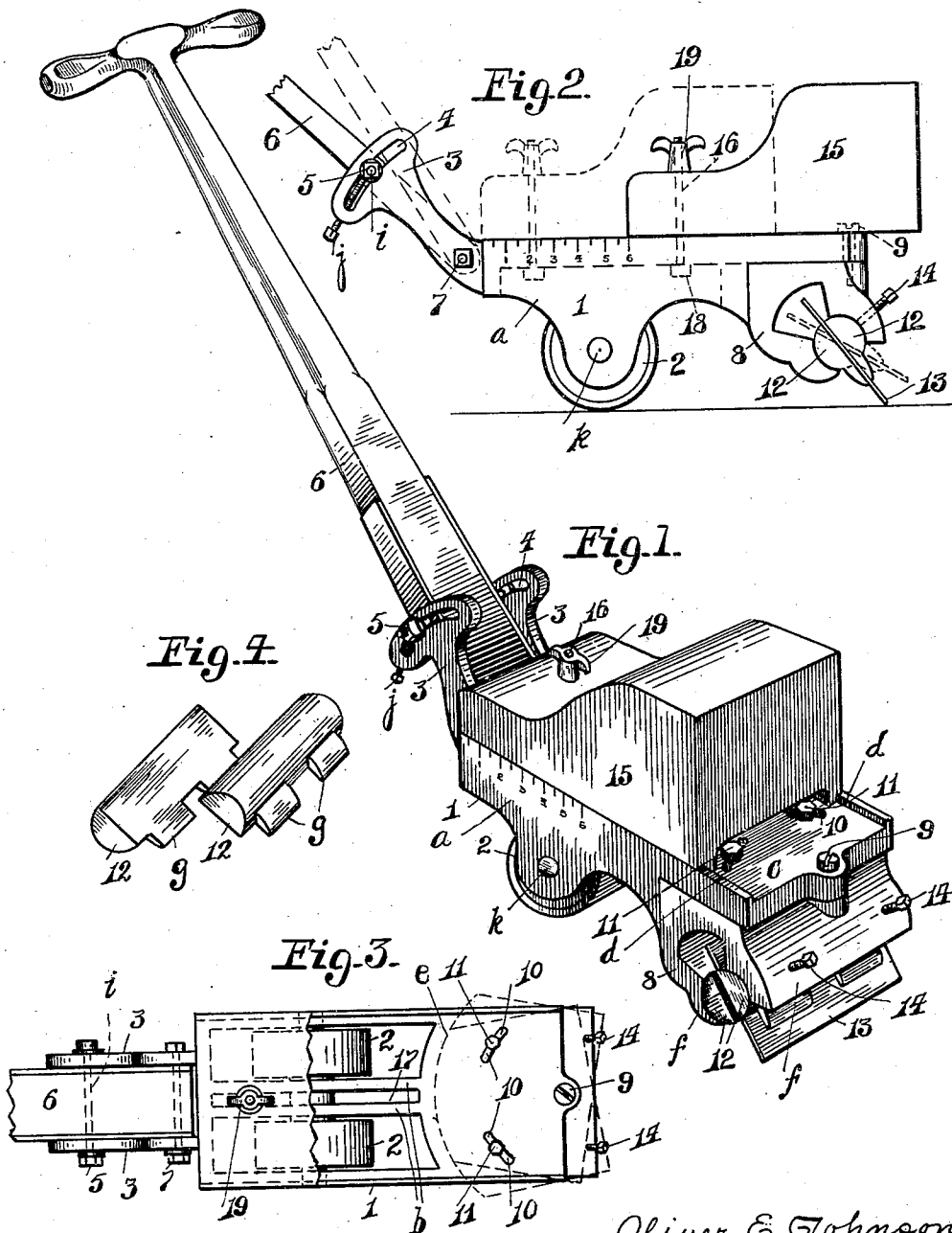


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 FLOOR DRESSING MACHINE.
 APPLICATION FILED NOV. 16, 1908.

