

1,383,688. **Patented July 5, 1921.**

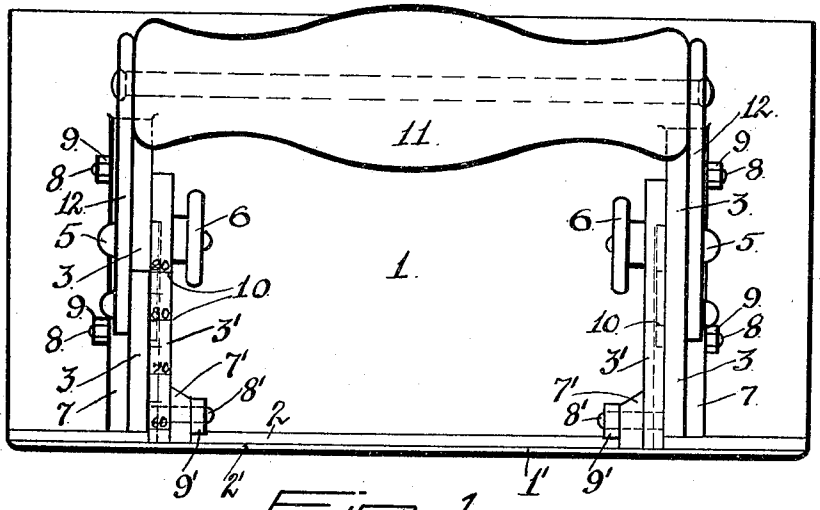


Fig. 1.

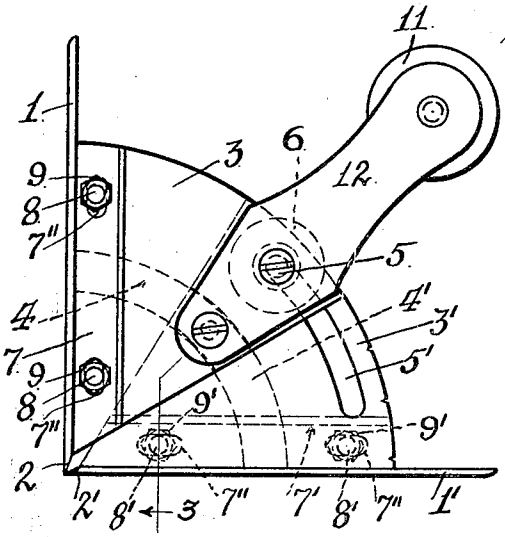


Fig. 2.

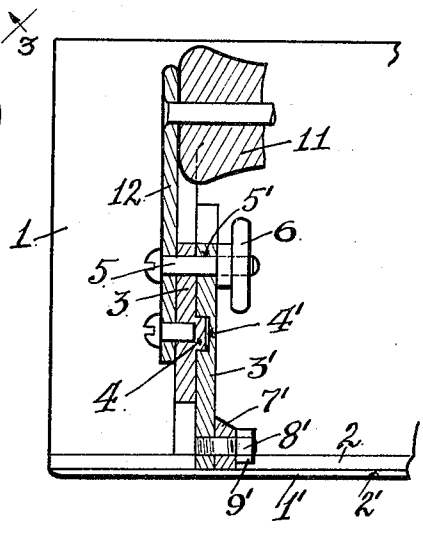


Fig. 3.

WITNESS

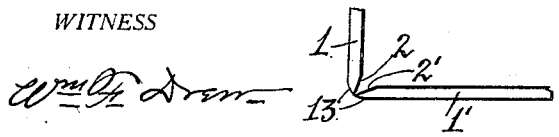


Fig. 4.

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CORNER-TROWEL.

1,383,688. Specification of Letters Patent. Patented July 5, 1921.

Application filed November 30, 1920. Serial No. 427,427.

To all whom it may concern:

Be it known that I, WILLIAM W. WORD, a citizen of the United States, residing at Piedmont, in the county of Alameda and State of California, have invented certain new and useful Improvements in Corner-Trowels, of which the following is a specification.

My invention relates to smoothing trowels of that class used by cement workers and plasterers for working in corners, and which have two contiguous blades set at an angle to each other.

The object of the invention is to provide a trowel of the described class in which the angular relation of the two blades may be varied, so that one trowel may be used for working in corners having different angular dimensions. It is customary, in the mentioned trades, for an artisan to have a number of corner trowels, each having a fixed angularity, each trowel being capable of use only in a corner of the proper angularity. By using a tool embodying the principles of my present invention, however, the artisan can work all corners with the one trowel, and need not be supplied with the usual set of trowels.

A further object of my invention is to provide an adjustable corner trowel in which the angle line of the adjacent edges of the two blades is practically constant, by reason of said edges being always contiguous without any substantial gap therebetween, no matter what the angle between said blades may be. This is necessary for the production of smooth work.

My invention will now be fully described with reference to the accompanying drawings, in which—

Figure 1 is a front elevation of my corner-trowel.

Fig. 2 is an end view of the same.

