K. A. A. LEHMANN AND C. SCHINDLER.

MACHINE FOR STAMPING WORKMEN'S INDIVIDUAL CARDS.

APPLICATION FILED NOV. 27, 1917.

1,328,840. Patented Jan. 27, 1920.

4 SHEETS—SHEET 1.

Fig. 1

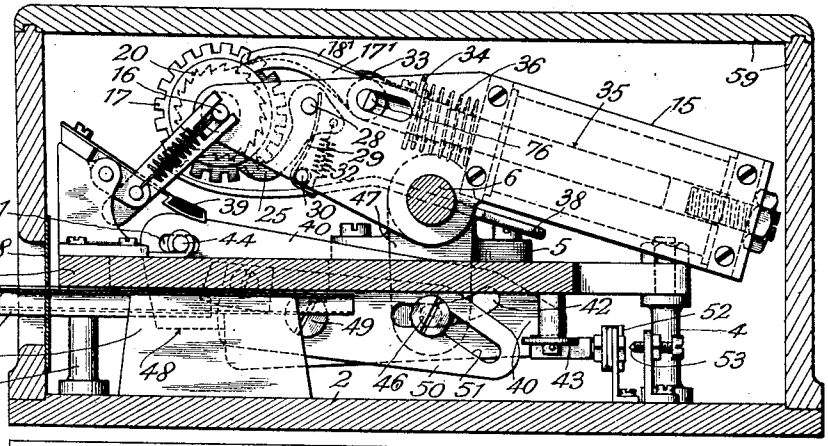
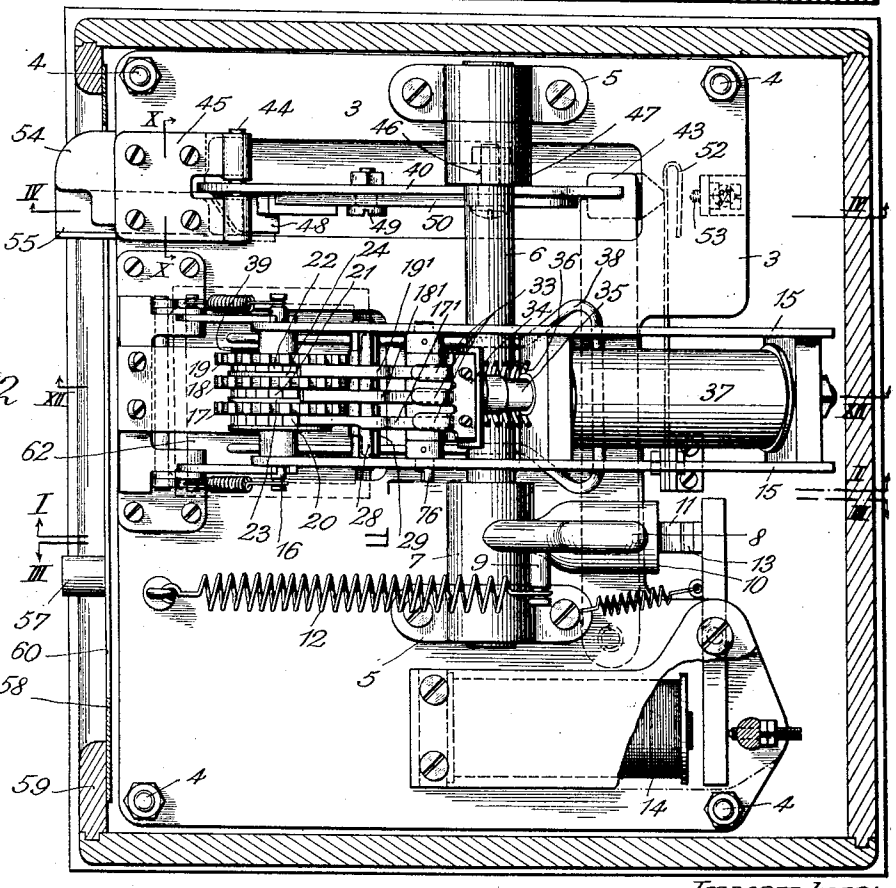