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Patented Oct. 5, 1909.



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UNITED STATES PATENT OFFICE.

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FLOOR-DRESSING MACHINE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, OLIVER E. JOHNSON and EBER A. LONG, citizens of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Floor-Dressing Machines, of which the following is a specification.

This invention relates to floor dressing machines.

One object of the invention is to provide a floor dressing machine embodying such characteristics that its cutting or dressing blade may be readily and quickly adjusted to different lateral positions and efficiently controlled in its different positions.

Another object of the invention resides in the provision of a floor dressing machine embodying means whereby the exact pressure desired upon the dressing blade may be obtained, so as to provide for a uniform cutting or dressing of the floor or other place or material upon which the machine may be operated.

A still further object of the invention is to provide a handle for the machine so that it may oscillate vertically as the machine is drawn toward the operator for the purpose of not altering or effecting the degree of pressure upon the dressing blade by the aforesaid pressure means.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts herein-after more fully described, illustrated in the accompanying drawings and particularly pointed out in the appended claims, it being understood that changes may be made in the form, proportion, size and minor details without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of the invention. Fig. 2 is a side elevation, the pressure means being shown in full lines in one position and in dotted lines in another position, as is also the handle and the operating blade of the machine. Fig. 3 is a top plan view with parts broken away. Fig. 4 illustrates the blade clamping means separated from the machine.

Referring now more particularly to the accompanying drawings, the reference char-

acter 1 indicates the truck of the machine having depending sides *a* and a pair of longitudinally spaced sills *b*, and a preferably flat top *c*, the sides *a* extending above the flat top *c* to form guide rails *d* upon which latter slides the pressure block 15. This pressure block may be held rigidly in its different positions upon the guide rails *d* by means of a screw 16 having its head 18 bearing against the underside of the aforesaid spaced sills *b*, with its body extending upwardly between said sills and through the reduced inner end of the pressure block 15 upon which reduced end of the latter bears a thumb nut 19 which coöperates with said bolt 16 and through which latter and the thumb nut it will be readily seen how the pressure block may be held firmly in its different adjusted positions. There are graduations indicated along one or both sides of the truck 1 for the purpose of determining the adjustment of the pressure block 15.

Journalled in the truck 1 in any suitable manner is the fulcrum roller 2, and at the rear of the truck it will be seen that the underside of the same is cut away, and the back of the undercut portion formed upon a curve *e* to correspond with the curvature of the rear end of the head 8, so that the latter may have pivotal movement to provide for a lateral adjustment of the cutting or dressing blade 13.

The head 8 is provided with downwardly and outwardly directed companion parts *f*, each part having a grooved inner face adapted to receive the blade clamping members 12, each of which latter is preferably formed semi-circular in cross section and between which the dressing blade 13 is clamped, the inner edge of the blade 13 projecting beyond the members 12 and into the space between the companion member *f*.

The dressing element 13 is first placed between the clamping members 12 and then the clamping members 12 with the dressing element between them is forced longitudinally between the companion members *f*. The clamping members 12 are then tightly forced against the dressing element 13 through the instrumentality of the clamping bolts 14, and if desired, each clamping member 12 may be provided with one or more fingers *g* adapted to bear against corresponding

faces of the dressing element 13 to provide for a substantial clamping of the dressing element between the members 12 and thereby overcome any tendency of a bending or breaking of the dressing element.

To provide for a lateral adjustment of the head 8 and consequently the dressing element 13, there is formed in the top of the truck a pair of slightly curved oppositely directed slots 10 through which are passed bolts 11 and which enter the head 8. By loosening these bolts 11 the latter may be moved in either direction in their slots 10 and the head 8 moved accordingly laterally of the machine upon its pivot bolt 9, as clearly indicated in dotted lines in Fig. 3. In order that the heads of the bolts 11 may not interfere with a sliding movement of the pressure block 15, the underside of the latter is cut out, as clearly shown in Fig. 1.

