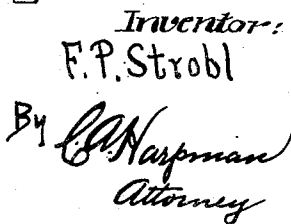


1,395,161.

2 SHEETS—SHEET 1.

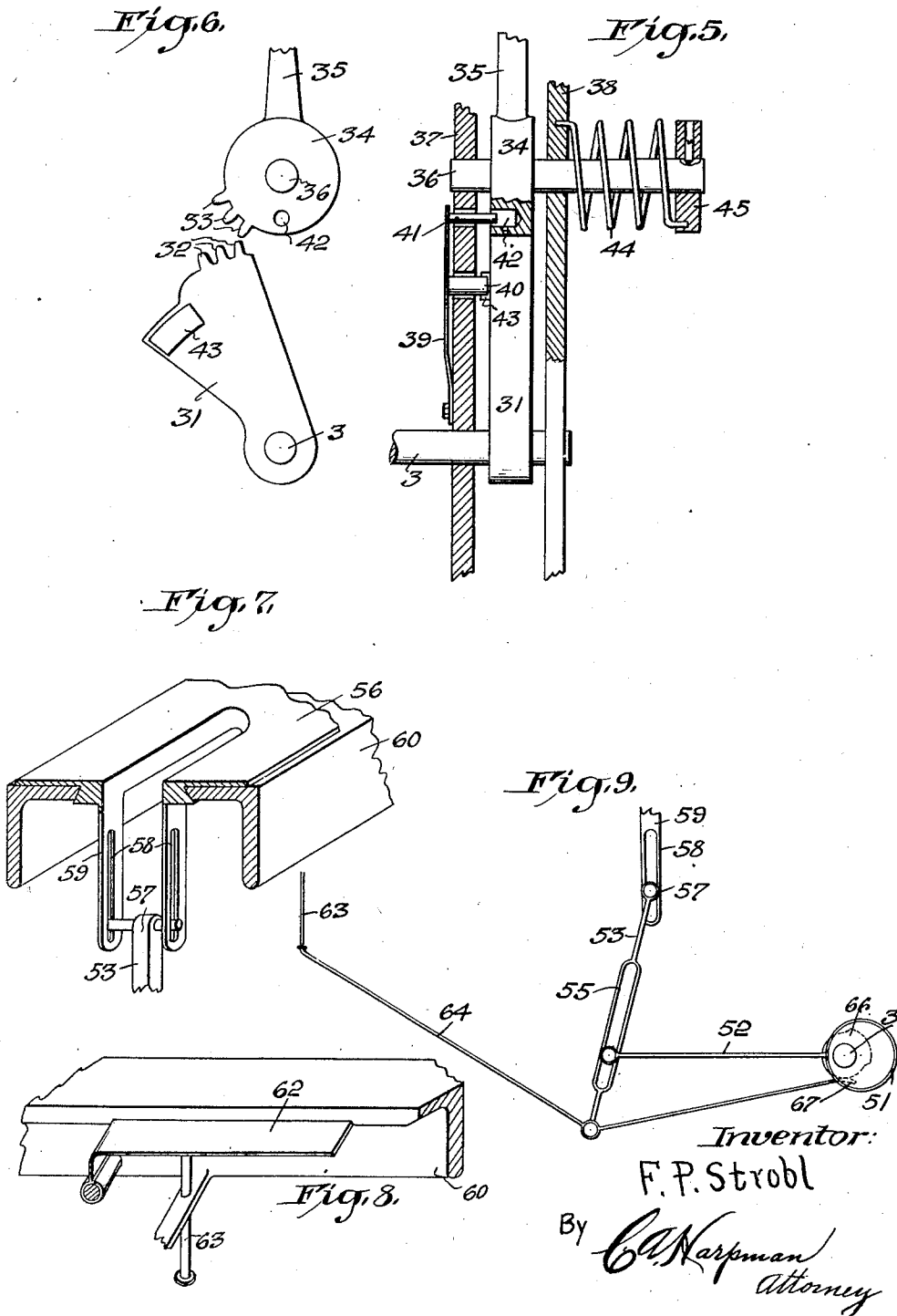


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 AUTOMATIC BATTING OUT AND SLAPPING ON DEVICE.
 APPLICATION FILED OCT. 6, 1920.