Fig. 2



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Fig. 3

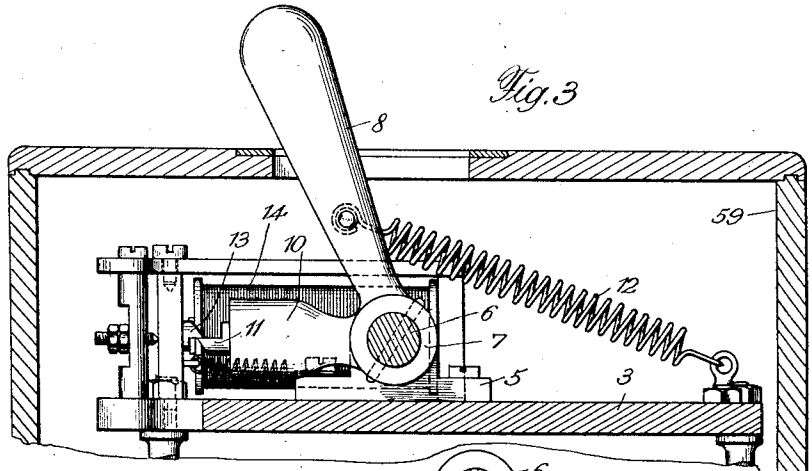


Fig. 4

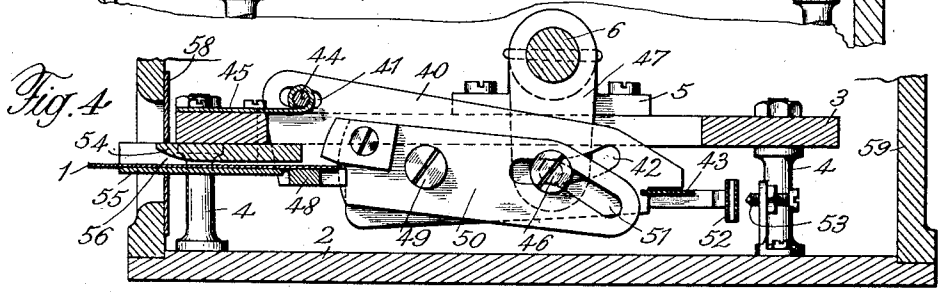


Fig. 5

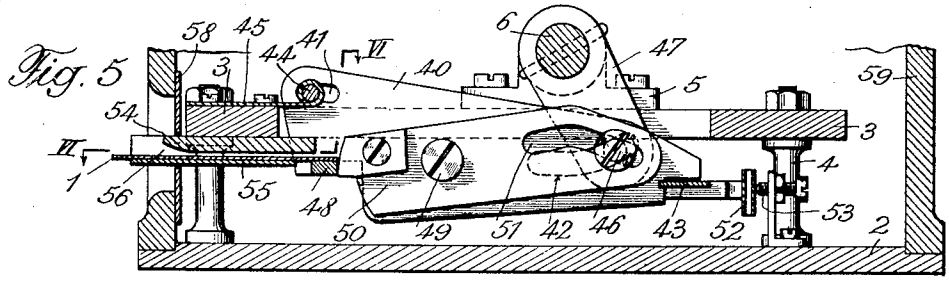
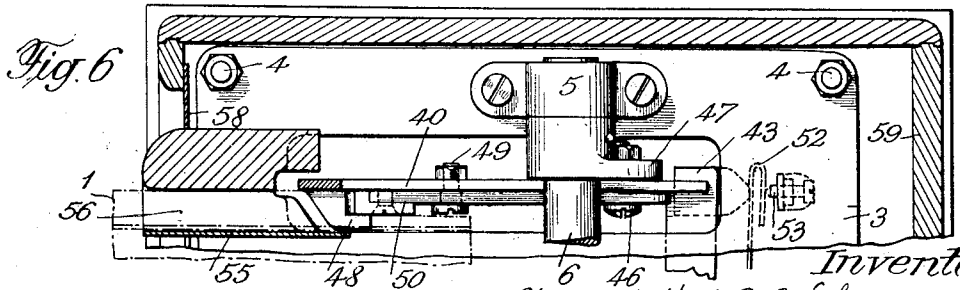


Fig. 6



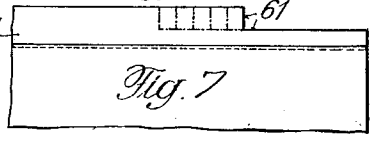


Fig. 7

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4 SHEETS—SHEET 3.

Fig. 8

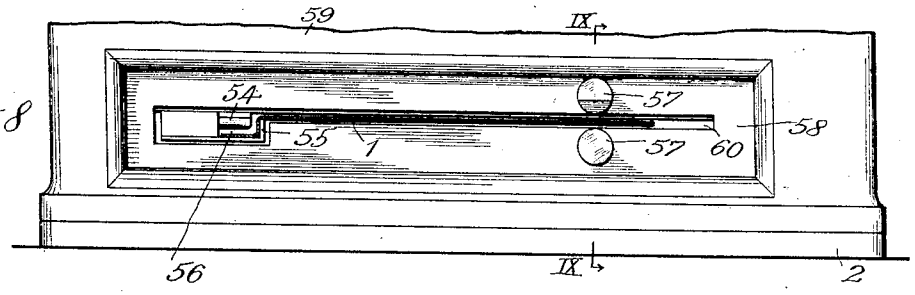


Fig. 12

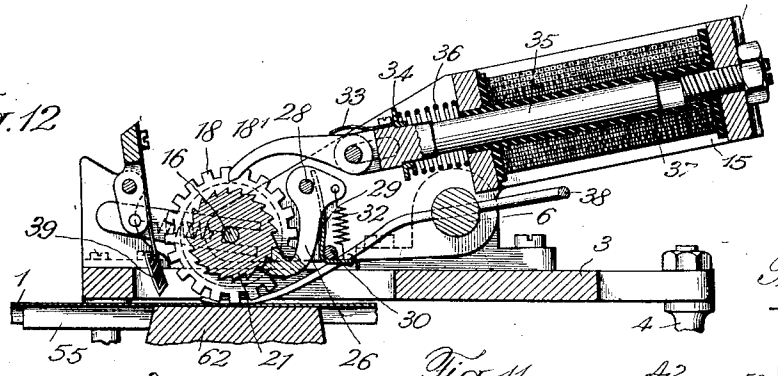


Fig. 9

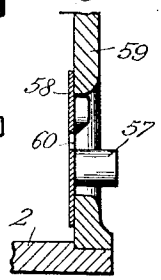


Fig. 10

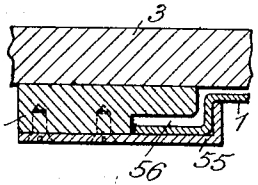


Fig. 11

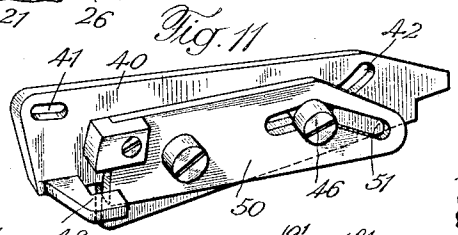


Fig. 13

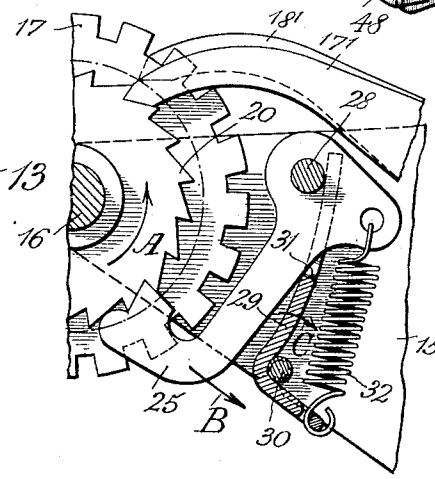
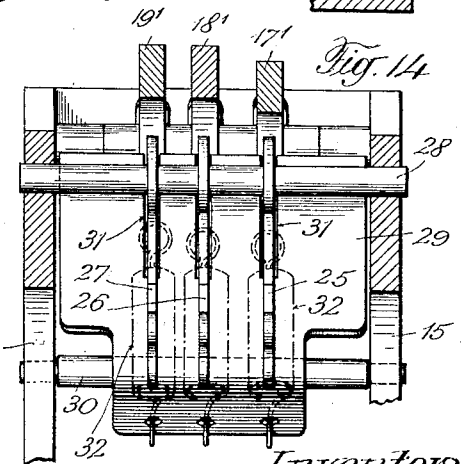