Formed at the forward end of the truck 1 is a pair of spaced ears 3, each having a curved slot 4. These ears are adapted to receive the inner end of an operating handle 6, whose inner end is pivoted between the ears 3 at the inner ends of the latter by means of a suitable pivot 7.

Passed through the inner end of the handle 6 and the curved slots 4 of the ears 3 is a bolt 2, and upon this bolt 2 there is secured a nut 5, which latter is not adapted to bind tightly against the corresponding ear 3 but is employed principally for the purpose of preventing displacement of the bolt 2. If desired, the nut 5 may bind tightly against the corresponding ear 3 and thereby hold the handle 6 rigidly in one position, but it is preferred that the nut 5 be not forced tightly against said ear 3, so that the handle 6 may have free and easy upward movement vertically upon its pivot 7 so that as the machine is drawn toward the operator, the pressure by the operator upon the handle would not effect or alter the degree of pressure upon the dressing element incident to the weight of the pressure block 15. Thus the handle is arranged preferably so that it may oscillate vertically as the machine is drawn toward the operator, so as not to effect or alter the degree of pressure upon the dressing element and whereby a machine is constructed that will provide for a uniform cut throughout. This uniformity in dressing would not be the result if any downward pressure should be applied to the handle with the handle not constructed and arranged for the said vertical oscillating movement, because the rigidity of a fixed handle would partly counterbalance the weight of the pressure block 15 if downward pressure should be brought to bear upon the rigidly mounted handle.

To prevent the handle 6 falling downwardly beyond a certain point and to enable

the machine to be tilted without lowering the handle to its lowest limit of movement there is provided in each ear 3 a screw *j* the inner end of which engages the bolt 5. By adjusting this screw *j* the downward movement of the handle may be adjusted accordingly.

By virtue of the clamping members 12 being semi-circular in cross section, they form practically a circle in cross section when assembled so that the dressing element 13 may be adjusted in the head 8 and held in its different adjusted positions, as will be apparent by referring to Fig. 2, by means of the screw bolts 14. The further the weight or pressure block 13 is placed beyond the fulcrum of the truck, that is, the axle *k* of the roller 2, the greater will be the weight upon the dressing element.

What is claimed is:—

1. In a floor dressing machine, a wheeled truck whose body is cutaway in the rear to provide a shoulder, the shoulder being concaved transversely of the truck, a dressing element head having one side convexed longitudinally for engagement with said concaved shoulder, a dressing element carried by said head, the sides of the body of the truck extending above the top of the truck to form guideways, a pressure block adjustably mounted upon the truck and whose side engages the inner faces of said guideways to prevent accidental lateral displacement of the block, and a handle for the truck.

2. In a floor dressing machine, a wheeled truck provided with a longitudinal slot and whose body is cutaway in the rear to provide a shoulder, the shoulder being concaved transversely of the truck, a dressing element head having a side convexed longitudinally and disposed adjacent said concaved shoulder, means permitting the head to be adjusted to shift its convexed side in opposite directions on the concaved shoulder, a dressing element carried by said head, the sides of the body of the truck extending above the top of the truck to form guideways, a pressure block adjustably mounted upon the truck and whose sides engage the inner faces of said guideways to prevent accidental lateral displacement of the block, and a bolt passed through the slot of the truck and the pressure block to hold the latter in its adjusted positions upon the truck, and a handle for the truck.

3. In a floor dressing machine, a wheeled truck provided with a longitudinal slot and whose body is cutaway in the rear to provide a shoulder, the shoulder being concaved transversely of the truck, a dressing element head having a side convexed longitudinally and disposed adjacent said concaved shoulder, means permitting the head to be adjusted to shift its convexed side in

opposite directions on the concaved shoulder, a dressing element carried by said head, a pressure block slidably mounted upon the truck, a bolt passed through the slot of the truck and the block to hold the latter in different positions upon the truck, and a handle for the truck.

