

No. 743,863.

PATENTED NOV. 10, 1903.

W. GRISCOM & C. H. LOUTZENHISER.
SIEVE CLEANER FOR BOLTING MACHINES.

APPLICATION FILED OCT. 25, 1902.

NO MODEL.

Fig. 1.

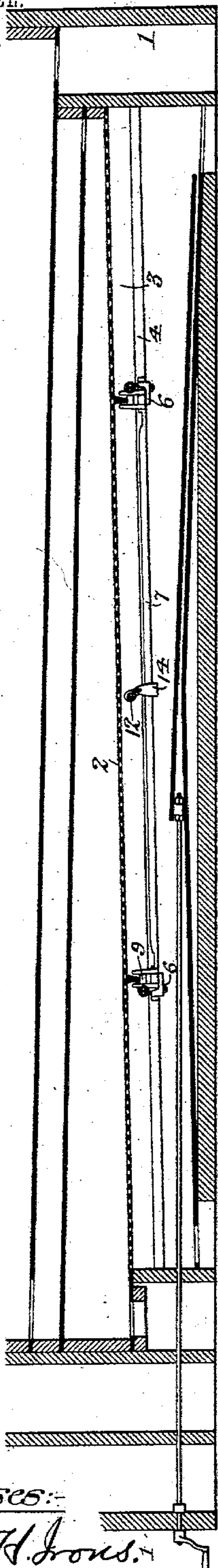


Fig. 2.

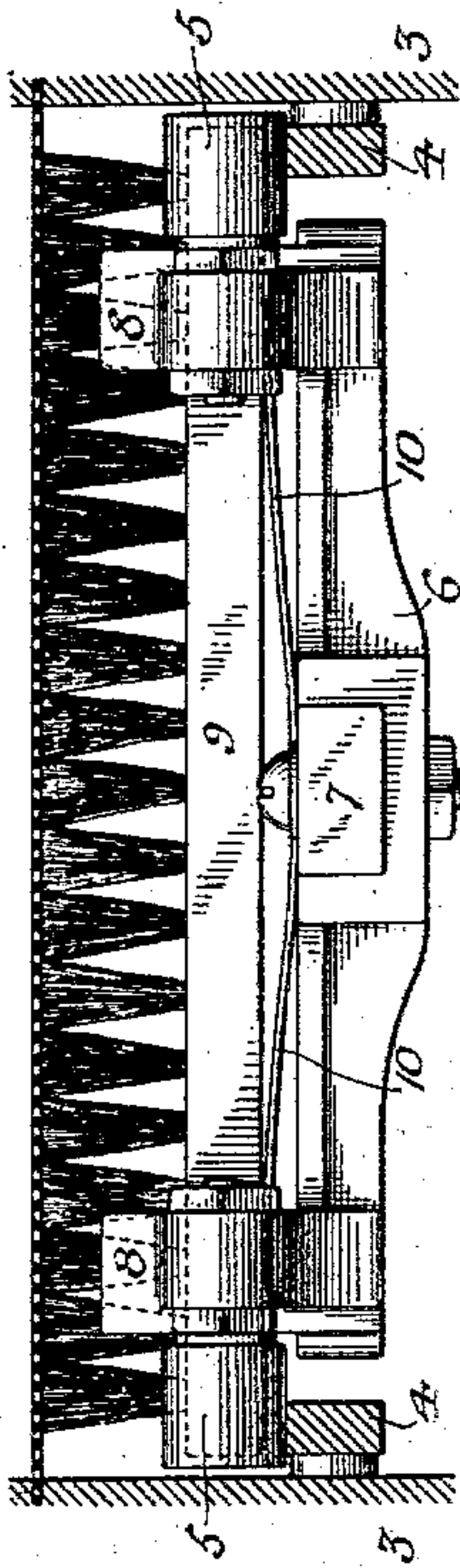


Fig. 3.

