

A. HAMMER & F. EGERSDÖRFER.
STAMPING APPARATUS, IN PARTICULAR FOR MARKING ARTICLES TO BE LAUNDERED.
APPLICATION FILED NOV. 7, 1916.

1,235,565.

Patented Aug. 7, 1917.
3 SHEETS—SHEET 1.

FIG. 1.

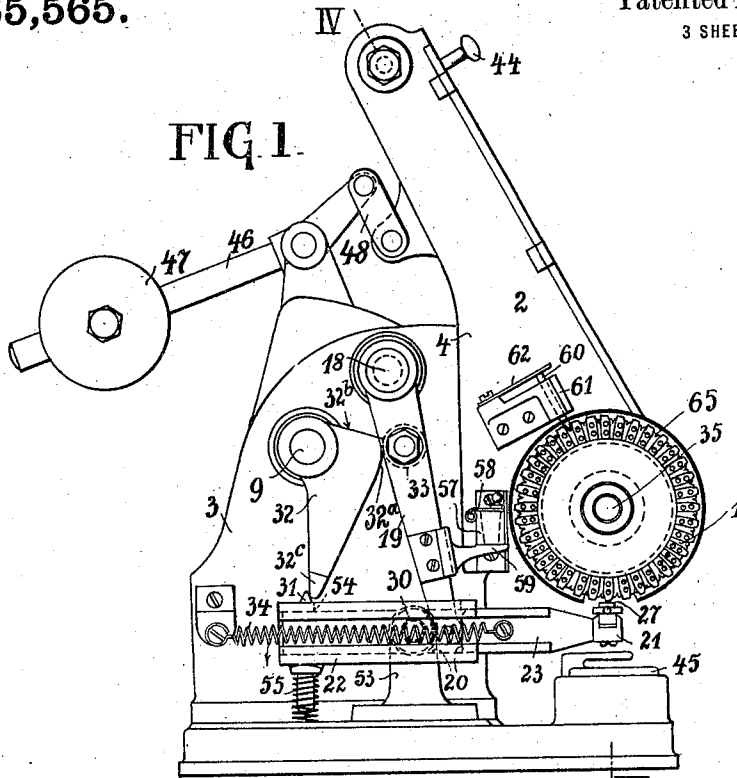
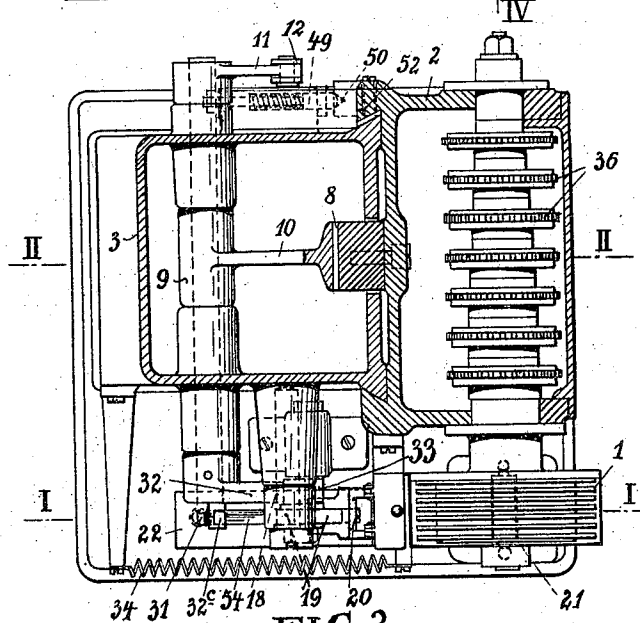


FIG. 3,

Witnesses:

August O. Kautzman
Hugo Schneider

Inventors:

Arthur Hammer
Fritz Egersdörfer

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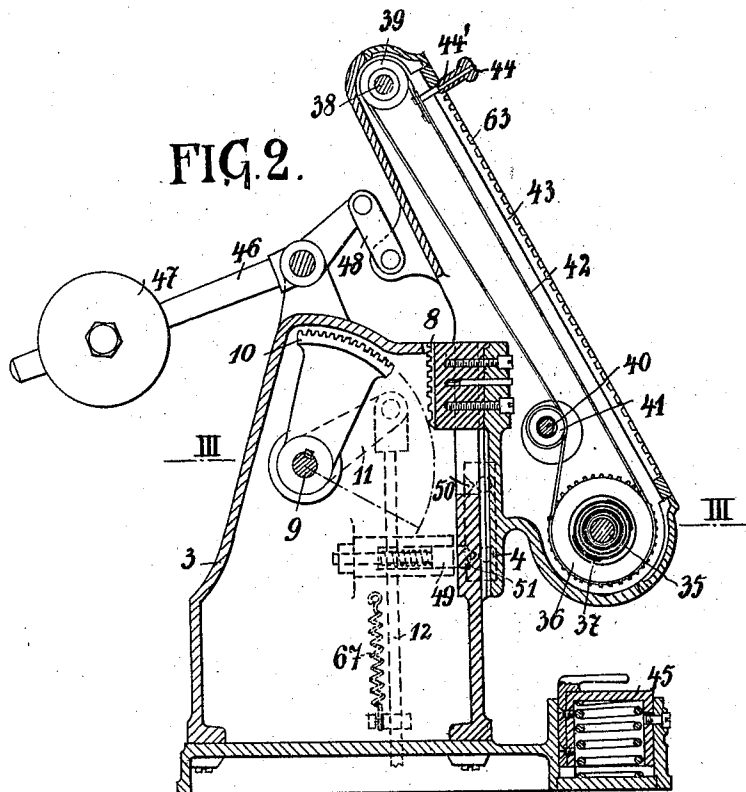
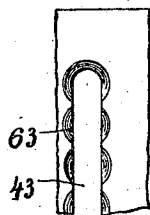


FIG. 5.

Witnesses:

August Bachmann
Hugo Schuster

Inventors:

Arthur Hammer
Fritz Egersdörfer

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FIG. 4.

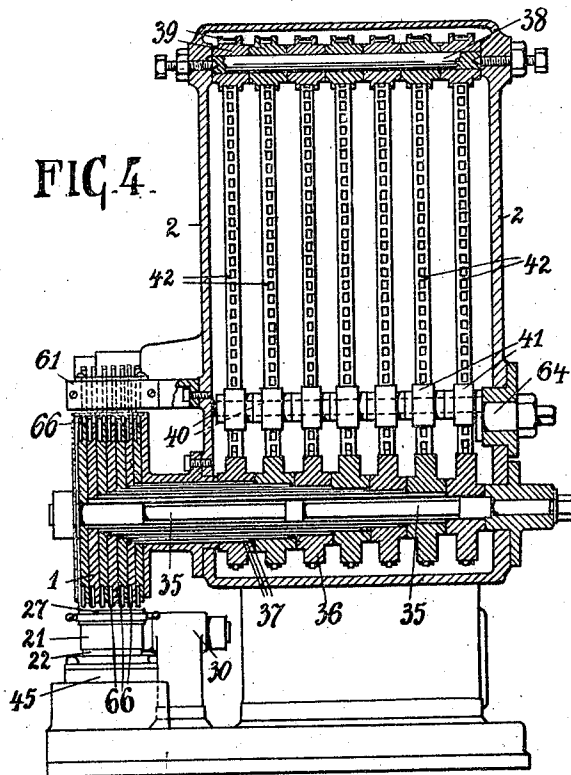
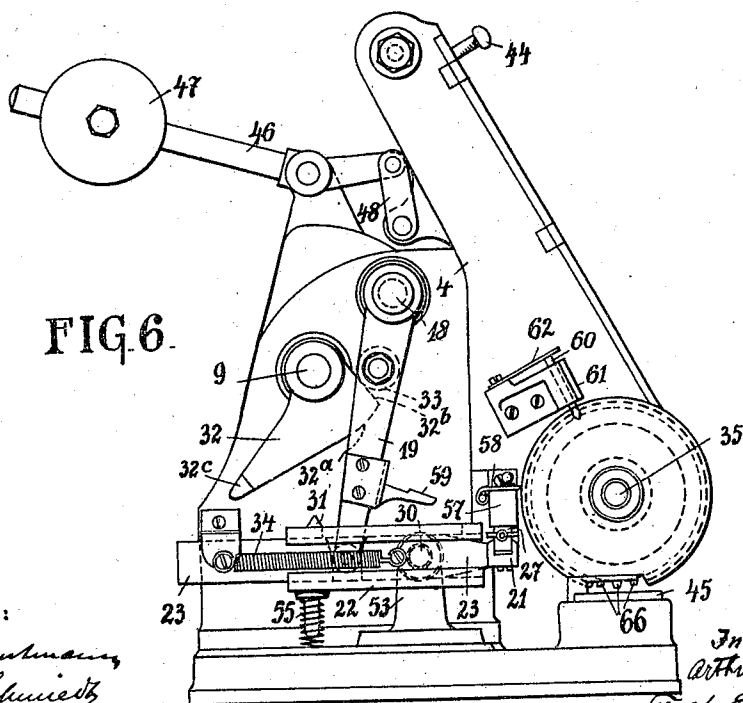


