

No. 753,829.

PATENTED MAR. 1, 1904.

W. T. JORDAN.
BLACKBOARD MACHINE.
APPLICATION FILED JUNE 4, 1903.

NO MODEL.

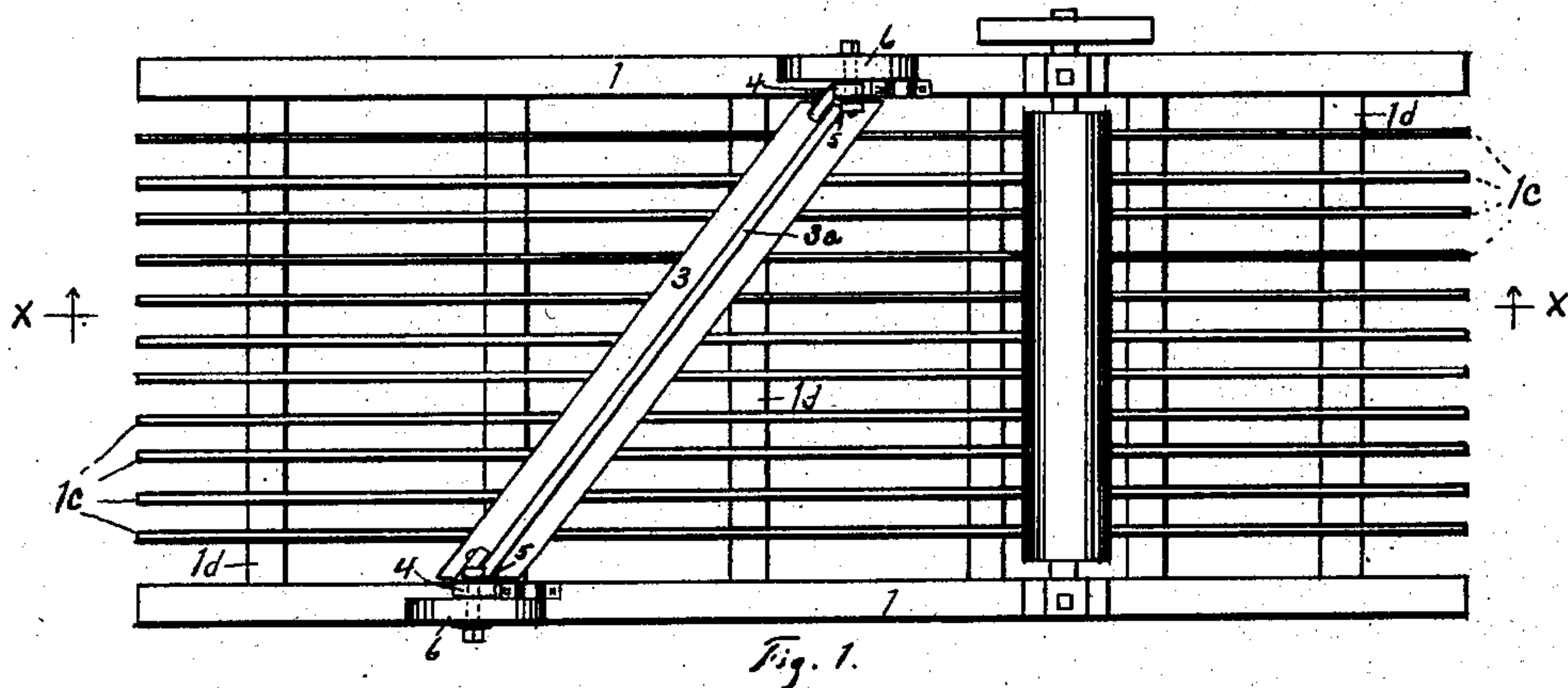


Fig. 1.