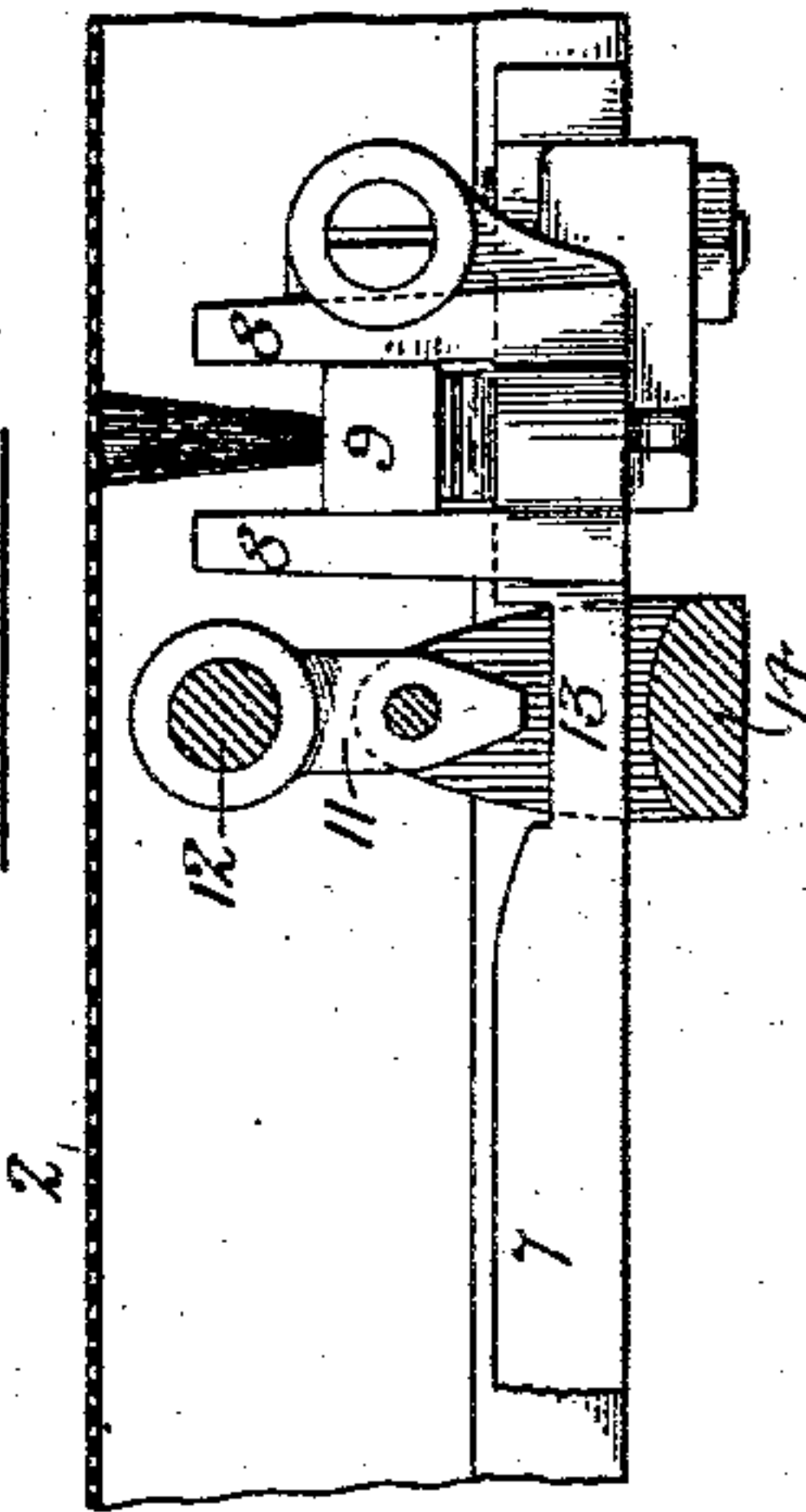


Fig. 4.