Fig. 14



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4 SHEETS—SHEET 4.

Fig. 15

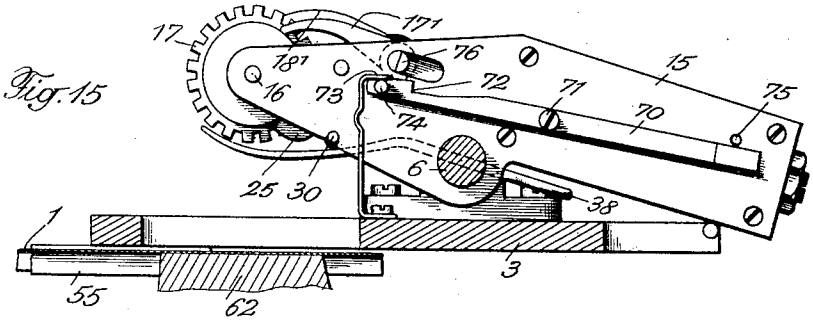


Fig. 16

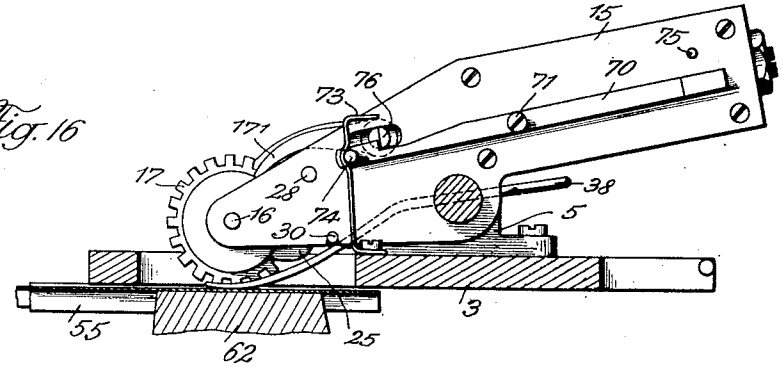


Fig. 17

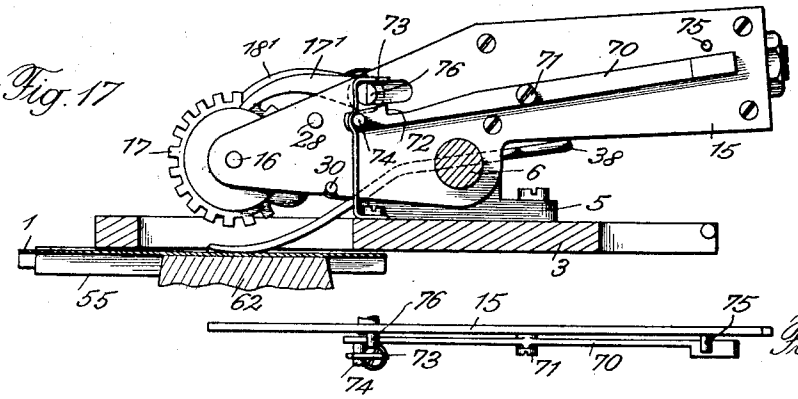


Fig. 21

Fig. 18



Fig. 20

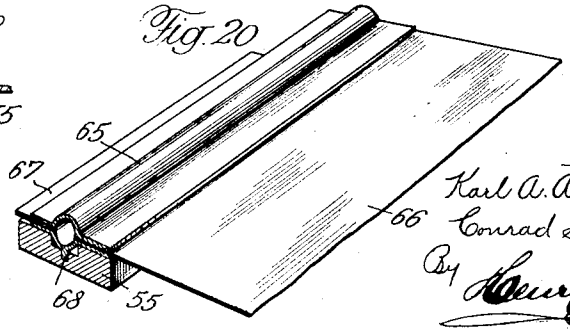


Fig. 19



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UNITED STATES PATENT OFFICE.

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MACHINE FOR STAMPING WORKMEN'S INDIVIDUAL CARDS.

1,328,840. Specification of Letters Patent. **Patented Jan. 27, 1920.**

Application filed November 27, 1917. Serial No. 204,185.

To all whom it may concern:

Be it known that we, KARL AUGUST ALBERT LEHMANN, a citizen of the Republic of Switzerland, residing at Biel, Switzerland, and CONRAD SCHINDLER, a citizen of the Republic of Switzerland, residing at Pfäfers, Switzerland, have invented certain new and useful Improvements in Machines for Stamping Workmen's Individual Cards; and we do hereby declare the following to be a clear, full, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in machines for stamping workmen's individual cards.

The object of the invention is to provide a machine of the kind referred to, in which a type-mechanism, together with a mechanism adapted to impart a feed movement to the type wheels, is mounted on a shaft adapted to be rotated about its own axis, and in which a cutting mechanism determining the position of the records to be printed on the card is positively connected in such a manner to said shaft, that the type-mechanism and the cutting mechanism are simultaneously released on an insertion of the card to be stamped into the machine.