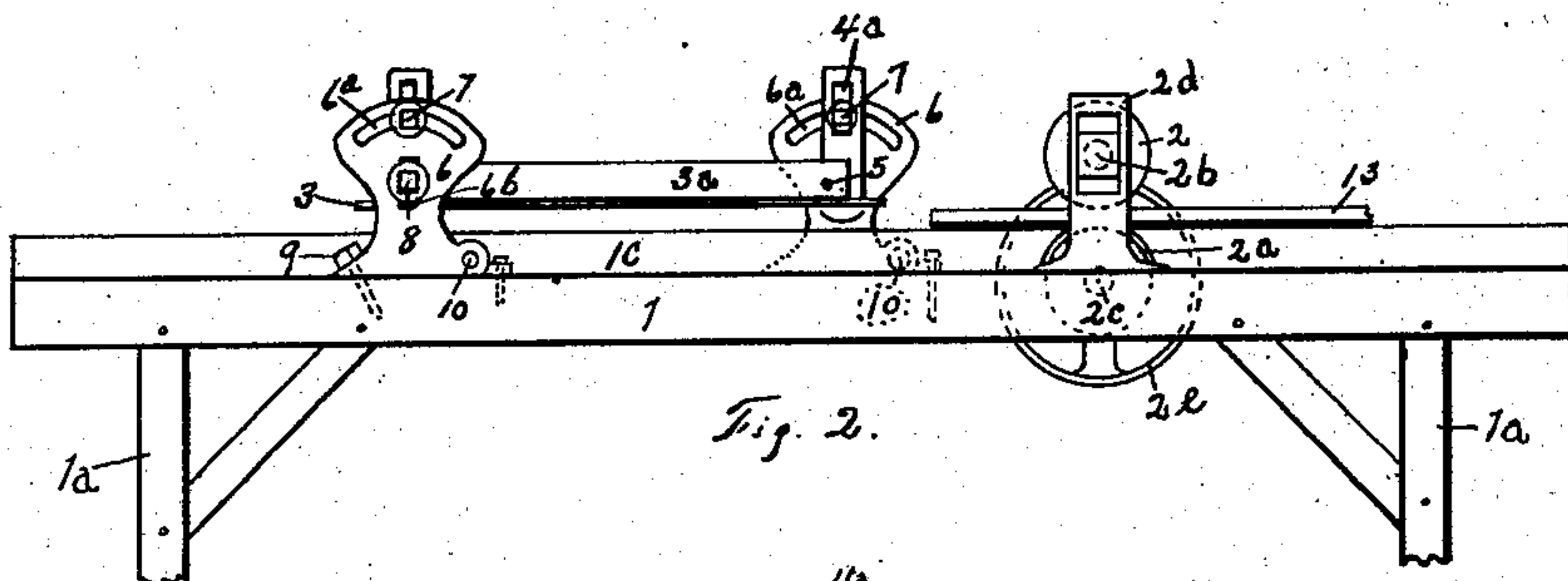


Fig. 2.

