W. KAMMER.

TAMPER.

APPLICATION FILED MAR. 4, 1912.

1,063,039. **Patented May 27, 1913.**

Fig. 2.

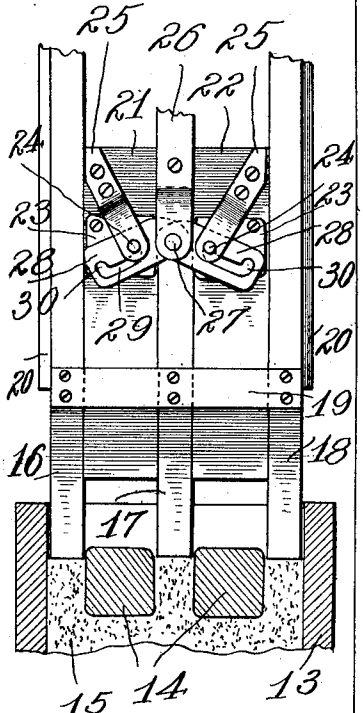


Fig. 1.

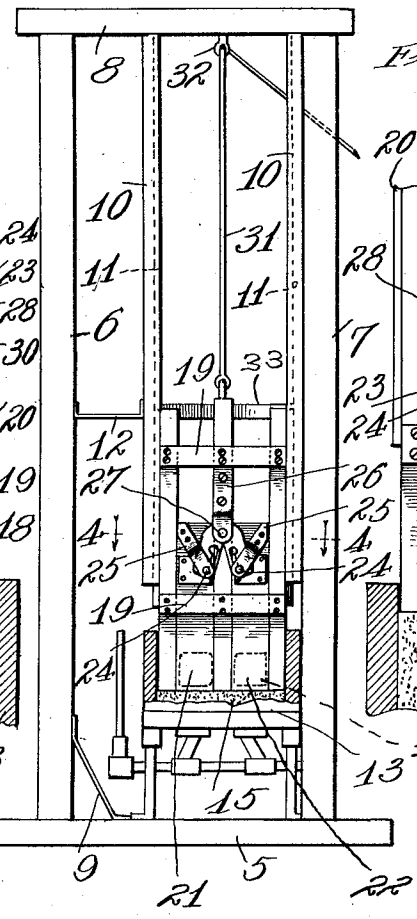


Fig. 3.

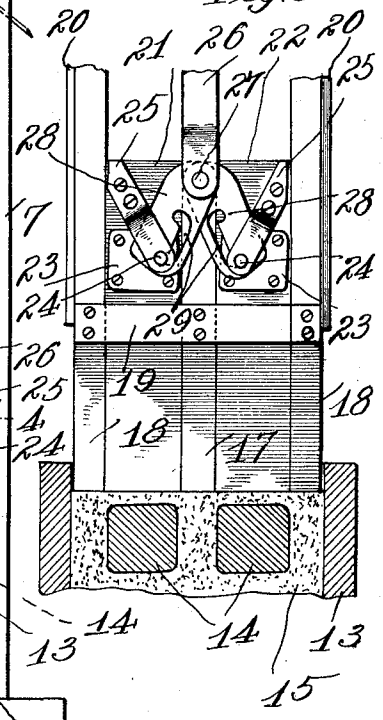
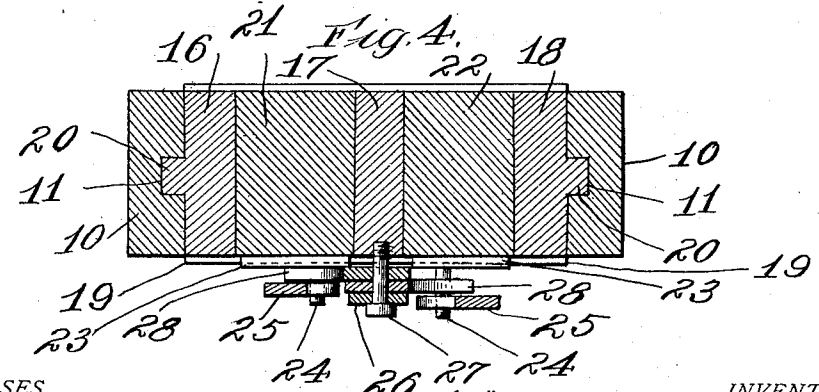


Fig. 4.



WITNESSES

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TAMPER.

1,063,039. Specification of Letters Patent. Patented May 27, 1913.

Application filed March 4, 1912. Serial No. 681,617.

To all whom it may concern:

Be it known that I, WILLIAM KAMMER, a citizen of the United States of America, residing at Leshara, in the county of Saunders and State of Nebraska, have invented certain new and useful Improvements in Tampers, of which the following is a specification.

While I have shown my invention in use in connection with a down face or horizontal core cement block machine, it is, of course, understood that its use is not restricted to such machines.

The object of my invention is to provide a tamper which will efficiently tamp material to be molded around cores in the mold box, and with this and minor objects in view, my invention consists of the parts and combination of parts as will be more fully hereinafter set forth.

In the drawing, Figure 1 is a front elevation of a molding plant, parts being in section; Fig. 2 is an enlarged detail view showing the tampers in relative adjusted position, in the act of tamping around cores; Fig. 3 is an enlarged detail view showing all of the tamping members in alinement; and Fig. 4 is an enlarged detail sectional view on the line 4—4, Fig. 1, looking in the direction of the arrows.

