

F. A. & A. P. FISCHER.
FRANKING MACHINE.
APPLICATION FILED AUG. 31, 1910.

1,034,096.

Patented July 30, 1912.

4 SHEETS--SHEET 1

FIG. 1

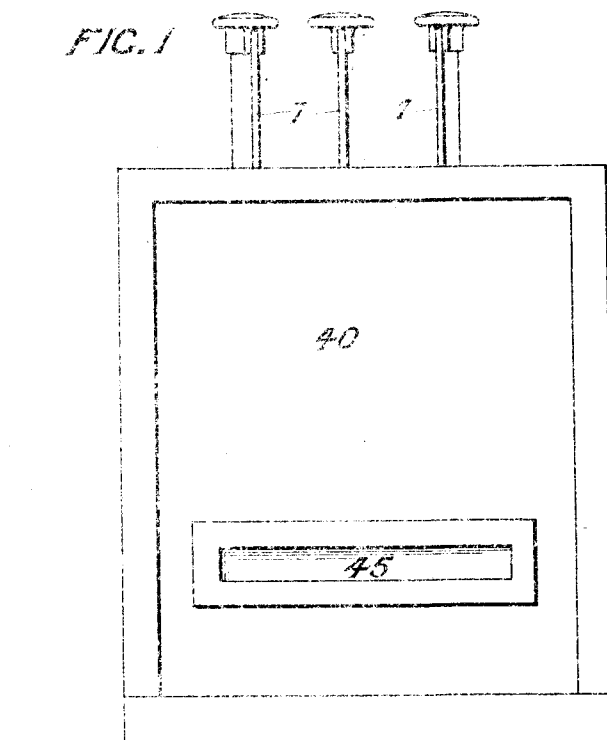


FIG. 2

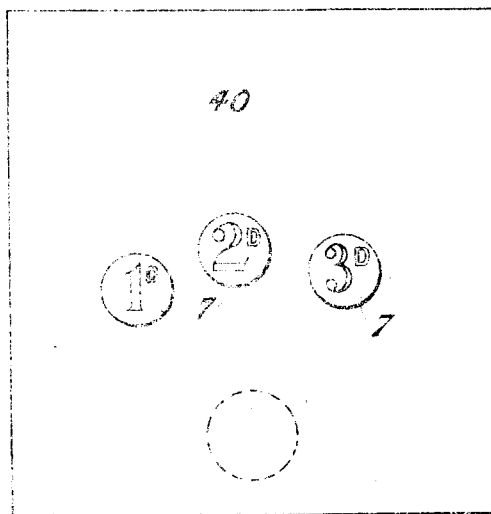
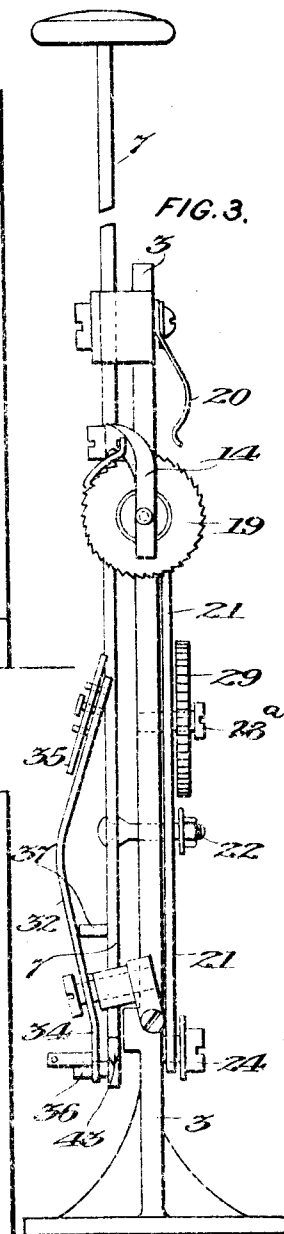


FIG. 3



WITNESSES.

John C. ...
Alfred C. ...