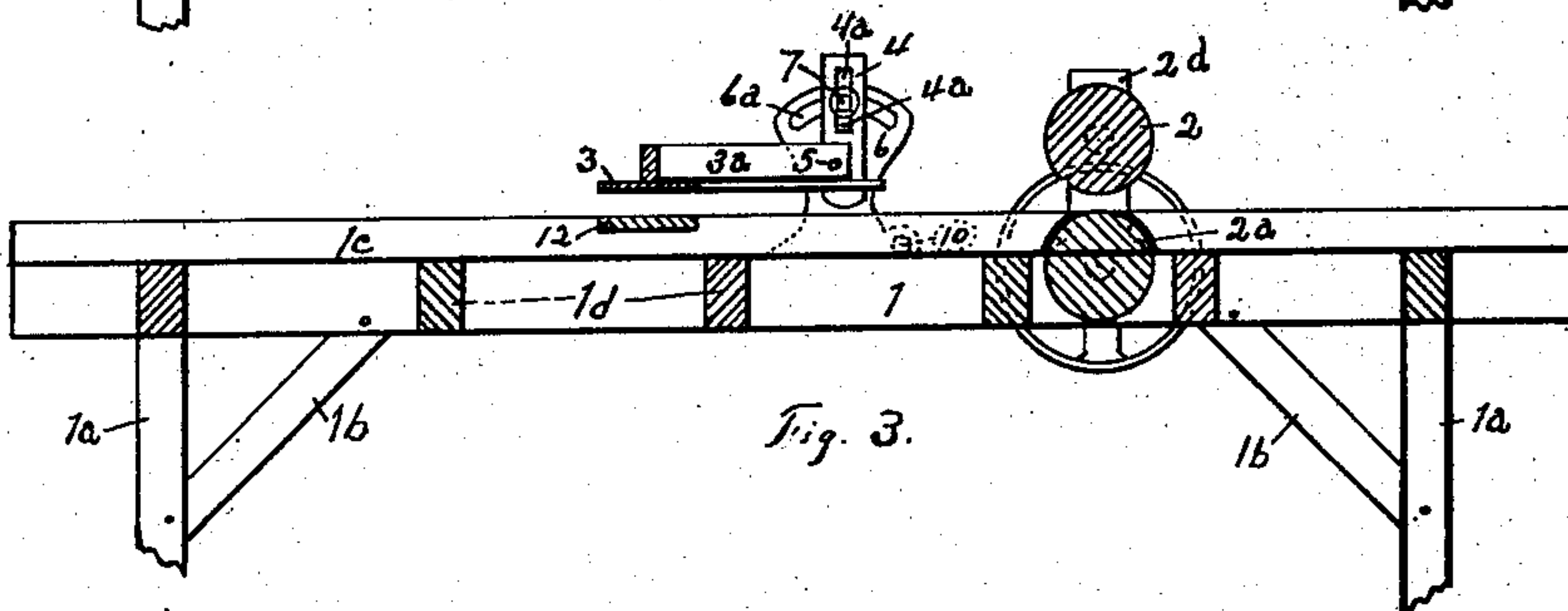


Fig. 3.

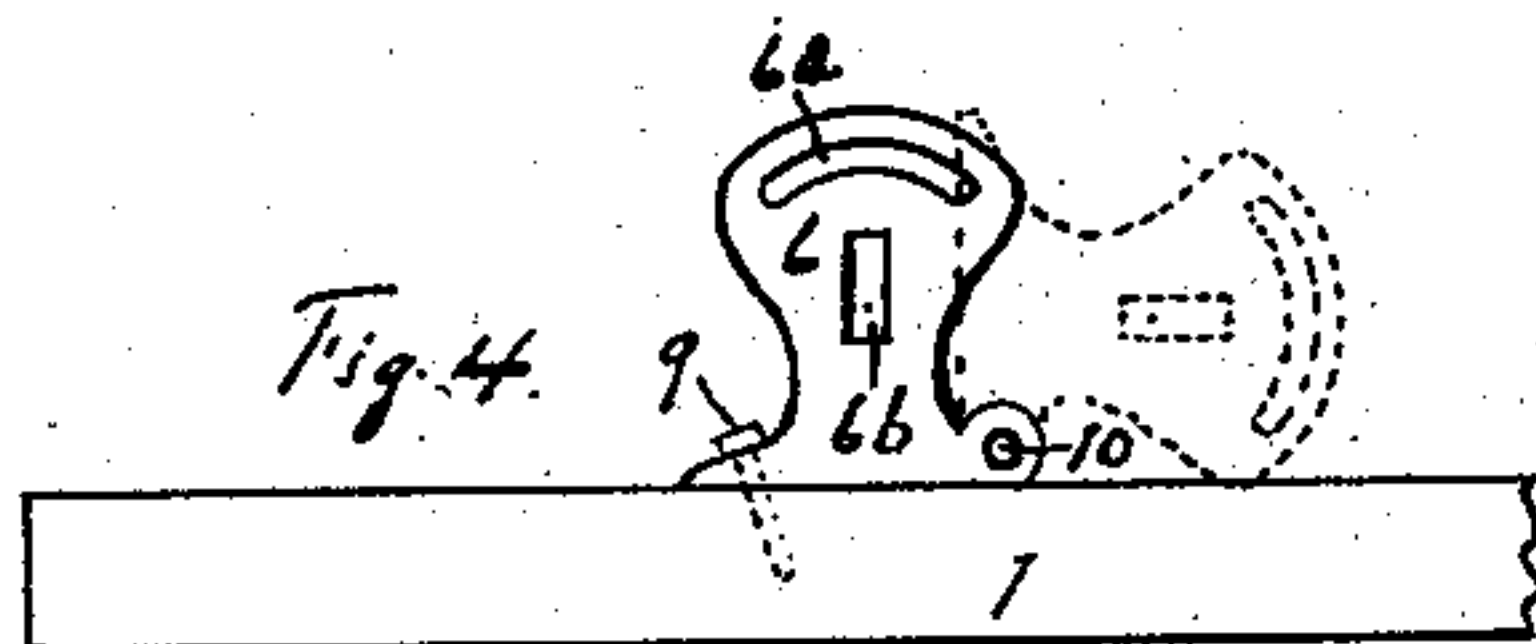


Fig. 4.