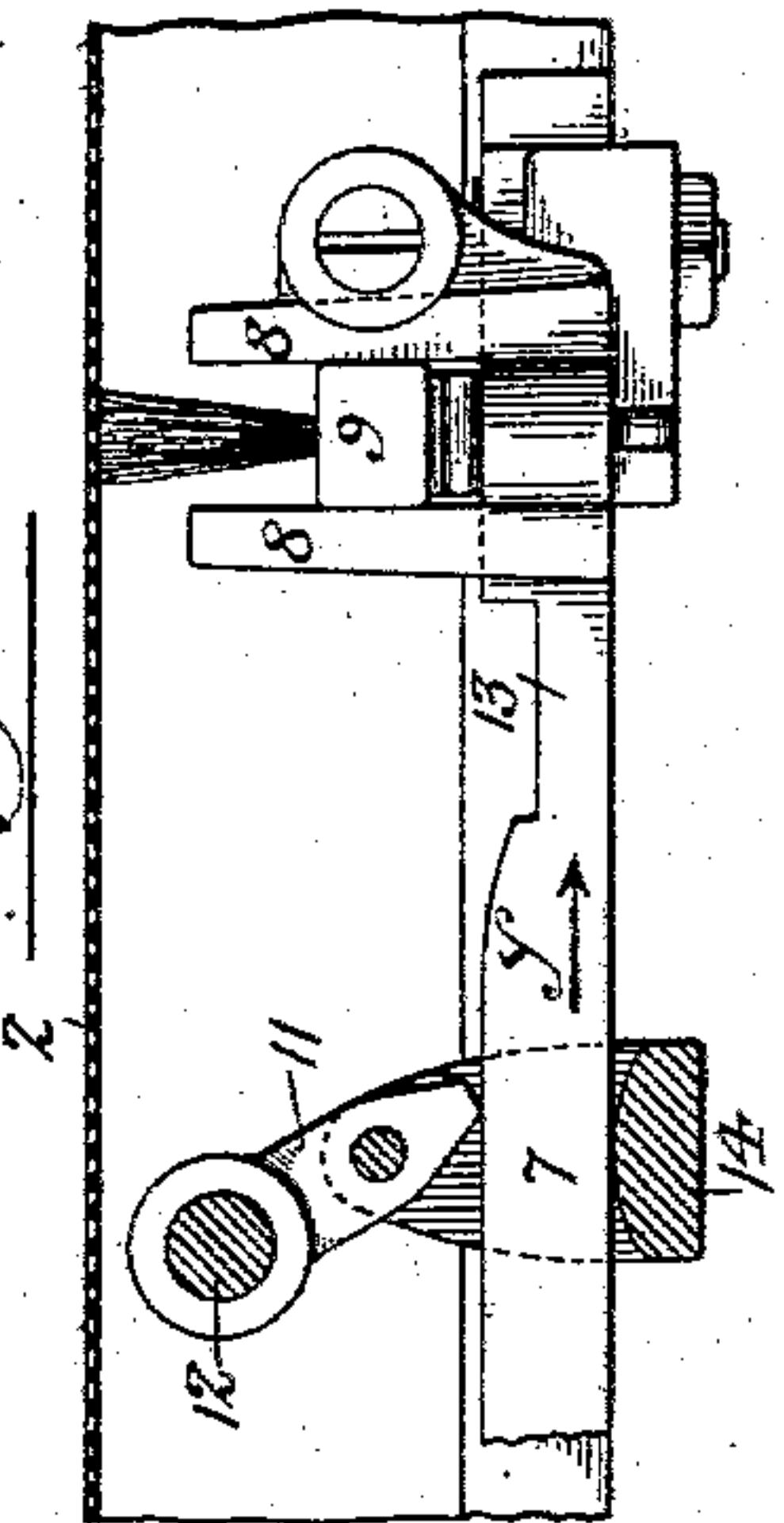
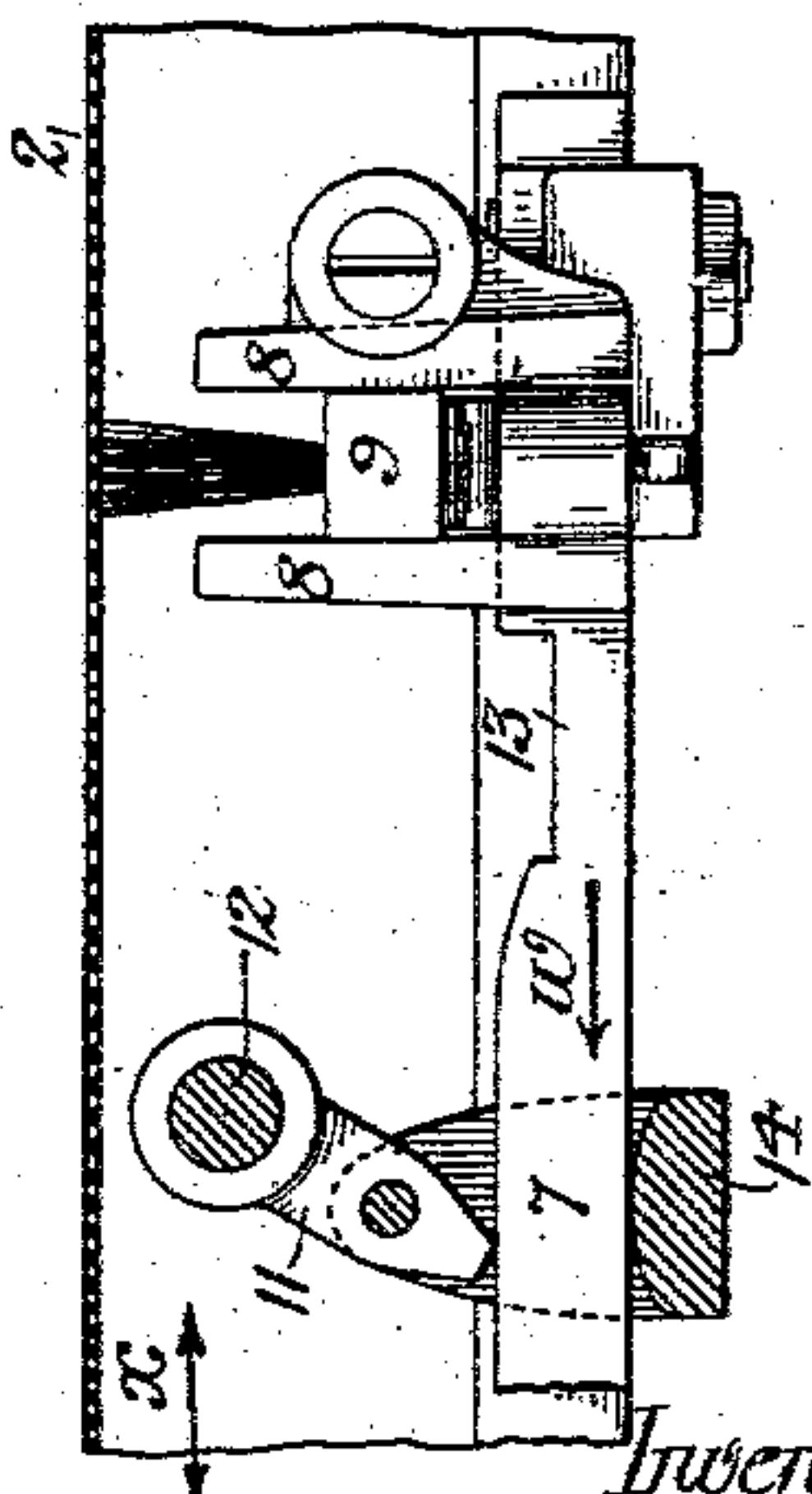