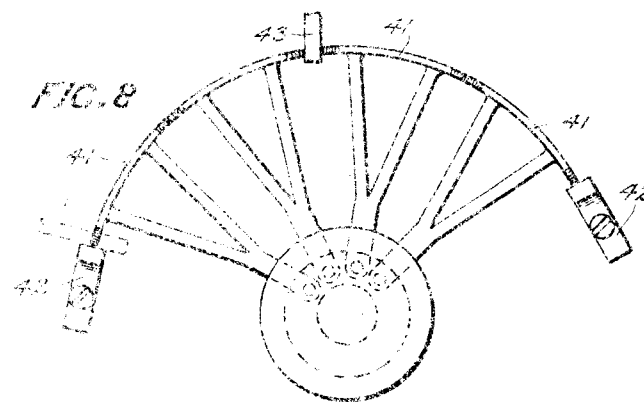
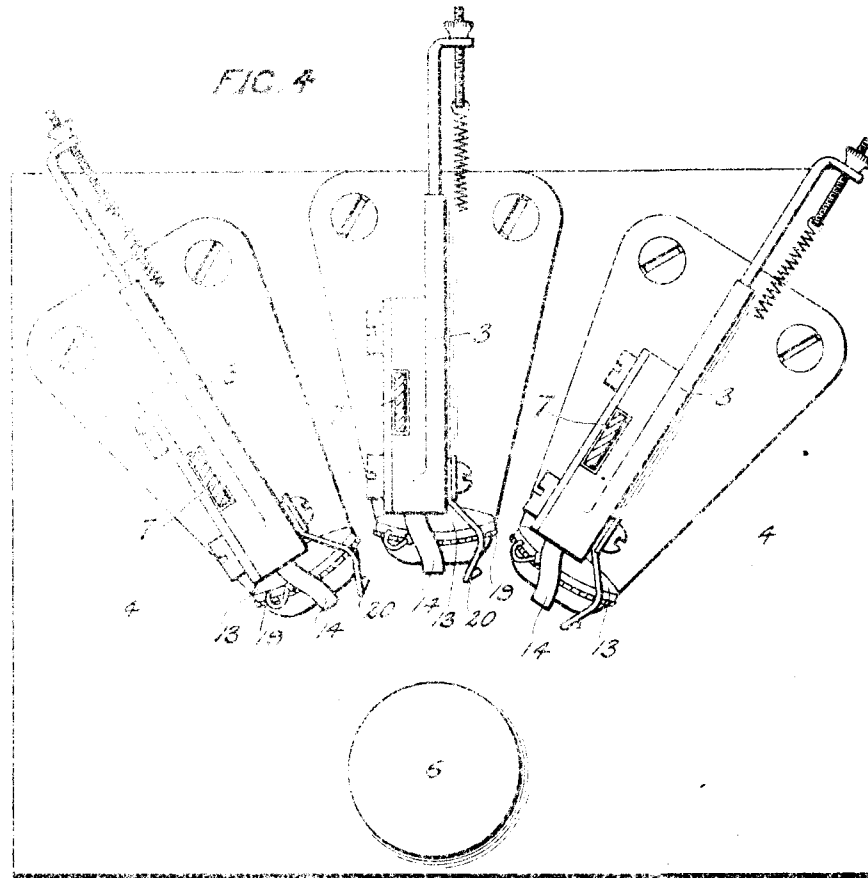
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F. A. & A. P. FISCHER.
 PRESSING MACHINE.
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1,384,096.

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4 SHEETS-SHEET 2.



WITNESSES.