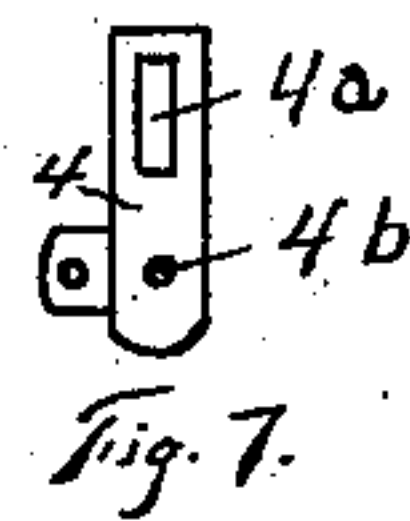


Fig. 7.

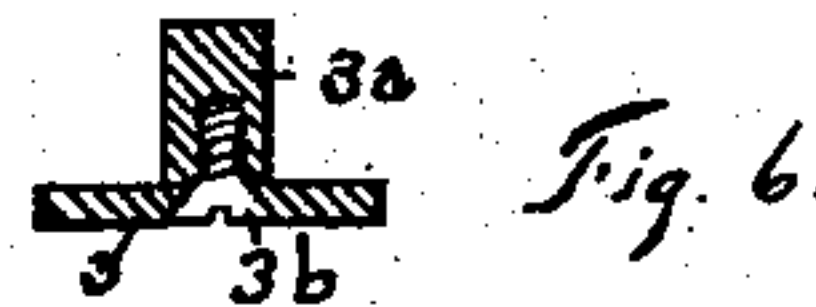


Fig. 6.

WITNESSES:

J. E. Peterson,
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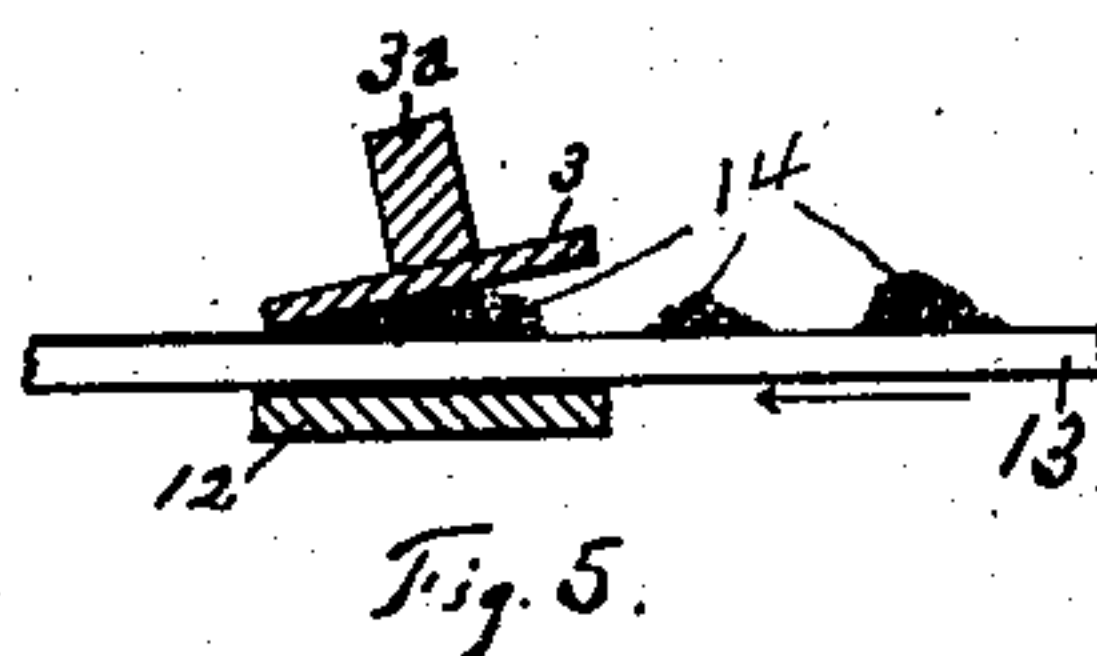


Fig. 5.

INVENTOR

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TO F. A. HOLBROOK, OF CHICAGO, ILLINOIS.

BLACKBOARD-MACHINE.

SPECIFICATION forming part of Letters Patent No. 753,829, dated March 1, 1904.

Application filed June 4, 1903. Serial No. 160,107. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. JORDAN, 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 Blackboard-Machines, of which the following is a specification.