A further object of the present invention is to provide a stamping machine, in which the cards are guided in such a manner by a member coöperating with a cranked portion of the cards, that the releasing of the type-wheel mechanism and the cutting mechanism is effected always at the right moment with regard to the position of the card to be stamped, this releasing being brought about quite independently of the length of the card-strip extending on one side of the cranked portion of the card to be stamped and of the width of the latter.

A still further object of the invention is to provide a stamping machine of the hereinbefore mentioned type, in which the feed mechanism for the type-wheels is constructed in such a manner, that the power required for imparting a feed movement to said wheels is not great enough to cause an inaccurate adjustment of the type-wheels, and in which the latter are securely fixed in the proper position as well in their position of rest as also in those cases, where two or more type-wheels have to be moved simultaneously relatively to each other.

This invention will now be more particularly described with reference to the accompanying drawings, which illustrate a constructional example of the invention. The machine shown is constructed, for instance, for the insertion of one card only.

In these drawings:

Figure 1 is a vertical cross-section on the line I—I of Fig. 2.

Fig. 2 is a plan view of the machine showing its cover in section;

Fig. 3 is a section on the line III—III of Fig. 2,

Fig. 4 is a section on the line IV—IV of Fig. 2.

Fig. 5 is a section corresponding to Fig. 4, illustrating certain parts in another position.

Fig. 6 is a plan view corresponding to Fig. 5 partly in section on the line VI—VI of Fig. 5.

Fig. 7 is a plan view of the cranked portion of an individual card.

Fig. 8 is a view of the machine seen from the left hand side with regard to Fig. 2.

Fig. 9 is a section on the line IX—IX of Fig. 8, the card being omitted for the sake of clearness.

Fig. 10 is a section on an enlarged scale on the line X—X of Fig. 2.

Fig. 11 is a perspective view of the cutting mechanism.

Fig. 12 is a section on the line XII—XII of Fig. 2, showing the type-mechanism in its downward tilted position.

Figs. 13 and 14 show on an enlarged scale details of the feed mechanism for the type-mechanism.

Figs. 15, 16 and 17 illustrate a device for preventing a time-mechanism from imparting a feed movement to the type-wheels while they effect the stamping of the card, Fig. 15 illustrating the parts in the position

which they take up previous to the actuation of the machine; Fig. 16 shows the parts in the stamping position and Fig. 17 in the position, which they assume, when the card has been stamped, but before the main shaft has been returned into its initial position by means of a hand lever.

Figs. 18, 19 and 20 illustrate modifications of details, and

Fig. 21 shows an enlarged view of a detail.

The machine illustrated on the accompanying drawings is adapted to record on an individual card 1 (Fig. 7) a determinate point of time by means of the type-mechanism. The latter is acted upon by an electric clock not shown on the drawings. This clock is of well known construction and sends at determinate time intervals electric currents into a device electrically connected therewith. These currents impart in the manner hereinafter described a feed movement to the type-wheels, so that the latter may record the hours, the quarters of an hour and the minutes on the individual card inserted into the machine. Such a time recording is required in all those cases, where the beginning and the end of the working hours, or the beginning of a certain job, or the presence of the owner of the card has to be recorded automatically, *i. e.* in a manner excluding any mistake and so that the recorded time can not be wiped out. In order that one and the same card may be used several times, it is, however, essential, that the stamping of the card is effected in such a manner, that a fixed distance between the printed lines is automatically secured. To this end, we have provided in our machine in connection with the type mechanism a cutting mechanism which on each actuation of the machine, *i. e.* each time that a line is printed severs a portion from the card, the dimensions of this severed portion corresponding to the distance between two succeeding stamped lines of the card.

Referring now to the drawings, 3 denotes a plate supported by four members 4 fixed to a base-plate 2. To the plate 3 are fixed two bearings 5 in which is rotatably supported a main shaft 6. To the latter is fixed a sleeve 7 provided with a hand lever 8. A spring 12 is connected at one end to a projection 9 of this lever 8 and at the other end in a suitable manner to the plate 3. The sleeve 7 has an extension 10 carrying a hardened catch 11 adapted to coöperate with a catch 13 (Figs. 2 and 3). Catch 13 is influenced by an electromagnet 14 and it usually keeps the parts of the machine in the position which they take up previous to the actuation of the machine.

On the main shaft 6 is pivotally mounted a printing or type-mechanism comprising a frame 15. In the end of this frame shown in the drawings on the left hand side is rotatably mounted a pin 16 (Figs. 1, 2, 12). On the latter are mounted for instance three type-wheels 17, 18 and 19 (Fig. 2). Each of these type-wheels is rigidly connected to a toothed disk 20, 21 and 22 respectively. 17^1, 18^1 and 19^1 are three feed-levers. Lever 17^1 coöperates with the feed-disk 20, 18^1 with the disk 21 and 19^1 with the disk 22. To the type-wheel 17 is also rigidly connected a disk 23 (Fig. 2) and to the type-wheel 18 a disk 24. Each of these disks 23 and 24 has a notch. These notches are not shown on the drawings; they are adapted to be engaged by the feed-levers 18^1 and 19^1 respectively, for the purpose of imparting to the disks 18 and 19 a feed movement corresponding to the distance between two letters of the type-wheels, each time that the latter have completed one revolution.