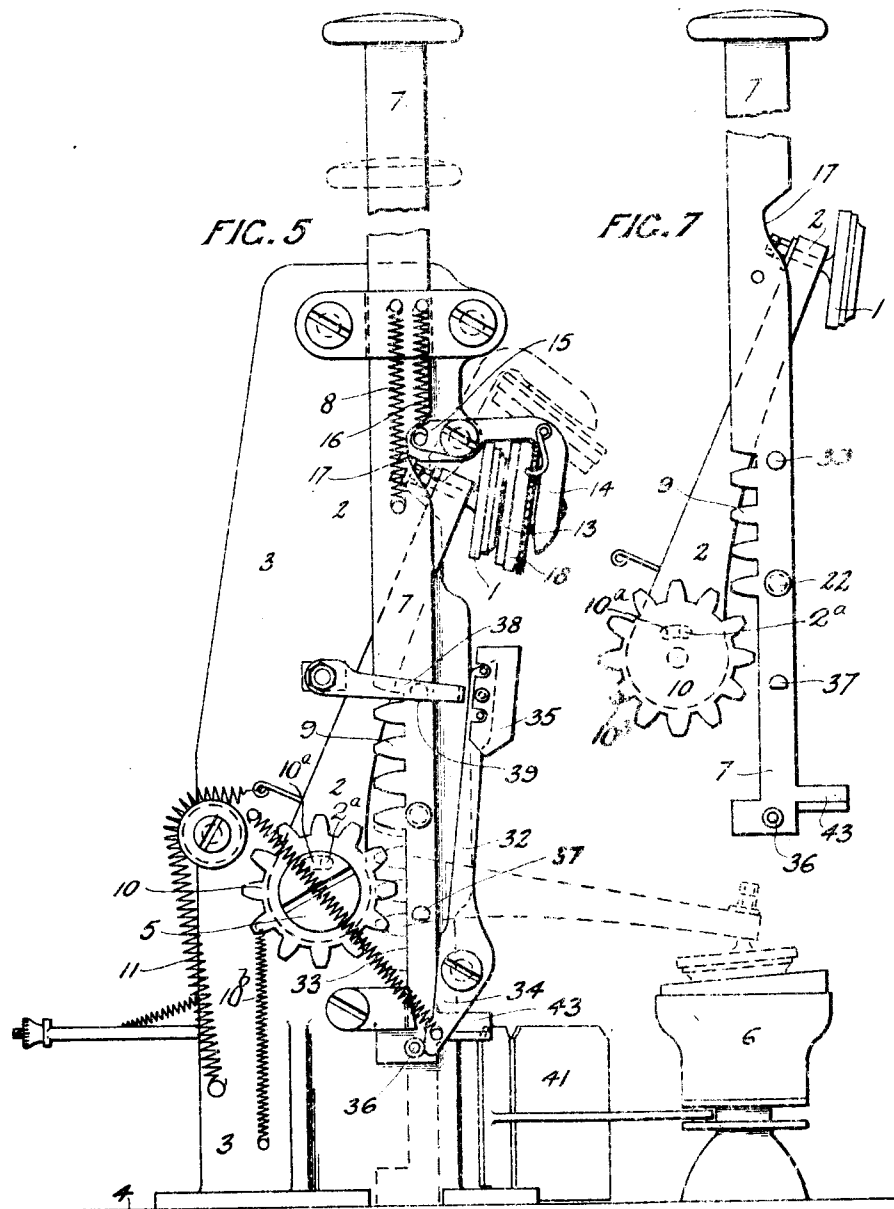
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F. A. & A. P. FISCHER.
FRAMING MACHINE.
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4 SHEETS—SHEET 3.