My invention relates to new and useful improvements in machines especially adapted for the manufacture of artificial blackboards.

The object of my improvements is to provide automatic means for applying a viscous slaty composition to blackboard-bases.

A further object is to provide means which will permit the trowel or applying device to be adjusted at any angle or position desired relative to the blackboard being treated.

In the accompanying drawings, Figure 1 is a top plan view of the machine embodying my invention; Fig. 2, a side elevation of same; Fig. 3, a longitudinal sectional view taken on the line X X of Fig. 1; Fig. 4, a detail in side elevation of a bracket forming part of the machine; Fig. 5, a cross-sectional view of the trowel and a bed-plate forming part of the machine and showing a fragment of blackboard-base and illustrating the trowel in operative position; Fig. 6, a cross-sectional view of the trowel; and Fig. 7, a detail in side elevation of a bar forming part of the machine.

Referring to the drawings, in its various details the frame of the machine is shown as built up of longitudinal bed-timbers 1. The supporting-posts 1^a, the braces 1^b, and the strips 1^c, which rest upon the cross-supports 1^d, are spaced apart and form the top or bed of the machine. Extending at right angles to said strips 1^c and located to the right hand of the center of the bed are two rollers 2 2^a, mounted one above the other, respectively, on shafts 2^b 2^c, having bearings 2^d, supported by the bed-timbers. On one end of the lower shaft is secured a pulley 2^e, drivable from any power source. Located to the left of the said rollers and extending diagonally across the bed is a trowel, consisting, preferably, of a flexible metal blade 3, provided on its upper side with a central longitudinal rib 3^a, the blade being se-

cured to the rib by means of machine-screws 3^b, as illustrated in Fig. 6 of the drawings. The ends of the rib are secured to upright bars 4 by means of bolts 5, which pass through the ends of the rib and through portions of the said upright bars, which in turn are adjustably connected to the inside of the brackets 6 by means of clamping-bolts 7 and 8, the former passing through the vertical slots 4^a in the upper ends of the bars and through the curved slots 6^a in the brackets. The bolts 8 pass through the vertical slots 6^b in the brackets and are screwed into threaded openings 4^b in the bars. Said brackets rest upon and are connected to the bed-timbers by means of bolts 9 and the hinge-pins 10. By loosening the bolts 7 and 8 the trowel may be raised or lowered or tilted to accommodate the work in hand. When it is desired to clean the under side of the trowel, the bolts 9 may be removed and the brackets turned over on their side, as illustrated by the dotted lines in Fig. 4, thus permitting free access to the under side of the blade.

Located directly underneath the trowel-blade and extending parallel therewith is a metal bed-plate 12, which is embedded in, supported by, and has its upper face flush with the upper faces of the strips 1^c.

In operation a section of a blackboard-base, as 13, is inserted between the rollers under motion and carried thereby to the left over the top of the frame toward the trowel. As the said blackboard-base travels from the rollers to the trowel a viscous slaty composition, as 14, is deposited upon its upper surface in any manner desired, and as the blackboard-base passes between the bed-plate and the trowel-blade the composition collects underneath the latter, which applies a smooth and uniform coating of the composition to the base, the thickness of the coating being controlled by the distance of the blade above the bed and the firmness by the tension of the blade.

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

1. In a machine of the class described, a

frame having a portion adapted to support a blackboard-base, brackets secured to the frame, and a trowel adjustably mounted on the brackets.

5 2. In a machine of the class described, a frame having a portion adapted to support a blackboard-base, a trowel carrying a blade, brackets supporting the trowel, and hinged to the frame and adapted to turn over on their
10 side to expose the trowel-blade.

3. A machine of the class described comprising a frame, brackets mounted on the frame and having lower vertical slots and provided with upper curved slots, a trowel, a bar
15 secured to the trowel and provided with vertical slots, adjusting devices mounted on the bar and operating in the vertical slots of the brackets, and adjusting devices operating in the curved slots of the brackets and engaging

the vertical slots of the bar, substantially as 20 described.

4. In a machine of the class described a bed adapted to support a blackboard-base, means for carrying the base over said bed, a trowel mounted diagonally above said bed and carry- 25 ing a blade and means for adjusting said trowel relative to the bed.

5. In a machine of the class described a bed adapted to support a blackboard-base, means for carrying the base over said bed, and a 30 trowel mounted above and extending across said bed.

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

WILLIAM T. JORDAN.

Witnesses:

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