With each of the hereinbefore described feed-disks 20, 21 and 22, coöperates also a locking pawl 25 (Figs. 1, 12, 13 and 14) and 26, 27 (Fig. 14) respectively. These pawls 25, 26 and 27 are adapted to fix the type-wheels 17, 18 and 19 in their proper position and they are loose on a pin 28 mounted in the frame 15. 29 denotes a plate bearing on a pin 30 (Figs. 13, 14) which is also mounted in the frame 15. The arrangement is such, that the locking pawls 25, 26 and 27 are in contact with the plate 29 and effect an oscillation of the latter as soon as they are caused to exert a pressure on said plate 29. The locking pawls 25, 26 and 27 project through slots 31 provided in the plate 29. 32 denotes tension springs. Each of the latter is connected at one end to the plate 29 and at the other end with one of the locking pawls 25 and 26, 27 respectively. The preliminary tension and the strength of these springs 32 are relatively small. The springs 32 are adapted to set the locking pawls 25, 26 and 27 to operative position by pressing these pawls toward the feed-disks 20 and 21, 22 respectively. Resilient tongues 33 (Fig. 2) of a plate 34 cause the feed-levers 17^1, 18^1, 19^1 to engage the feed-disks 20, and 21, 22 respectively. Said tongues 33 are connected to a magnet core 35 acted upon by a spring 36. The magnet core 35 is influenced in its turn by an electromagnet 37 which is electrically connected to the clock hereinbefore referred to and not shown on the drawings. A stirrup-like, resilient member 38 passing through the main shaft 6 (Figs. 1 and 12) is adapted to act upon the frame 15 carrying the type mechanism on a rotation of the shaft 6 for the purpose of tilting this frame 15. 39 denotes the ink-pad. The type-wheels 17, 18 and 19 are caused to touch this pad 39 when they are oscillated about the

shaft 6 before they are pressed against the card 1 to be stamped.

The operation of the hereinbefore described feed mechanism is as follows:

Each time that the electromagnet 37 is energized, the magnet core 35 is attracted by it. The free ends of the feed levers 17^1, 18^1, 19^1 then slide over the teeth of the disks 20, 21 and 22 respectively, with which they are just in engagement, disengaging thereby said teeth and dropping upon the immediately succeeding tooth of these disks. The type-wheels 17, 18 and 19 are fixed during said movement of the feed-levers in their proper position by the locking pawls 25, 26 and 27. As soon as the current flowing through the electromagnet 37 is interrupted, the spring 36 has the tendency to move the core 35 with regard to the figures toward the left and the feed-lever 17^1—and correspondingly also the feed-levers 18^1, 19^1, in the case, that a feed movement of the type-wheels 18 and 19 has just to be effected—is forced into the gap lying between the tooth over which the lever has just been moved and the tooth which is now engaged by this lever. On a further movement of the core 35 toward the left, the disk 17, together with the feed-disk 20 is then moved in the direction of the arrow A (Fig. 13). This rotation causes the locking pawl 25 to oscillate in the direction of the arrow B about the pin 28, so that the plate 29 rotates in the direction of the arrow C (Fig. 13) about the pin 30 acting as a pivot for said plate 29. Thereby the spring 32 connected to the locking pawl 25 is wholly tensioned, while the remaining two springs 32 are only partially tensioned.

It will be seen, that in this arrangement it is necessary to overcome, besides the friction produced in the bearings for the type-wheels during each feed movement imparted to them, no matter if one, two or three type-wheels have to be moved simultaneously through a certain angle, only the resistance, which the plate 29 influenced by the springs 32 opposes to a rotation about its pivot 30 when it is acted upon by the locking pawls 25, 26, 27.

As, however, the preliminary tension and the strength of the springs 32 are relatively small, the power required for imparting a simultaneous feed movement to two or three type-wheels is not very much greater than that required for imparting feed movement to only one of these wheels. As soon as the feed-levers 17^1, 18^1, 19^1 have brought about the required rotation of the type-wheel or the type-wheels, the locking pawls of the type-wheels which have been rotated, engage the next tooth space of the feed-disks 20, and 21, 22 respectively, rigidly connected to the type-wheels, in order to fix these disks 20, 21, 22 in their proper position. The power with which the locking pawls 25, 26, 27 are caused to engage the feed-disks and the fixing power, *i. e.* the power with which the locking pawls are kept in engagement, remains substantially also always the same, no matter if one, two or three type-wheels have to be rotated simultaneously. Thus, the power with which the locking pawls tend to engage the feed disks depends only on the power with which the plate 29 tends to move back into its initial position under the influence of the springs 32, and this power remains substantially the same when one, two or three type-wheels have to be moved.

The hereinbefore described manner of operation of the feed mechanism is wholly independent of the number of the type-wheels, *i. e.* of the wheels provided with numbers, letters or marks, which may be arranged in the type mechanism.

The cutting mechanism comprises a rail 40 (Figs. 1, 2, 4, 5, 6, 11) provided with two slots 41 and 42 (Figs. 5, 4, 11) and cooperating with a member 43. A bolt 44 mounted in a plate 45 (Figs. 4, 5) fixed to the plate 3 projects into the slot 41. The slot 42 arranged concentrically to the main-shaft 6 coöperates with a bolt 46 rigidly connected to a crank arm 47 fixed to the main shaft 6. The front end of the rail 40 has a part 48 (Fig. 11) arranged substantially at right angles to the main body of this rail 40. 50 denotes a knife pivotally mounted on a bolt 49 fixed to the rail 40. The part 48 acts as a counter-piece or matrix for the knife 50. The rear end of the latter has a slot 51 (Figs. 11, 4, 5) through which passes the bolt 46 and which is so shaped, that upon rotation of the shaft 6 the bolt 46 causes the knife 50 to pivot about bolt 49 in order to sever a cutting from the card 1. The arrangement and the shape of the slots 41, 42 and 51 are such, that they admit in their foremost position a short displacement of the rail 40 and knife 50 in the direction of insertion of the card 1 without causing a tilting or a rotation of the knife 50, a movement which would then prevent any further insertion of the card 1.

The rear end of the rail 40 is adapted to act upon a contact spring 52 (Fig. 2) by means of the member 43. On a rearward displacement of the rail 40, the contact spring 52 is pressed toward a contact 53. As a result of this, the current energizing the electromagnet 14 is closed. The contact spring 52 acts indirectly also as a spring upon the knife, so that a proper breaking of the contact and a certain resistance against a too easy contact-making is obtained. The parts 40, 50 are moved in their longitudinal direction on an insertion of the card to be

stamped into the machine, the card effecting thereby also the actuation of the electromagnet 14.