FIG. 6.



Witnesses:
August Oettermann
Hugo Schmeider

Inventors:
Arthur Hammer
Fritz Egersdörfer

UNITED STATES PATENT OFFICE.

ARTHUR HAMMER, OF BERLIN, AND FRITZ EGERSDÖRFER, OF BERLIN-CHARLOTTENBURG, GERMANY; SAID EGERSDÖRFER ASSIGNOR TO SAID HAMMER.

STAMPING APPARATUS, IN PARTICULAR FOR MARKING ARTICLES TO BE LAUNDERED.

1,235,565.

Specification of Letters Patent.

Patented Aug. 7, 1917.

Application filed November 7, 1916. Serial No. 130,104.

To all whom it may concern:

Be it known that we, ARTHUR HAMMER, a subject of the Emperor of Germany, and resident of Berlin, Germany, and FRITZ EGERSDÖRFER, a subject of the Emperor of Germany, and resident of Berlin-Charlottenburg, Germany, have invented certain new and useful Improvements in Stamping Apparatus, in Particular for Marking Articles to be Laundered, of which the following is a specification.

The present invention relates to a stamping apparatus which is chiefly intended for marking articles to be laundered, and in which the inking device is, at the commencement of the stamping operation brought into contact with the stamp and thereupon again moved away from the latter. In the heretofore known stamping apparatus of this kind the inking device is during such moving away or at least during the first part of such movement still in contact with the stamp, so that it wipes along the latter and the inking is not performed in the most favorable manner.

According to the present invention the inking device is brought into contact with the stamp and again removed therefrom before its moving aside is started. For obtaining this object the inking device may be fitted to a carrier which receives an up-and-down-movement before the aside movement.

In the accompanying drawing a constructional form of the new stamping apparatus is exemplified; in this drawing—

Figure 1 is a side elevation, partly in section along the line I—I in Fig. 3.

Fig. 2 is a section along the line II—II in Fig. 3.

Fig. 3 is a horizontal section along the line III—III in Fig. 2.

Fig. 4 is a section through the stamping apparatus along the line IV—IV in Fig. 1, the types on the type disks not being represented.

Fig. 5 is an enlarged fragmentary top view of the setting plate.

Fig. 6 is a side elevation corresponding to Fig. 1, with the stamp pressed down.