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

WALTER GRISCOM AND CHARLES H. LOUTZENHISER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS TO SAID GRISCOM AND THOMAS McFEELY, OF PHILADELPHIA, PENNSYLVANIA, TRADING AS GRISCOM & McFEELY, A FIRM.

SIEVE-CLEANER FOR BOLTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 743,863, dated November 10, 1903.

Application filed October 25, 1902. Serial No. 128,737. (No model.)

To all whom it may concern:

Be it known that we, WALTER GRISCOM and CHARLES H. LOUTZENHISER, both citizens of the United States, and residents of Philadelphia, Pennsylvania, have invented certain Improvements in Sieve-Cleaners for Bolting-Machines, of which the following is a specification.

Our invention relates to that class of sieve-cleaners for bolting-machines which employ a traveling brush having step-by-step movement imparted to it by means of a pawl which is caused to engage a bar or strip by reason of the shaking or gyrating movement of the sieve-frame. In prior devices of this class with which we are familiar the pawl has been mounted upon the brush-carrier and engaged a bar secured to and moving with the sieve-frame; and our invention involves mainly a reversal of these conditions—that is to say, the mounting of the pawl upon the sieve-frame and the provision of the brush-carrier with a bar for engaging the pawl. By this means the brush-carrying frame can be made lighter than usual, a less area of surface is presented for catching and holding the flour dropping from the sieve, the pawl is firmly supported, and the brushes can be so guided upon the frame of the sieve as to be properly maintained in contact with the under face of said sieve at all times.