In order to obtain a correct stamping of the card, it is essential, that the releasing of the type-mechanism and the cutting mechanism is effected each time in the proper position of the card to be stamped. This position depends, however, largely on the guide member of the card, so that this guide member is of very great importance.

For the purpose of guiding the card to be stamped in an accurate manner, the machine illustrated on the drawings comprises a plate 54 (Fig. 10) fixed to the plate 3. This plate 54 has a recess extending over its whole length. To the bottom side of the plate 54 is secured a further plate 55, a part of which is bent substantially at right angles upward. The plates 54, 55 form between them a slot 56 (Fig. 10) adapted to receive the cranked portion of the card 1. The latter may be cranked in the manner shown by folding it in a suitable manner. The surfaces of the plate 55 coming in contact with the card 1 effect an accurate guiding of the card 1. The accuracy with which the card 1 is guided by the plate 55 is thereby wholly independent of the contraction of the card taking place in consequence of the severing of the cuttings along one of the edges of the card or of the width of the latter. The plate 55 acts simultaneously as a front stop for the rail 40 when the latter is moved in its longitudinal direction.

57 denotes pins adapted to act as guides for the card 1 in all those cases where its width exceeds a certain measure. The pins 57 are provided on a plate 58 (Fig. 9) which is fixed to the inside of a removable cover 59. The latter is for inclosing the different mechanisms of the machine. The plate 58 has a slot 60 for inserting the card 1. The plate 3 is provided with the recesses and openings required for the proper movements of the different parts of the mechanisms.

Fig. 7 shows the cranked end of the card 1. The recess 61 of this card is for preventing a printing of the right end of the card, as this end is reserved for the printing of notices relating to the name of the firm, the section of the works, the name and number of the workman, or the like. The dotted lines in Fig. 7 show the cuttings gradually severed from the card in the course of the stamping of the latter, in order that the required distance between the different stamped lines may be obtained.

The working of the machine is as follows: When the hand lever 8 has been turned from the right to the left into the position shown in Figs. 2, 3 and 4, the catch 11 is caused to engage the catch 13. The latter then locks the catch 11. The spring 12 has been tensioned in consequence of said movement imparted to lever 8, and the different parts are now in the position which they assume previous to the actuation of the machine, this being the normal position of rest.

When it is desired to effect a time record, the card 1 to be stamped is inserted into the guide-slot 56. As soon as this card is pushed against the knife 50, it moves the latter together with the rail 40 rearward until the spring 52 is caused to touch the contact 53, in which case the circuit for the current energizing the electromagnet 14 is closed. Owing to this, the catch 13 is then released and the tension spring 12 causes the sleeve 7, provided with the catch 11 and fixed to the shaft 6, to turn quickly about its own axis. This rotation of the shaft 6 causes an oscillation of the crank 47 of the cutting mechanism, the bolt 46 rigidly connected to the crank 47 effecting thereby a rotation of the knife 50 about bolt 49. As a result of this, the knife 50 is moved from the position shown in Fig. 4 into that shown in Fig. 5, whereby a cutting is severed from that portion of the card 1 which rests on the counter-piece or matrix 48, the cutting severed off corresponding to the distance between the lines of the records to be printed. The type-mechanism loose on the shaft 6 remains, owing to the great load of the magnet 37 arranged on one side of the frame 15, in its position of rest until the stirrup 38 rigidly connected to the shaft 6 strikes against the frame 15, when this resilient stirrup 38 then causes the type-mechanism to tilt about the shaft 6 and stamp the required record on the card 1 resting on the support 62 (Figs. 12, 1). The resilient stirrup 38 pressing the card 1 against the support 62 prevents, during the stamping, any shifting of the card 1 in its direction of insertion. Fig. 12 illustrates the parts in the stamping or printing position. Immediately after the striking of the type-mechanism against the stamping card, the frame 15 carries out a small backward oscillation relatively to the stirrup 38 until it comes to rest on the rear end of the stirrup 38. Any accidental too early pulling out of the card does not interfere with the proper working of the machine.

The parts of the machine then remain in the position just described, until the main shaft 6 is returned into its initial position by means of the lever 8. When this is done, the card can be pulled out, the different mechanisms of the machine being again in the position which they assume previous to their actuation.

Figs. 15, 16 and 17 illustrate a device for preventing the clock hereinbefore referred to from imparting a feed movement to the type-mechanism while the latter stamps the

card, but without causing the loss of the temporary prevented feed movement.

Referring to these Figs. 15, 16 and 17, 70 denotes a pawl pivotally mounted on a pin 71 carried by the frame 15. The pawl 70 has a recess 72. The right hand end of this pawl 70 has the tendency to move downward under the action of gravity. 73 is a resilient stop fixed to the plate 3. The pawl 70 provided on one of its ends with a pin 74, assumes previous to the operation of the machine the position shown in Fig. 15. The frame 15 has a pin 75.

When the stamping is taking place, the frame 15 is in the position shown in Fig. 16, it being then for a short moment, owing to the tilting force imparted to it, at a certain distance from the rear end of the stirrup 38. As soon as the frame 15 is moved from the position shown in Fig. 15 into that shown in Fig. 16, the pawl 70 changes its position as well relatively to the stop 73 as to the frame 15. The pin 76 mounted in the core 35 (Fig. 2) of the electromagnet 37 strikes, on the tilting of the frame, against the left hand end of the pawl 70 (Fig. 21) and presses this end into the position shown in Fig. 16, the stop 73 being bent toward the left by the pin 74. Should it now occur, that a current impulse passes through the electromagnet 37, the pin 76 drops into the recess 72 as soon as the core 35 is pulled inward. Thereby, an outward movement of the core 35, and therefore a feed of the type-wheels is prevented as long as the parts assume the position shown in Fig. 16. However, this is only the case for a short moment, as immediately after the striking of the type-mechanism against the card, the frame 15 effects a small relative movement with regard to the stirrup 38 until it comes to rest on the rear end of this stirrup 38 (Fig. 17). In consequence of the resistance produced between the stop 73 and the pin 74, the pawl 70 is substantially prevented from carrying out any movement. The result of this is, that the pin 76 is in the position of the frame 15 shown in Fig. 17 wholly out of reach of the pawl 70, so that the core 35 can now complete its interrupted to and fro movement. The core 35 is also adapted to carry out later on in this position of the type-mechanism such a to and fro movement, should the mechanism have been left through inadvertence in the position shown in Fig. 17.