1,395,161.

Patented Oct. 25, 1921.

2 SHEETS—SHEET 2.



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AUTOMATIC BATTING-OUT AND SLAPPING-ON DEVICE.

1,395,161.

Specification of Letters Patent.

Patented Oct. 25, 1921.

Application filed October 6, 1920. Serial No. 415,182.

To all whom it may concern:

Be it known that I, FRANK P. STROBL, a citizen of the United States of America, residing at Sebring, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Automatic Battering-Out and Slapping-On Devices, of which the following is a specification.

10 This invention relates to a device used in the manufacturing of pottery wares and the like.

The principal object is to provide an automatic machine that will cut out from a plastic ribbon, made of the desired clay and mixture, a form which is automatically slapped upon a mold.

Another object of this device is to provide a means for automatically carrying the mold away from the position above described and released automatically from said carrier.

With the above and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a side elevation of the device.

30 Fig. 2 is a detail view.

Fig. 3 is a detail view.

Fig. 4 is a detail view.

Fig. 5 is a detail view partly in section.

35 Fig. 6 is a detail view showing side elevation of Fig. 5.

Fig. 7 is a detail view partly in section.

Fig. 8 is a detail view partly in section.

Fig. 9 is a side elevation of principal motion transmission parts.

40 By referring to Fig. 1 it will be seen that I have provided a base 1 which may be a floor. Upon this base 1, I have secured the main frame part 2. Near the base of main frame part 2, I have secured a shaft 3. Upon this shaft 3, I have secured a belt wheel 4. In order to transmit motion to this belt wheel 4 I have provided a primary shaft 5 which may be energized by any desired means. This shaft 5 is partly supported by a beam 6. Upon this shaft 5 I have keyed a cog wheel 7 which registers with a cog wheel 8 which is secured to shaft 9 which is a projection of a main shaft within an ordinary puddling mill 10, and supported by beams 6 and 11.

Shaft 5 carries a sprocket wheel 12. On this sprocket wheel 12 is a drive chain 13 which drives a shaft 14 by means of a sprocket wheel 15 secured to the shaft 14. At the end of said shaft 14 is secured a beveled gear 16 which registers with a gear 17 mounted upon a shaft 18. Upon this shaft 18 is secured a belt wheel 19 carrying a belt 20 which drives the belt wheel 4.

The motion transmitted to the gear 17 may transmit, by any suitable means, motion to a belt wheel 21 carrying a belt 22 which drives a belt wheel 23 secured to a shaft 24. Upon this shaft 24 is also secured a belt wheel 25 which carries a conveyer belt 26, which registers over a belt wheel 27. The function of this conveyer belt 26 is to carry back to the puddling mill 10 all scraps of the plastic ribbon 28 remaining after the batter-out disk 29 has cut a desired portion from the plastic ribbon 28.

It will be seen that directly underneath the plastic ribbon 28 I have provided an inclined trough member 30 which catches the scraps above referred to and feeds them to the conveyer or belt 26.

By referring to Figs. 5 and 6 it will be seen that upon the shaft 3 I have secured a segment of a wheel 31 provided with a plurality of teeth 32 which register with a like number of teeth 33 formed on the circumference of the circular base 34 of a batter-out arm 35, this circular base 34 is secured to a shaft 36, which is in turn secured by support arms 37 and 38. The support arm 37 has secured to its outer surface a spring member 39 which is provided with a trip 40 and a dog 41. When the shaft 3 revolves the teeth 32 of the segment of a wheel 31 engage the teeth 33 and carry the arm 35 to a vertical position; this is done by means of the dog 41 seating in the seat 42.

