(No Model.)

# A. E. CROSS.

## TOOL FOR FINISHING JOINTS OF BRICK WALLS.

No. 352,082. Patented Nov. 2, 1886.

Fig. 1.

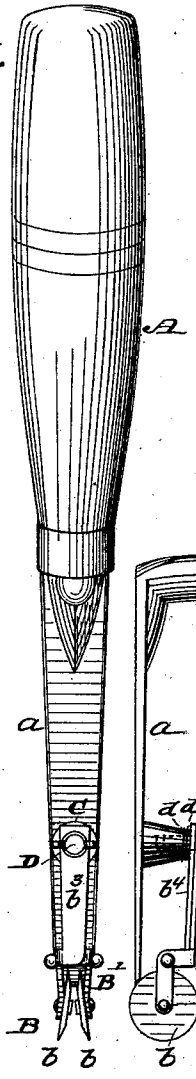


Fig. 2.

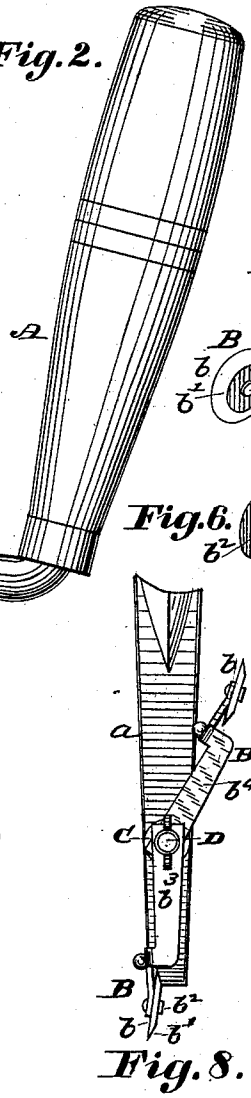


Fig. 3.

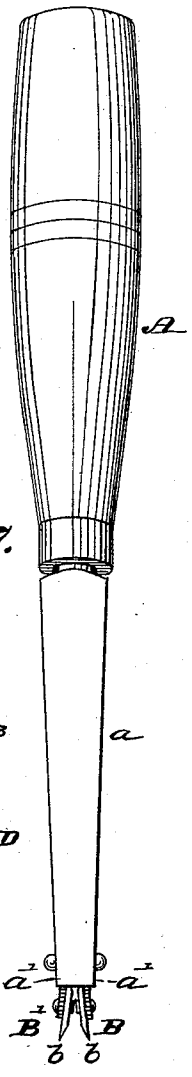


Fig. 4.

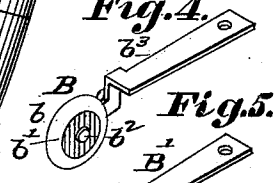


Fig. 5.

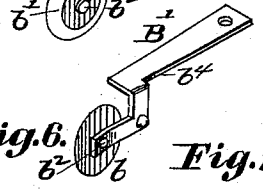


Fig. 6.



Fig. 7.

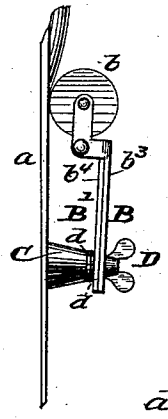
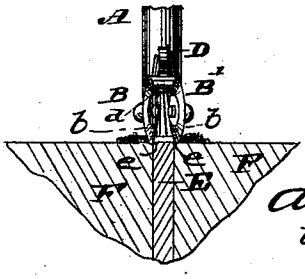


Fig. 8.



Witnesses.
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Atty

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# UNITED STATES PATENT OFFICE.

ARTHUR E. CROSS, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO BENJAMIN F. REX, OF SAME PLACE.

## TOOL FOR FINISHING JOINTS OF BRICK WALLS.

SPECIFICATION forming part of Letters Patent No. 352,082, dated November 2, 1886.

Application filed July 9, 1886. Serial No. 207,594. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR E. CROSS, of St. Louis, Missouri, have made a new and useful Improvement in Tools for Finishing Joints of Brick Walls, of which the following is a full, clear, and exact description.

By means of this improved tool the mortar can be scored out at the edge or edges of the joints of brick walls.