The stamping device 1, which is composed, in the usual manner, of a plurality of disks having printing types 66 (omitted in Fig. 3) on their circumference and disposed to be set at will, is journaled in a

carriage 4 which is vertically guided on the machine body 3. The individual disks of the stamping device 1 are arranged close beside each other on a shaft 35, which is fitted in the walls of a casing 2 connected to the carriage 4; by means of telescoped tubes 37 the said disks are coupled to chain wheels 36 in the said casing 2. Over these chain wheels 36 travel endless perforated steel bands 42 which act as driving chains. These steel bands 42 travel also over guide rollers 39 fitted loose on a shaft 38 in the upper end of the casing 2 and besides over tension rollers 41 fitted loose on a shaft 40, which is journaled by means of an eccentric pin 64 in the casing 2 so as to allow of regulating the tension. In the front wall of the casing 2 are provided slots 43 extending from the top downward. Through these slots project handles 44 attached to the individual bands 42. Along the sides of said slots characters, such as numerals, letters or the like, corresponding to those on the circumference of the disks are indicated in series in such a manner that when the handle 44 of a given band is set to any such character, the said character on the respective stamping disk will be in stamping position. The handles 44 are provided with conical shoulders 44' which correspond to recesses 63 in the sides of the slots 43 (Figs. 2 and 5). The resilient steel bands 42 will draw the handles with the conical shoulders 44' into the recesses 63 and thereby lock them, so that they must first be pulled out when the type wheels are to be reset. The stamping is performed by moving the carriage downward, whereby the set types of the type wheels are printed onto the article placed upon the elastically supported table 45. For moving the carriage 4 downward, the following arrangement is employed.

In the machine body 3 is journaled a shaft 9, on which a toothed segment 10 is fitted. On a lever 11 fitted to the same shaft acts a rod 12 connecting with a foot lever. A returning spring 67 acts upon said rod 12. Fitted to the carriage 4 is a rack 8 (Fig. 2) with which the toothed segment 10 turning clockwise as seen in Fig. 2, meshes when the foot lever is depressed, so that the carriage 4 with the casing 2 is moved downward. When the foot lever is released the toothed segment 10 and with it also the car-

riage 4 returns under action of the returning spring 67 into lifted position. For facilitating this movement the weight of the casing 2 is balanced by means of a counter-weight 47 fitted to a double-armed lever 46. This lever 46 acts by means of a link 48 on the casing 2. The carriage 4 is arrested both in raised and in lowered position by means of an elastic bolt 49, which at the two terminal positions of the carriage 4 engages in corresponding spherical bores 50 and 51 respectively in the latter.

A bar 23 (Fig. 1) carrying the inking device 21 with the inking pad 27 is shiftably fitted in a U-shaped guide 22 which is under action of a pressure spring 55. This guide 22 is pivotally supported by aid of a pin 30 in a bearing 53. The guide 22 has at its upper end a longitudinal slot 54 (Fig. 3) through which the end of a lever 19 pivoted at 18 engages in a slot 20 of the bar 23 which is under action of a returning spring 34. The said lever 19 is under the control of a cam 32 fitted to shaft 9, by means of a roller 33 fitted to the side of said lever. This cam has a concentric portion 32^a which in the position of rest (Fig. 1) is in contact with the roller 33. In this position a lug 32^c of the cam 32 abuts against a lug 31 of the guide 22.

When by pressing down the foot lever the shaft 9 is turned clockwise, the guide 22 will, by the action of lug 32^c of cam 32 on lug 31, be moved contrary to the hands of a clock, so that the inking pad 27 is pressed against the types of the stamping device 1 opposite to it. In the next moment the lug 31 is cleared, so that the guide 22 will return under action of spring 55 into the initial position. Then the roller 33 will leave the concentric portion 32^a of the cam and slip on to its side 32^b (Fig. 6), so that the spring 34 can pull the inking device 21 away from the range of the stamping device 1. Only after this operation has been completed, the toothed segment 10 comes into engagement with the rack 8 and moves the stamping device 1 downward.

When the foot lever is released, the stamping device is first raised, whereupon by the action of the side 32^b of the cam 32 the lever 19 and with it the inking device is moved toward the right as seen in Fig. 1. Toward the end of the return movement the cam 32 passes over the lug 31 and bears against it.