The reference numeral 5 designates a base on which are mounted columns 6 and 7 which are connected at their upper ends by a cross-beam 8, thus constituting a frame of the machine.

9 is a brace between the column 6 and the base 5. Guide-ways 10 are suspended from the cross-beam 8 and are provided with a groove 11.

12 is a brace between the column 6 and one of the guide-ways 10.

13 is the mold, 14 the cores and 15 the material being molded, such for instance as cement.

16, 17 and 18 are tamping members spaced part and arranged parallel to each other, and secured together in their spaced parallel relation by means of bands or ties 19. The tamping members 16 and 18 are each provided with a tongue 20 adapted to fit within the groove 11 of the guides 10, as more clearly shown in Fig. 4.

21 and 22 are the movable tamping members slidably mounted between the parallel tamping members 16, 17 and 18, on each of which is a plate 23 having a pin 24 projecting at right angles thereto.

25 is a strap secured to the movable member, having an opening in its lower end through which the outer end of the pin 24 projects, whereby the pin is sustained against bending, etc.

26 is a strap secured to the tamping member 17 carrying a pin 27 at its lower end, which pin is secured or otherwise anchored in the member 17, as clearly shown in Fig. 4.

28 are links pivotally mounted at their inner ends on the pin 27 with their outer ends free. These links 28 are each provided with an elongated slot 29, terminating at each end in a locking recess or a notch 30, the pins 24 being adapted to slide in the elongated slots 29 and be locked at each end of the slots against movement, by reason of their passing into the locking notches or recesses 30, as will be readily understood. An operating cable 31 is secured to the tamping member 17 and passes over the pulley or sheave 32 on the cross-beam 8.

In making a hollow cement block, the cement is first tamped in the bottom of the mold before the cores 14 are drawn in the molds. As soon as the proper thickness of cement has been tamped in the bottom of the mold, the cores are placed therein and the cement poured or filled around the cores, as shown in Fig. 2, whereupon the movable tamping members 21 and 22 are positioned relative to the fixed members 16, 17 and 18 so that the fixed tamping members 16, 17 and 18 may tamp the cement firmly around the cores, as clearly illustrated in Fig. 2. When the cement has been tamped around the cores, cement is placed in the mold above the cores, whereupon the movable members are again adjusted so that their bottom faces will be on a line with the bottom faces of the tamping members 16, 17 and 18, as shown in Fig. 3, whereby the cement is tamped throughout the entire area of the mold.

When the tamping members are adjusted relatively, as shown in Fig. 2, the movable members are locked in that position by reason of the fact that the pins 24 are in the notch 30 at the upper end of the elongated slot 29, and when the members are adjusted to the position shown in Fig. 3, they are locked in that position by reason of the fact

that the pins 24 are in engagement with the locking notch or recess 30 at the bottom of the elongated slot.

When the tamper is used to tamp below or above the cores, they are in the position shown in Fig. 3. Assuming that the cement has been tamped in the mold below the cores and the cores are now inserted, the tamper continuing its operation will bring the movable tampers 21 and 22 in contact with the top of the cores 14. This impact will jar the tamper tripping links 28, whereupon the pins 24 are free to move from engagement with the lower locking notches 30, thus permitting the movable tamping members 21 and 22 to slide vertically between the members 16, 17 and 18 and assume the position shown in Fig. 2, which brings the pins 24 into engagement with the locking notches at the top of the elongated slots 29, thus locking the movable tamping members in the position shown. As will be seen from Fig. 2, the fixed tamping members 16, 17 and 18 are now free to project into the mold and tamp the cement around the cores. When the cement becomes solid between the cores, the movable tamping members 21 and 22 will be jarred so as to release the pins 24 from the upper locking notch, thus leaving the movable tamping members free to slide vertically to the position shown in Fig. 3, in which position they are locked, by reason of the fact that the pin 24 engages the lower locking notch 30.

33 is a brace secured to the column 7 and the guides 10.

I claim:—

1. A tamper comprising relatively movable tamping members, means locking said members against relative movement and constructed to be moved by impact to free the members for relative movement and again lock them in their changed relative position against relative movement.

2. A tamper comprising permanently fixed tamping members and relatively movable tamping members, in combination with a pin and slot connection between the fixed and movable members permitting relative movement between the fixed and movable members and means locking the movable members in their adjusted position.

3. A tamper comprising spaced parallel tamping members permanently secured together against relative movement, tamping members slidably mounted between said parallel members, a pin secured to each movable member and slotted links pivotally mounted on one of the parallel members coöperating with said pins to permit and limit relative movement between the fixed and movable members.

4. A tamper comprising spaced parallel tamping members secured together against relative movement, tamping members slidably mounted between said parallel members, pins on the movable members, and links pivotally mounted on one of the parallel members and provided with elongated slots having a locking recess at each end of each thereof, said pins being constructed to operate in said slots, whereby the slidable members may be moved relatively to the parallel members and locked against movement in their adjusted position.

The foregoing specification signed at Fremont, Nebr., this 12th day of February, 1912.

WILLIAM KAMMER.

In presence of—
F. W. Button,
Mars Feist.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."