Fig. 6 shows the relative position of the members provided with teeth 32 and 33 when the batter-out arm 35 is in a vertical position and the dog 41 is seated in the seat 42. As the member carrying the teeth 32 turns contra-clock wise the cam 43 comes in contact with the trip 40 and releases the batter-out arm 35. By referring to Fig. 5 it will be seen the coil spring 44 by having one end secured to the support arm 38 and the other end to a disk 45 keyed to the shaft 36 places the batter-out arm 35 on a spring

tension when set in a vertical position. Therefore, when the dog 41 is forced out of the seat 42 the batter-out arm 35 strikes forwardly, cutting out a form 46 by means of the batter-out disk 29 coming in contact with the plastic ribbon 28 and the cutting frame 47 (see Figs. 2, 3, and 4).

By referring to Fig. 1 it will be seen that the batter-out arm 35 is suddenly stopped by coming in contact with a stop 48, thereby throwing the form 46 upon a mold 49.

The plastic ribbon 28 is formed by being forced out of a longitudinal slot at the end of the puddling mill 10 and passes over a roller 50.

Secured to the shaft 3 is an eccentric 51 carrying an arm 52 connected to a link 53. This link 53 is pivoted at its lower end by a pin 54. The arm 52 may be pivotally connected to the link 53 anywhere within the slot 55 in order to regulate the movement of the mold base 56.

By referring to Fig. 1 or 9 it will be seen that the end 57 of the link 53 slides within the slot 58 which is located in a downwardly extended arm 59 of the mold base 56.

By referring to Fig. 7 it will be seen that this mold base 56 slides upon the upper surface of the arm portion 60 of the base 2.

In order that the operation of putting on plastic forms on the mold may be repeated, mold is carried outwardly along the arm 60 until the edge 61 of the mold 49 is carried over the lift arm 62. At this time the left rod 63 is automatically pushed upwardly by means of the rocker arm which is pivoted at 65 and caused to move by means of a cam 66 which comes in contact with the inner end 67 of the rocker arm 64.

By the action above described the mold 49 is released from the mold base 56. The mold base is now carried back to starting point where a new mold is put in place by the operator of the machine.

It will be seen that the machine is made for adjustment. While other parts may be made for adjustment, I have shown the batter-out arm adjustable by means of a set screw 68. Also that the batter-out disk 29 is made so that it may be removed and a

similar disk of larger or smaller size may be substituted.

By referring to Fig. 2 it will also be seen that the cutting frame 47 may be changed to suit the dimensions of the batter-out disk 29. It may also be mentioned that in cutting out the plastic form 46 the same is done by a shearing method; that is, the cutting starts at the upper edge of the batter-out disk 29, thereby making an easier and cleaner cut.

It is also pointed out that arm 52 is adjustable along the slot 55, and that the stop 48 is adjustable. It is understood that minor changes may be made which may be apparent to a person skilled in the art of building machines, in so far as such changes do not depart from the claims which follow.

What I claim is:

1. In a device of the class described, a machine for cutting out a form from a vertical plastic ribbon formed of pottery clay and placing the same on a mold, means for moving said mold and form to a desired distance from place of putting form on mold, means for releasing said mold and form, means for carrying the scraps remaining after cutting out said forms to a puddling machine, substantially as described.

2. In a device of the class described, a machine comprising a spring controlled arm, means for releasing said arm, a cutting disk attached to said arm, a cutting frame directly opposite said cutting disk, substantially as described.

3. In a device of the class described, the combination of a cutting disk attached to a spring controlled arm, means for holding said arm at tension, means for releasing said arm, a cutting frame directly opposite said cutting disk, means for moving a mold and form thereon from the point of putting said form on said mold, means for releasing said mold with form, substantially as described.

In testimony whereof I affix my signature.
FRANK P. STROBL.

Witnesses:

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