WITNESSES:
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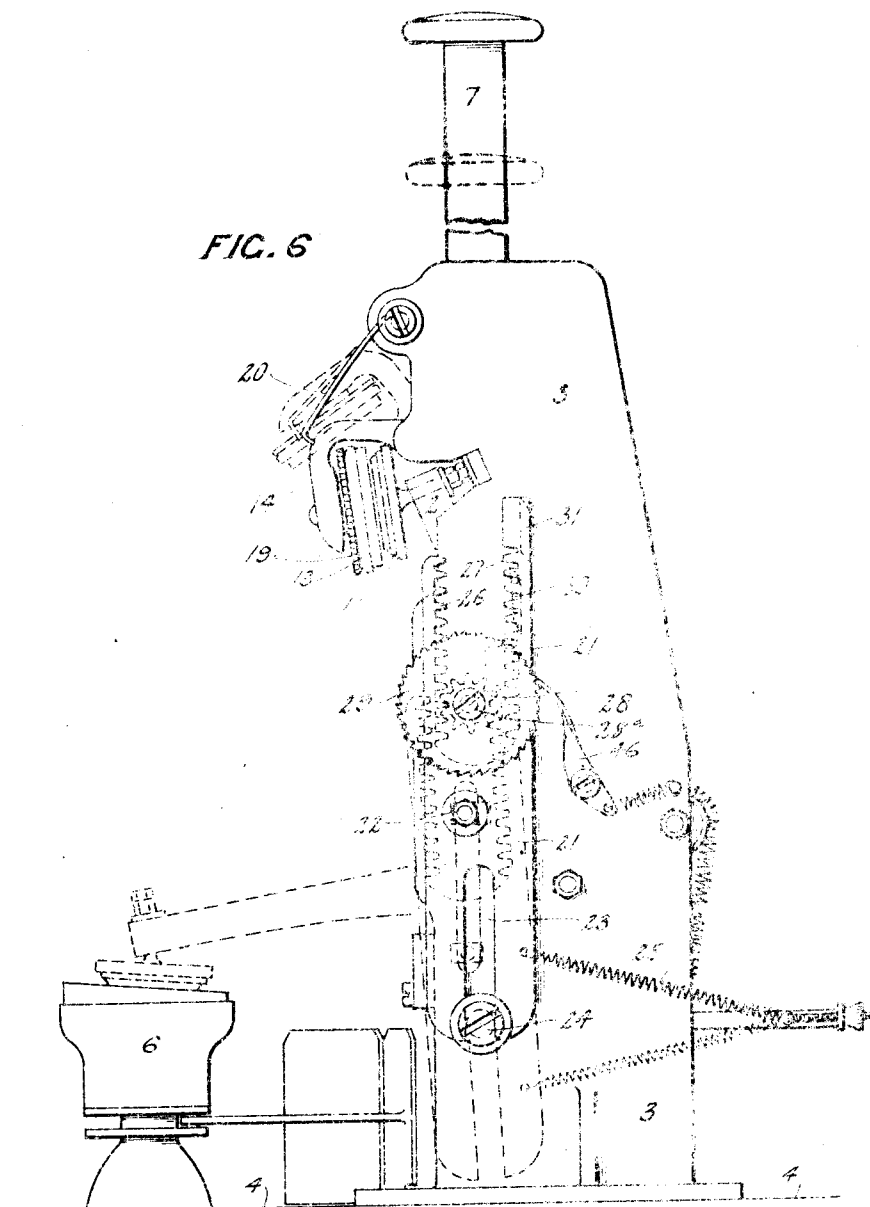
F. A. & A. F. FISCHER
FRANKING MACHINE
APPLICATION FILED AUG. 31, 1910

1,034,096.

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4 SHEETS-SHEET 1

FIG. 6



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UNITED STATES PATENT OFFICE.

FREDERICK AUGUST FISCHER AND ARTHUR PAUL FISCHER, OF NAPIER, NEW ZEALAND.

FRANKING-MACHINE.

1,034,096.

Specification of Letters Patent.

Patented July 30, 1912.

Application filed August 31, 1910. Serial No. 579,923.

To all whom it may concern:

Be it known that we, FREDERICK AUGUST FISCHER and ARTHUR PAUL FISCHER, subjects of the King of Great Britain, residing at Napier, in the Dominion of New Zealand, have invented a new and useful Improved Franking-Machine; and we do hereby declare the following to be a full, clear, and exact description of the same.

10 This invention relates to that class of franking machine for impressing letters, telegrams and the like, with stamps representing different values for postage, stamp duty or like purposes, in which stamp dies are caused to descend upon the article to be stamped, and in which the aggregate values of such impressions are recorded or indicated.

20 The invention consists in improvements in the construction and manner of operating such dies, in the use of special means whereby any fraudulent use of the stamp without actuating the recording mechanism, is rendered impossible, and also in other details of construction that will be hereinafter more fully referred to.

25 The means devised for carrying out the invention consist in mounting each stamp die upon the end of a pivoted arm which is caused to descend upon an impression block arranged to receive the die and impress its stamp upon a paper placed upon the block. These dies are adapted to be actuated independently of each other by means of suitably arranged levers or rods and in their movements to actuate a counting or recording mechanism of any ordinary construction to record the total value of the stamps impressed by the machine.