The improvement consists, mainly, in providing a trowel or analogous tool adapted for bearing upon a brick-wall joint or upon the joint and the abutting bricks with a device shaped and arranged, as the trowel or tool is drawn along the joint, to score into and remove the mortar at the edge or edges of the joint.

The improvement is preferably attached to a form of trowel used by brick-layers for striking and finishing brick-wall joints, and as shown in the annexed drawings, making part of this specification, in which—

Figure 1 is a plan of the improved tool. Fig. 2 is a side elevation. Fig. 3 is a bottom view of the tool. Fig. 4 is a view in perspective of one of the scoring devices. Fig. 5 is a view in perspective, from the same point as that of Fig. 4, of the other of the scoring devices. Fig. 6 is a plan showing one only of the scoring devices in position for use, the other being swung around out of position. Fig. 7 is a side elevation showing both of the scoring devices turned around out of position, so that the trowel can be used as a trowel merely; and Fig. 8 is a view introduced to illustrate the operation of the improvement, the view showing the wall and joint in section and the tool in end elevation.

The same letters of reference denote the same parts.

A represents a trowel such as used upon the joints of brick walls. It is of the customary form otherwise than as modified by the improvement.

B B′ represent the scoring devices. They are secured to the trowel so that both of them or either of them can be used; or, if desired, both of them can be so arranged as to permit of the trowel being used in the ordinary way. The scoring devices are preferably in the form of a wheel, *b*, having a beveled edge, *b′*, and held obliquely to the longitudinal axis of the blade *a* of the trowel, and so as to bring its lower part below the blade *a*. The wheels *b b* are journaled at $b^2$ to the arms $b^3$ $b^4$, respectively, which arms in turn are secured, and so that they can be turned when desired horizontally around thereon, to a bearing, C, upon the trowel-blade *a*. The arms $b^3$ $b^4$ are suitably shaped and extended to bring the wheels *b b*, when to be used, into the position substantially indicated in Figs. 1, 2, 3, 8. By loosening the screw D the arms $b^3$ $b^4$, carrying their respective wheels, can be adjusted upon the bearing C so as to hold the wheels closer together or farther apart from each other, as may be desired, to suit the thickness of the joint E between the bricks F F, Fig. 8, and also so that the wheels shall project beyond the end and respectively in line with the side edges, *a′ a′*, of the blade *a*. The screw D is then tightened to fasten the arms and wheels in position, and then by drawing the tool along the joint E the mortar is, as indicated in Fig. 8, scored out at the edges *e e* of the joint. The blade *a* at the same time bears upon the joint and serves to smooth it between the edges *e e*.

The trowel can be used with one only of the wheels, in which case the other wheel is turned out of the way, as indicated in Fig. 6. The wheels can be set closer together than the width of the end of the blade *a*. The arms $b^3$ $b^4$ can also be set to cause the wheels to score deeper or shallower, as may be desired. A desirable method of accomplishing this is indicated in Figs. 2, 7, 8. D represents a screw adapted to be screwed into the bearing C, and when thus attached the screw, in conjunction with the bearing C, forms the pivot on which the arms $b^3$ $b^4$ are held and turned. When it is desired to hold the arms closer to the blade, the screw D is unscrewed from the bearing C, and one or more, as desired, of the washers *d* removed, after which the screw carrying the arms is screwed farther into the bearing C than before, and so as to cause the head of the screw to bind the arms $b^3$ $b^4$ upon the bearing C. This adjustment of the arms causes the wheels to be correspondingly adjusted with reference to the blade *a* and to cut deeper into the mortar. The arms can be similarly adjusted to suit the diameter of the wheels as they become worn away.

I claim—

1. A trowel or analogous tool whose blade is provided with a scoring device or devices, as and for the purpose described.

2. A trowel or analogous tool having a scoring device adjustable laterally thereon, as and for the purpose described.

3. A trowel or analogous tool having a scoring device attached to an arm, which in turn is capable of being swung around upon the blade of the trowel or tool, as and for the purpose described.

4. The combination of the trowel A and the scoring device or devices B B′, substantially as described.

5. The wheel or wheels *b b*, adjustable toward and from the blade *a*, as and for the purpose described.

Witness my hand this 29th day of June, 1886.

ARTHUR E. CROSS.

Witnesses:
C. C. LOGAN,
C. D. MOODY.