Fig. 3 is a section on the line 3—3 of Fig. 2.

Fig. 4 is a fragmentary view of the meeting edges of the two blades, showing a rounded corner as a modification.

In the drawings, the reference numerals 1 and 1′ designate respectively the two blades of the trowel, 2 and 2′ being the contiguous edges thereof forming the angle line. Segmental members 3 and 3′ are respectively secured to the blades 1 and 1′, perpendicularly thereto. There are preferably two pair of such segmental members, one pair near each end of said blades, the members 3 lying adjacent to and outside the members 3′.

The segmental members 3 are provided with arcuate laterally projecting tongues 4, which engage and slide in correspondingly arcuate grooves 4′ formed in the adjacent faces of the segmental members 3′. Said tongues 4 and grooves 4′ are formed upon the arc of a circle whose center lies in the line of intersection of the outer surfaces of the blades 1 and 1′, and the contiguous edges 2 and 2′ of said blades are relatively oppositely inwardly beveled, as shown, so that, no matter in what relative angular position said blades may be, their outer surfaces are always closely contiguous leaving practically no gap between the edges 2 and 2′ in the angle line.

The segmental members 3′ are also formed with arcuate slots 5′, cut upon the arc of a circle having the same center as in the case of the tongues and grooves 4 and 4′. Pins or studs 5, secured to the members 3, project laterally and freely through said arcuate slots 5′, and carry thumb nuts 6 upon their projecting threaded ends, which may be screwed up to lock the members 3 and 3′ together, to prevent relative movement of the blades 1 and 1′.

In order to provide for adjustment to compensate for wear on the outer surfaces of the blades 1 and 1′ at the angle line which would tend to cause a gap between the meeting edges 2 and 2′ of said blades, the segmental members 3 and 3′ are adjustably secured to their respective blades. The blades carry fixed or integral flanges 7 and 7′ respectively, against which rest the segmental members 3 and 3′. Elongated slots 7′′ are provided in said flanges 7 and 7′ and in these slots, pins 8 and 8′ secured in the segmental members 3 and 3′ play and receive nuts 9 and 9′. By loosening said nuts the blades 1 and 1′ may be set up until their edges 2 and 2′ meet, or may be removed entirely for replacement or repair.

The outer arcuate faces of the segmental members 3′ are preferably marked with graduations 10, which coöperating with the ends of the members 3, show at a glance the measurement of the angle included between the two blades 1 and 1′. A handle 11, by means of which the tool is operated, is carried between brackets 12 secured to and projecting from the members 3.

In case it be desired to have the corner of the trowel slightly rounded, instead of sharp, the meeting edges of the outer faces of the two blades may be slightly curved as shown at 13 in Fig. 4. In this case the axis of relative movement of the blades is along the line at the outer extremity of the bevels of the blades, so that even with the slight round effect there will be a minimum tendency to gap along the angle line, under adjustment.

I claim:—

1. A corner-trowel comprising angularly disposed blades, the adjacent edges of which meet in a line in the planes of their outer faces, and are spaced from each other back of said line; and means connecting said blades, for turning them about their meeting line as an axis, to vary their angular relation.

2. A corner-trowel comprising angularly disposed blades, with their outer faces alone meeting in a line and their edges back of said meeting line being relatively oppositely inwardly beveled to afford clearance therebetween in moving the blades toward each other; and means connecting said blades for turning them about their meeting line as an axis, to vary their angular relation.

3. A corner-trowel comprising angularly disposed blades, their outer faces meeting in a line; means connecting said blades for turning them about their meeting line as an axis, to vary their angular relation; and an adjustable connection between said connecting means and said blades for relatively adjusting the latter to compensate for wear of their edges along their meeting line.

4. A corner-trowel comprising angularly disposed blades, their outer faces meeting in a line; overlapping connecting members between the blades, one of said members having a groove and a tongue in the other of said members slidable in said groove, both groove and tongue being on an arc having the meeting line of the blades as an axis; and means for controlling the slidable connection between said members to hold the blades in adjusted relation.

5. A corner-trowel comprising angularly disposed blades, their outer faces meeting in a line; overlapping connecting members between the blades, one of said members having a groove and a tongue in the other of said members slidable in said groove, both groove and tongue being on an arc having the meeting line of the blades as an axis, and means for controlling the slidable connection between said members consisting of an arcuate slot in one member; a screw pin in the other member playing in the slot and a nut on the screw pin.

6. A corner-trowel comprising angularly disposed blades, their outer faces meeting in a line; overlapping connecting members between the blades, one of said members having a groove and a tongue in the other of said members slidable in said groove, both groove and tongue being on an arc having the meeting line of the blades as an axis; means for controlling the slidable connection between said members consisting of an arcuate slot in one member; a screw pin in the other member playing in the slot and a nut on the screw pin; a flange on each blade, and an adjustable connection between said respective connecting members and flanges, for relatively adjusting the blades to compensate for wear of their edges along their meeting line.

In testimony whereof I have signed my name to this specification.

WILLIAM W. WORD.