In the accompanying drawings, Figure 1 is a longitudinal section of part of a bolting-machine, showing one of the sieves and a cleaner therefor constructed in accordance with our invention. Fig. 2 is a transverse section of one of the sieves and its frame, showing an end view of the brush-carrier, this view being on a larger scale than Fig. 1; and Figs. 3, 4, and 5 are longitudinal sections of part of the sieve and sieve-frame, showing the brush-carrier in elevation and illustrating the action of the driving-pawl upon the bar forming part of said brush-carrier.

In Fig. 1 of the drawings, 1 represents part of the casing of a bolting-machine, 2 one of the sieves of the same, and 3 one of the side frames of said sieve. Each of these side

frames has secured to it a rail 4, upon which runs an antifriction-roller 5 of the brush-carrier, the latter comprising a pair of transverse bars 6, connected by a central longitudinal bar 7, and having vertical guides 8 for the brush-bar 9, which rests upon a spring 10, tending to lift the bar, so that the tops of the brushes are maintained in constant contact with the under side of the screen 2. In the present instance there are two brushes. Consequently in order to effect a proper cleaning of the entire under surface of the screen 2 the brush-carrier will be compelled to travel back and forth throughout half the length of the screen, and in order to effect this movement the bar 7 is engaged by a pawl 11, pivotally mounted upon a transverse rod 12, which extends across from one side frame 3 to the other at the longitudinal center of the screen. The distance between the rod 12 and the upper surface of the bar 7 is less than the length of the pawl 11, so that the latter is compelled to occupy an inclined position, such as shown in Figs. 3 and 5, except at points near each end of the bar and adjacent to the brushes, at which points the upper surface of the bar is recessed, as shown at 13, so that at these points the pawl can hang vertically without coming into contact with the surface of the bar. If therefore the screen-frame is reciprocated longitudinally, as indicated by the double arrow x in Fig. 3, the pawl, if inclined to the left, will engage the upper surface of the bar 7 and move the same to the left, as indicated by the arrow w in Fig. 3, or, if inclined to the right, will engage said bar and move it to the right, as indicated by the arrow y in Fig. 5. The recesses 13 at the opposite ends of the bar 7 provide for automatic reversal in the angle of the pawl, and consequently for automatic reversal in the direction of travel of the brush-carrier. For instance, supposing that the bar is traveling in the direction of the arrow w , Fig. 3, the pawl when it reaches the recess 13 will drop to the vertical position, and on the next movement of the screen-frame to the left the pawl will be tilted to the right, as indicated in Fig. 5, and will

then engage the bar 7, so as to move it to the right, and in like manner the direction of movement will be reversed at the opposite end of the bar. In order to prevent the spring
5 of the bar from interfering with the proper engagement of the pawl 11 therewith, said pawl is provided with a depending pivoted yoke 14, which serves to weight the pawl and also bears against the under side of the bar
10 in order to insure the clamping of said bar between the pawl and yoke, as shown in Figs. 3 and 5, except at the recessed ends 13 of the bar, as shown in Fig. 4.

The brush-carrier may be provided with
15 any desired number of equidistantly-spaced brushes, and it, as well as the pawl, can be mounted upon other portions of the machine than the sieve-frame, if desired.

By using the bar 7 as part of the brush-
20 carrying frame the use of longitudinal side bars is rendered unnecessary. Hence there is less area of surface beneath the sieve to catch and retain the material descending therefrom.

25 Having thus described our invention, we claim and desire to secure by Letters Patent—

1. The combination in a bolting-machine, of a pawl hung to a fixed pivot, with a travel-

ing brush-carrier having a longitudinal bar 30 engaging the pawl, and a yoke pivoted to the pawl, and embracing said bar whereby the latter is clamped between the pawl and yoke, substantially as specified.

2. The combination in a bolting-machine, 35 of a pawl hung to a fixed pivot, with a traveling brush-carrier having a longitudinal bar engaging the pawl, and a yoke pivoted to the pawl, and serving the double purpose of a weight for the pawl and a clamp for holding 40 the bar in engagement with the pawl, substantially as specified.

3. A brush-carrier for a sieve-cleaner comprising transverse end bars, a longitudinal bar connecting the same, brush-bars verti- 45 cally guided on said end bars, springs for supporting said brush-bars, and antifriction-rollers mounted upon said end bars, substantially as specified.

In testimony whereof we have signed our 50 name to this specification in the presence of two subscribing witnesses.

WALTER GRISCOM.

CHARLES H. LOUTZENHISER.

Witnesses:

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