When the main shaft 6 is moved back into the position shown in Fig. 15 by means of hand lever 8 (Figs. 2, 3), the pin 75 of the frame 15 strikes against the pawl 70 and causes thereby a rotation of the latter about the pin 71 in a clockwise direction, the last part of this movement being only brought about by the gravity acting on pawl 70, so that pin 75 disengages again the pawl 70. As soon as the pin 74 strikes against the stop 73, the pawl 70 is prevented from further rotating in the direction referred to.

When the cards to be used have not a cranked portion, but are provided, for instance, with a ∩ or ∧ shaped recess, the shape shown in Figs. 18 and 19 respectively, is given to the part 55 acting as a guide.

When desired, the cranked card may also be replaced by a card-holder 65 (Fig. 20). On one side of such a holder is then fixed a thin sheet of paper 66 on which the records may be stamped, while on the other end is fixed a narrow, stiff strip 67 from which the cuttings may be severed. The holder 65 comprises also a part acting as a guide for it and which has, for instance, the shape of an arm 68 coöperating with a correspondingly shaped part of the plate 55.

What we claim now as our invention is:

1. A machine for stamping workmen's individual cards, comprising a main shaft, means adapted to rotate the main shaft about its own axis, locking means usually preventing such a rotation of the shaft, a type-mechanism pivotally mounted on the main shaft, a cutting mechanism operatively connected in a positive manner to the main shaft, means adapted to effect on the insertion of the card to be stamped into the machine a releasing of the locking means, the rotation of the main shaft then taking place causing as well an actuation of the cutting mechanism as a stamping of a record on the card by the type-mechanism, and means adapted to move the main shaft back into the initial position.

2. A machine for stamping workmen's individual cards, comprising a main shaft, means adapted to rotate the main shaft about its own axis, locking means usually preventing such a rotation of the shaft, a frame pivotally mounted on the main shaft, a type-mechanism carried by the frame and comprising type-wheels, a mechanism also carried by the frame adapted to impart a feed movement to the type-wheels, a member positively connected to the main shaft and adapted to impart to the frame a tilting movement when the main shaft is rotated, a cutting mechanism operatively connected in a positive manner to the main shaft, means adapted to release the locking means on an insertion of the card to be stamped into the machine, the rotation of the main shaft then taking place causing as well an actuation of the cutting mechanism as a stamping of a record on the card held fast during the printing by the member positively connected to the main shaft, and means adapted to move the main shaft back into the initial position after it has been rotated about its own axis.

3. A machine for stamping workmen's individual cards, comprising a main shaft, means adapted to rotate the main shaft about its own axis, locking means usually preventing such a rotation of the shaft, a frame pivotally mounted on the main shaft, a type-mechanism carried by the frame and comprising type-wheels, a mechanism also carried by the frame adapted to impart a feed movement to the type-wheels, a member positively connected to the main shaft and adapted to impart to the frame a tilting movement when the main shaft is rotated, a cutting mechanism operatively connected in a positive manner to the main shaft, means adapted to release the locking means on an insertion of the card to be stamped into the machine, the rotation of the main shaft then taking place causing as well an actuation of the cutting mechanism as a tilting movement of the frame carrying the type-mechanism in order to stamp the card, means preventing an actuation of the type-mechanism by the feed mechanism while the card is being stamped, the last mentioned means preventing, however, the temporary prevented feed movement from being lost, and means adapted to move the main shaft back into the initial position after it has been rotated about its own axis.

4. A machine for stamping workmen's individual cards, comprising a main shaft, means adapted to rotate the main shaft about its own axis, locking means usually preventing such a rotation of the shaft, a frame pivotally mounted on the main shaft, a type-mechanism carried by the frame and comprising type-wheels, an electromagnet mounted on the frame and provided with a movable core, feed-pawls pivotally connected to the core of the electromagnet and adapted to impart a feed-movement to the type-wheels, a resilient member fixed to the main shaft and adapted to impart on a rotation of the shaft a tilting movement to the frame, a cutting mechanism operatively connected in a positive manner to the main shaft, means adapted to release the locking means on an insertion of the card to be stamped, the rotation of the main shaft then taking place causing as well an actuation of the cutting mechanism as a tilting of the frame carrying the type-mechanism, a pawl pivotally mounted on the frame and moved immediately previous the stamping of the card into the path of movement of the core of the electromagnet, the pawl allowing in this position an actuation of the core of the electromagnet, but preventing any movement of the core effecting a feed movement of the type-wheels as long as the frame is in the printing position, and means adapted to move the main shaft back into its initial position after it has been rotated about its own axis.

5. A machine for stamping workmen's individual cards, comprising a main shaft, means adapted to rotate the main shaft about its own axis, a hand lever fixed to the main shaft for moving the latter back into the initial position, locking means usually preventing a rotation of the main shaft about its own axis, an electromagnet adapted to release the locking means, a type-mechanism pivotally mounted on the main shaft, and a cutting mechanism operatively connected in a positive manner to the main shaft and comprising a rail adapted to be moved in the direction of its longitudinal axis on the insertion of the card to be stamped into the machine, a contact arranged in the electric circuit of the electromagnet and adapted to be closed by the rail of the cutting mechanism when it is moved in the longitudinal direction, the electromagnet then effecting a releasing of the locking means and the rotation of the main shaft taking place causing as well a strip to be severed from the card to be stamped as a stamping of the latter by the type-mechanism.