4. In a floor dressing machine, a wheeled truck, whose body is cutaway at its rear under side to provide a shoulder, the shoulder being concaved, a dressing element pivotally mounted at the rear of the truck and provided with a convexed side for slidable engagement with said concaved shoulder, a pair of clamping members fitted in said head and each provided with a pair of fingers, a dressing element fitted between said clamping members and engaged by said fingers, a pressure block slidably mounted upon the truck, and a handle secured to the truck.

5. In a floor dressing machine, a wheeled truck whose body is cutaway at its rear underside to provide a shoulder, the shoulder being concaved transversely of the truck, a dressing element head pivotally secured at the rear of the truck and having a longitudinally convexed side for slidable engagement with said concaved shoulder, means whereby the head may be held in various positions upon its pivot, said head having spaced upper and lower portions, a pair of clamping members fitted between said spaced portions of the head, a dressing element disposed between said clamping members, means operating upon one of the clamping members to effect a binding of the dressing element between them, a pressure block adjustably mounted upon said truck, and a handle for the truck.

6. In a floor dressing machine, a wheeled truck whose body is cut away in the rear to provide a shoulder, the shoulder being concaved transversely of the truck, a dressing element head pivotally secured to the truck and having a convexed side for slidable engagement with the concaved shoulder, means whereby the head may be held in adjusted positions upon its pivot, the head including spaced members, each being provided with a groove near its outer edge, a clamping member fitted in each groove of each spaced portion of said head, a dressing element disposed between said clamping members and projecting therebeyond into and between the inner portions of said spaced members, means operating upon the clamping members to hold the dressing element against displacement, a pressure block adjustably mounted upon the truck, and a handle for the truck.

7. In a floor dressing machine, a wheeled truck whose body is cut away in the rear to provide a shoulder, the shoulder being concaved transversely of the truck, a dressing

element head pivotally mounted upon the truck and provided with a convex side for slidable engagement with said concaved shoulder, means for holding the head in adjusted positions upon its pivot, said head including downwardly and outwardly spaced portions, clamping members disposed between said spaced portions of said head, a dressing element disposed between the clamping members, means whereby the clamping members and dressing element may be adjusted, a pressure block slidably mounted upon the truck, and a handle for the truck.

8. In a floor dressing machine, a wheeled truck whose body is cut away in the rear to provide a shoulder, the shoulder being concaved transversely of the truck, a dressing element head pivotally mounted upon the truck and provided with a convex side for slidable engagement with said concaved shoulder, said head including spaced portions each provided with a longitudinal groove, a clamping member semi-circular in cross section fitted in each groove of said spaced portions with each clamping member provided with a finger, a dressing element disposed between said clamping members and extending inwardly therebeyond and between said spaced portions and engaged by the fingers of said clamping members, means whereby the clamping members and dressing element may be held firmly in adjusted positions between said spaced portions of the head, a pressure block slidably mounted upon the truck, and a handle for the truck.

9. In a floor dressing machine, a wheeled truck provided with a longitudinal slot, a dressing element mounted at one end of said truck, an adjustable pressure block mounted upon the truck, a bolt passed through said slot and the block to lock the latter in different positions upon the truck, and a handle for the truck.

10. In a floor dressing machine, a wheeled truck, a dressing element head pivotally secured to the truck, said head having spaced upper and lower portions, clamping members fitted between said spaced portions, a dressing element disposed between said clamping members, means operating upon the clamping members to hold said members and the dressing element against displacement, and a handle for the truck.

11. In a floor dressing machine, a wheeled truck, a dressing element head pivotally secured to the truck, said head having spaced upper and lower portions, clamping members adjustably fitted between said spaced portions, a dressing element disposed between said clamping members, means operating upon the clamping members to hold the dressing element against displacement, and a handle for the truck.

12. In a floor dressing machine, a wheeled
truck, a dressing element mounted at one
end thereof, a pressure block mounted upon
the truck, means permitting the adjustment
5 and locking of said block to obtain different
degrees of fixed pressure upon the dressing
element, and a handle for the truck.

In testimony whereof we affix our signatures, in presence of two witnesses.

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EBER A. LONG.

Witnesses:

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