40 The machine comprises means whereby the stamp dies may be inked, means whereby any reverse movement of the stamp levers is prevented as they are caused to move up and down, means for preventing the fraudulent use of the stamps to obtain more than one impression at each downward movement thereof and other details in construction that will be hereinafter more fully described.

50 The invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a front elevation of the machine. Fig. 2 is a plan thereof. Fig. 3 is a front elevation of one of the stamps of the machine and the appliances for operating it.

Fig. 4 is a plan thereof. Fig. 5 is a left hand side elevation of one of the stamps and the mechanism devised for actuating it. Fig. 6 is a right hand side elevation thereof. Fig. 7 is a detail view of one of the stamp levers and with the means for operating it. Fig. 8 is a plan of the means employed for preventing more than one stamp being used at the one time, or for locking all of the stamps against being used.

In carrying out the invention each stamp die 1 is carried in the end of a lever bar 2 that is articulated at its other end to a vertical frame plate 3 secured to a base plate 4. The lever is so disposed that when turned on its pivot pin 5 the stamp 1 will be caused to strike with its die face upon the top of a resilient cushioned stamping block 6 secured upon the base plate 4. For thus operating the stamp lever a plunger rod 7 is provided and mounted vertically in sliding guides upon the side of the frame plate 3 so as to be capable of sliding up and down therein, being normally retained in its raised position by means of the spring 8. The plunger rod is formed with a rack 9 in one of its edges the teeth of which are adapted to gear with the teeth of a pinion wheel 10 mounted on the pivot pin 5 and adapted to engage with the stamp lever, when the rod is moved down and up. These movements of the rod are thus adapted to cause the stamp lever to be turned down to engage with the stamping block, and to turn upward under the influence of the spring 8 when the rod is released from the downward pressure thereon. A spring 11 is also provided for assisting the upward movement of the stamp lever. The connection of the pinion 10 with the stamp lever is made of such a nature as to permit of a limited amount of free movement to each so as thus to provide for any jar of the die on the stamping block being prevented. This is effected by forming a short slot 10^a in the pinion which slot rides over a pin 2^a projecting from the adjacent face of the lever. The pin is kept normally in the forward end of the slot by means of the spring 10^b, attached to the pinion. When the die hits the stamping block the lever 2 may thus rebound to the limit allowed by the length of the slot. Any number of these stamp levers may be so constructed

and down movements the pin will travel on reverse sides of the bar and thus will prevent the plate being moved across under the action of spring 25 until the limits of the travel are reached.

The means employed for preventing impressions being obtained on two or more paper sheets from the one movement of the stamp lever by the use of carbon paper or other duplicating means placed between the sheets, without indicating that such has been done, are shown in Fig. 5. These means consist of an arm 32 pivoted to the frame plate 3 and adapted to descend across the stamping block 6 under the influence of a spring 33 connected with a tail piece 34 thereon. This arm carries a plate 35 the edge of which engages with the stamping block. The arm is kept raised when the plunger rod is in its raised position and is retained by means of a pin or an anti-friction roller 36 on the bottom of the rod engaging against the tail 34. This pin is so positioned that the arm will be released immediately the rod starts to move downward so that its outer end and the edge of the plate 35 will strike across the paper laid on the stamping block sufficiently hard to make an impression across the face of any papers arranged beneath the top paper with duplicating means between. The arm is then immediately raised again by the engagement of the pin or roller 37 on the rod with the upper side of the tail piece, as the rod moves down so that it will be moved out of the way of the descending stamp die. It is retained in the raised position by means of a flat spring 38 engaging with a knob on the side of the arm and held by such spring until the rod reaches the upward limit of its travel when the spring will be forced out of contact with it by the inclined stud 39 on the rod engaging beneath the spring, and the arm then retained in the raised position by the engagement of the pin 36 with the tail piece in the manner before described.

Any approved means may be devised for depressing the plunger rods in the manner described. In the drawings each rod is shown as extending beyond the top of the casing 10 in which the mechanism is mounted and being provided on its end with a finger plate by means of which it may be depressed. If desired however the rod may be drawn down by means of a pivoted lever extending out of the front of the casing and connected at its back end by links or other connections with the rod.