6. A machine for stamping workmen's individual cards, comprising a plate, a main shaft supported by the plate, means adapted to rotate the main shaft about its own axis, a hand lever fixed to the main shaft for moving the latter back into its initial position, locking means usually preventing a rotation of the main shaft about its own axis, an electromagnet adapted to release the locking means, a type-mechanism pivotally mounted on the main shaft, a rail mounted on the plate supporting the main shaft and adapted to be moved in the direction of its longitudinal axis by the card to be stamped on the insertion of the latter into the machine and acting also as support for this card, a knife pivotally mounted on said rail, the rail being adapted to act as a counterpiece for the knife, a crank arm fixed to the main shaft and adapted to move the knife relatively to the rail on a rotation of the main shaft for the purpose of severing a strip off the card, a contact arranged in the electric circuit of the electromagnet and adapted to be closed by the rail of the cutting mechanism when it is moved in the longitudinal direction, the electromagnet then effecting a releasing of the locking means and the rotation of the main shaft taking place causing as well a rotation of the knife relatively to the rail as a stamping of the card by the type-mechanism.

7. A machine for stamping workmen's individual cards, comprising a plate, a main shaft supported by the plate, means adapted

to rotate the main shaft about its own axis, a hand lever fixed to the main shaft for moving the latter back into the initial position, locking means usually preventing a rotation of the main shaft about its own axis, an electromagnet adapted to release the locking means, a type-mechanism pivotally mounted on the main shaft, a rail mounted on the plate supporting the main shaft and adapted to be moved in the direction of its longitudinal axis by the card to be stamped on the insertion of the latter into the machine and acting also as a support for this card, a knife pivotally mounted on said rail, the rail being adapted to act as a counterpiece for the knife, a crank arm fixed to the main shaft and adapted to move the knife relatively to the rail on a rotation of the main shaft for the purpose of severing a strip off the card, the rail and the knife being so constructed that the knife is moved together with the rail on a movement of the latter in the direction of its longitudinal axis, but is not rotated relatively to the latter and a resilient contact-member adapted to close the electric circuit of the electromagnet on a longitudinal displacement of the rail, the electromagnet then effecting a releasing of the locking means and the occurring rotation of the main shaft causing as well a rotation of the knife relatively to the rail as a stamping of the card by the type-mechanism.

8. A machine for stamping workmen's individual cards, comprising a main shaft, means adapted to rotate the main shaft about its own axis, hand operated means for moving the main shaft back into its initial position, locking means usually preventing such a rotation of the shaft, a type-mechanism rotatably mounted on the main shaft, a cutting mechanism operatively connected in a positive manner to the main shaft, means adapted to effect on the insertion of the card to be stamped into the machine a releasing of the locking means, the rotation of the main shaft then taking place causing as well an actuation of the cutting mechanism as a stamping of a record on the card by the type-mechanism, and guide means for the card arranged in front of the cutting mechanism, the guide means effecting independently of the width of the card such a guiding of the latter, that the releasing of the locking means is always effected in the right moment relatively to the position of the card to be stamped.

9. A machine for stamping workmen's individual cards, comprising a plate, a main shaft supported by this plate, means adapted to rotate the main shaft about its own axis, hand operated means for moving the main shaft back into its initial position, locking means usually preventing such a rotation of the shaft, a type-mechanism rotatably mounted on the main shaft, a cutting mechanism operatively connected in a positive manner to the main shaft, means adapted to effect on the insertion of the card to be stamped into the machine a releasing of the locking means, the rotation of the main shaft then taking place causing as well an actuation of the cutting mechanism as a stamping of a record on the card by the type-mechanism, and a guide-plate for the card to be stamped connected to the plate carrying the main shaft, the guide-plate having a side turned upward substantially at right angles with regard to the body of this plate.

10. A machine for stamping workmen's individual cards, comprising a main shaft, means adapted to rotate the main shaft about its own axis, means adapted to move the main shaft back into its initial position after it has been rotated by the first mentioned means, locking means usually preventing a rotation of the main shaft, a frame pivotally mounted on the main shaft, type-wheels carried by the frame, a mechanism comprising a member adapted to receive a to and fro movement, levers connected to said member and adapted to impart a feed movement to the type-wheels, locking pawls for fixing the type-wheels, means effecting the power required for imparting a feed movement to the type-wheels being substantially independent of the number of type-wheels to which a feed movement has to be imparted, a cutting mechanism operatively connected in a positive manner to the main shaft, and means adapted to effect a releasing of the locking means on the insertion of the card to be stamped into the machine, the rotation of the main shaft then taking place effecting as well an actuation of the cutting mechanism as a striking of the type-wheels against the card to be stamped.

11. A machine for stamping workmen's individual cards, comprising a main shaft, means adapted to rotate the main shaft about its own axis, means adapted to move the main shaft back into its initial position after it has been rotated by the first mentioned means, locking means usually preventing a rotation of the main shaft, a frame pivotally mounted on the main shaft, type-wheels carried by the frame, a mechanism comprising a member adapted to receive a to and fro movement, levers connected to said member and adapted to impart a feed movement to the type-wheels, locking pawls pivotally mounted on the frame for fixing the type-wheels, a plate also pivotally mounted on the frame, springs each of which

is connected at one end to the pivotally mounted plate and at the other end to one of the locking pawls, a pin mounted in the frame and adapted to act as a pivot for the plate acted upon by the springs, a cutting mechanism operatively connected in a positive manner to the main shaft, and means adapted to effect a releasing of the locking means on the insertion of the card to be stamped into the machine, the rotation of the main shaft then taking place effecting as well an actuation of the cutting mechanism as a striking of the type-wheels against the card to be stamped.

12. A machine for stamping workmen's individual cards comprising, a spring actuated member, means for locking the latter against the action of the spring, a card cutting mechanism operable by the movement of the spring actuated member, and means including the cutting mechanism to effect, on the insertion of a card into the machine, a releasing of the locking means.

In testimony that we claim the foregoing as our invention, we have signed our names.

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