The inking device may, itself, serve as receptacle for the ink; in the constructional form shown, however, it consists of a plain inking pad which comes, at each stroke into contact with the ink receptacle for receiving a fresh supply of ink. The ink receptacle which is open at top and bottom and is fitted to the side of casing 2 of the stamping device 1 contains a porous substance saturated with the ink, onto which fresh ink may be

poured after the lid 58 has been opened. At the position of rest (Fig. 1) the lower opening of the receptacle 57 is closed by means of a plate 59 fitted to lever 19, in order to prevent the ink from dripping out or being evaporated. When the apparatus is employed, together with the aside movement of the inking device 21 the plate 59 is lifted from the receptacle 57, which is in such position that when the inking device is fully moved aside, the inking pad is vertically beneath it. In the subsequent downward movement of the carriage the ink receptacle will with its open lower side set down on the inking pad 27 (Fig. 6) so that the latter receives a fresh inking, which it will, at the following operation transfer to the printing types.

In combination with the stamping device 1 is provided a device for arresting the individual type wheels in their set up position. This device consists of a corresponding number of bolts 60, under action of springs 62, and disposed in a carrier 61 at the side of the casing 2. These bolts may engage with their beveled ends into corresponding notches 65 in the type wheels.

I claim:

1. In a stamping apparatus, the combination of a stamp, means to move said stamp toward the article to be stamped, an inking device fitted to a carrier shiftably sideways with respect to the stamp in a pivotally disposed guide, means to perform said shifting movement, and means to perform a rocking movement of the guide toward and away from said stamp before the sidewise movement of said carrier commences.

2. In a stamping apparatus, the combination of a stamp, means to move said stamp toward the article to be stamped, an inking device fitted to a carrier shiftably sideways with respect to the stamp in a pivotally disposed guide, means for rocking said guide to move the inking device directly into and out of contact with the stamp, a lever acting on said carrier, a cam having a concentric portion in touch with said lever at the commencement of the stamping operation during the rocking movement of the guide, and means for operating the cam to impart movement to the lever and thus shift the carrier in its guide.

3. In a stamping apparatus, the combination of a stamp, means to move said stamp toward the article to be stamped, an inking device fitted to a carrier shiftably sideways with respect to the stamp in a pivotally disposed guide, a lever acting on said carrier, a cam having a concentric portion in touch with said lever at the commencement of the stamping operation, means for operating the cam to impart movement to the lever and thus shift the carrier in its guide, and coacting lugs on said guide and cam to

produce rocking movement of the said guide while the concentric portion of the cam is in contact with the lever.

4. In a stamping apparatus, the combination of a stamp carriage, a stamp mounted on said carriage, a rack on said carriage, a toothed segment out of engagement with said rack during the rest position of the apparatus, an inking device, means to move said inking device sidewise out of the path of the stamp, means to bring said inking device into and out of contact with said stamp before its sidewise movement commences, and means to move said toothed segment into engagement with the rack after the sidewise movement of the inking device.

5. In a stamping apparatus, the combination of a stamp carriage, a stamp mounted on said carriage, said stamp being composed of a number of type wheels, supported by telescoped shafts, chain wheels on said shafts, chains engaging said chain wheels, a casing inclosing said chains and chain wheels, a wall of said casing having slots therein, handles on said chains projecting through said slots, said handles having con-

cal shoulders, and the said wall being provided with corresponding recesses in the sides of said slots, engaged by said conical shoulders.

6. In a stamping apparatus, the combination of a stamp carriage, a stamp mounted on said carriage, an ink receptacle fitted to said carriage and being open at the bottom, means to move said stamp carriage toward the article to be stamped, an inking device, a lever for moving aside said inking device out of the path of the stamp into the path of said ink receptacle, and a plate on said lever adapted to close the opening in the bottom of said inking receptacle in the position of rest of the apparatus.

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

ARTHUR HAMMER.

FRITZ EGERSDÖRFER.

Witnesses:

HENRY HASPER,

ALLEN F. JENNINGS.

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