Any desired number of stamps may be employed. In the drawings three are shown each of different values which values are indicated upon the finger plates of the respective rods. Where stamps of more than one value are used, the inking pad of each may be stamped with an ink of a different color to

the others so that its value may be readily recognized when it is impressed upon an envelop or the like. Instead of the inking pads the stamp dies may be designed to work in conjunction with an inking ribbon caused to pass across above the stamping block so as to transmit an impression to the article placed upon the block.

The means for locking the plunger rods from being depressed or for only allowing one to be depressed at the one time as shown in Fig. 8 consist of a number of vertical plates 41 arranged on their edges end to end within a frame 42. These plates are arranged so that the adjacent edges of each two plates coincide with one of the plunger rods and the frame is made of such a width that it will exceed the aggregate length of the plates by sufficient only to permit of a projecting V shaped block 43 on each plunger rod passing down between the edges of the plates when the rest of the plates are moved into close engagement with each other. The tops of the openings between the plates are inclined so that when a plunger rod is depressed its V shaped block will enter the wedge opening thus provided and will force the plates apart while closing all the other openings against the admission of the blocks of the other rods. If all the rods are to be thus locked from movement a separate block may be inserted between one of the end plates and the frame and the others thus jammed into the closed position.

The casing 40 will be provided with an opening 45 in its front of such a size as to permit of an envelop or paper being inserted to lie across the stamping block and if desired, this opening may be covered by a spring plate hinged to the inside of the casing and adapted to be lifted, to permit of the envelop being inserted in the manner required.

The counting or recording mechanism used with the machine may be of any of the known constructions and such as will provide for the aggregate values of the different stamps being recorded. This mechanism will be actuated by gearing with the several plunger rods of the different stamps which will be arranged to actuate the recorder in a manner proportionate to their respective values.

What we do claim as our invention, and desire to secure by Letters Patent is:—

1. In franking machines, a stamp die, a pivoted lever carrying such die, a plunger rod adapted when depressed to engage with and depress the lever, means for raising the rod and lever, a pivoted arm arranged adjacent to the plunger rod, an inking pad upon such arm, a spring for keeping the pad in engagement with the stamp die when the lever is in the raised position, a depression upon the pivoted arm a depression upon the

plunger rod into which such extension fits when the plunger rod is raised and shaped to engage with such extension when the plunger rod is depressed, substantially as herein specified.

2. In franking machines, a stamp die, a pivoted lever carrying such die, a plunger rod adapted when depressed to engage with and depress the lever, means for raising the rod and lever, a pivoted arm arranged adjacent to the plunger rod, an inking pad arranged to rotate on such arm, a spring for keeping the pad in engagement with the stamp die when the lever is in the raised position, an extension upon the arm, a depression in the plunger rod adapted to engage with such extension and to lift the arm on its pivot when the plunger rod is depressed, a ratchet wheel fixed to the back of the inking pad and a fixed spring tooth adapted to be engaged by such ratchet wheel when the arm is raised, substantially as specified.

3. In franking machines, a stamp die, a pivoted lever carrying such die, a stamping block adapted to be engaged by the face of the die, a plunger rod adapted to engage with and depress the lever, means for returning the rod and lever to the raised position, a ratchet wheel and pawl, a pinion

adapted to rotate with the ratchet wheel and a double rack connected with the plunger rod arranged with its racks on reverse sides of the pinion and adapted at each limit of movement of such rod to be rocked to cause the respective racks to engage alternately with the pinion substantially as and for the purposes herein specified.

4. In franking machines, a stamp die, a pivoted lever carrying such die, a plunger rod adapted to engage with and depress the lever, a stamping block adapted to be engaged by the die when depressed, means for actuating the plunger rod, a spring for keeping it normally in a raised position, a controlled pivoted lever having a plate fixed to its outer end and adapted on the downward movement of the plunger rod to strike across the stamping block and then to be raised clear thereof, substantially as specified.

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

FREDERICK AUGUST FISCHER.
ARTHUR PAUL FISCHER.

Witnesses:

A. HUOBLE CAMPBELL,
A. COLEMAN.