

**Jan. 27, 1953**

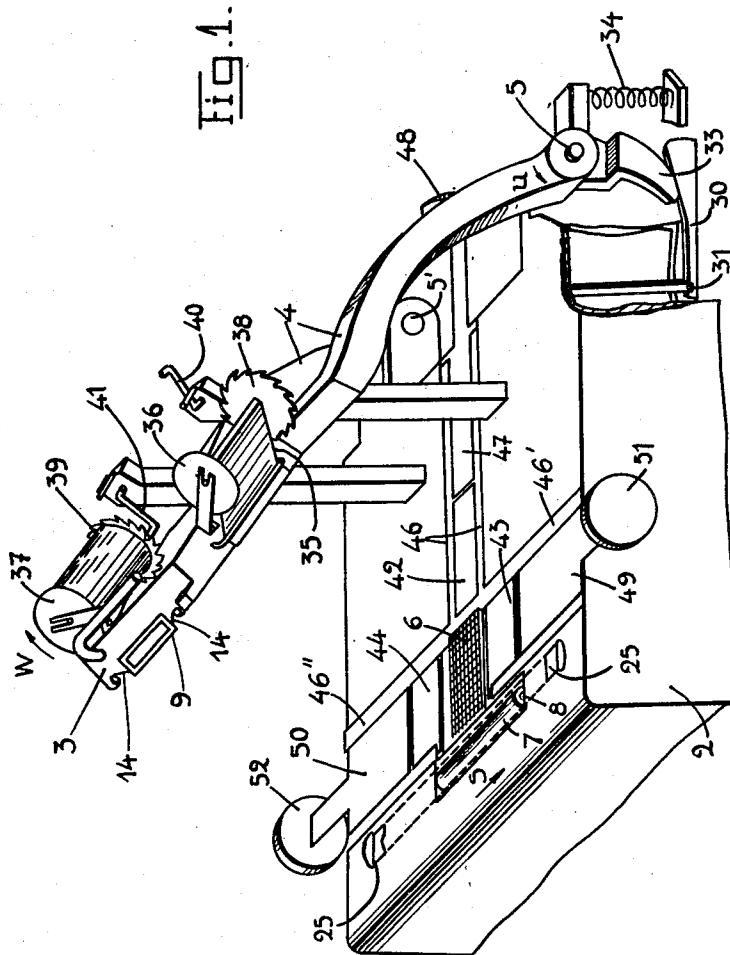
U. SCHUSTER

**2,626,565**

TICKET AND STRIP PRINTING MACHINE

Filed July 18, 1947

3 Sheets-Sheet 1



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2,626,565

TICKET AND STRIP PRINTING MACHINE

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3 Sheets-Sheet 2

Fig. 2.

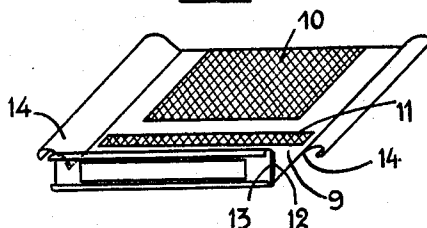


Fig. 3.

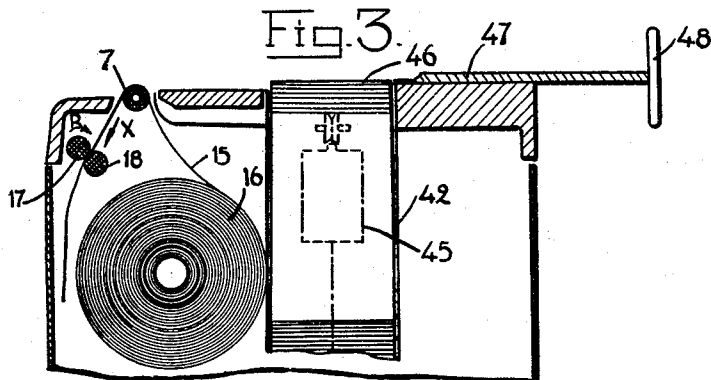


Fig. 4.

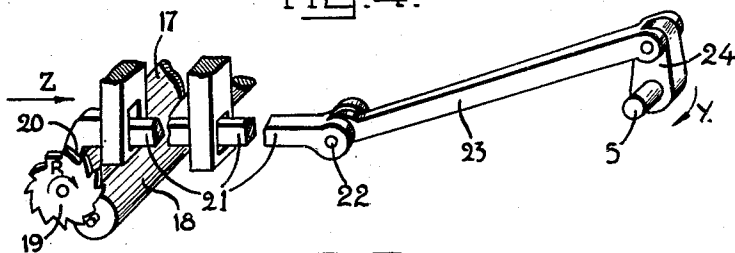
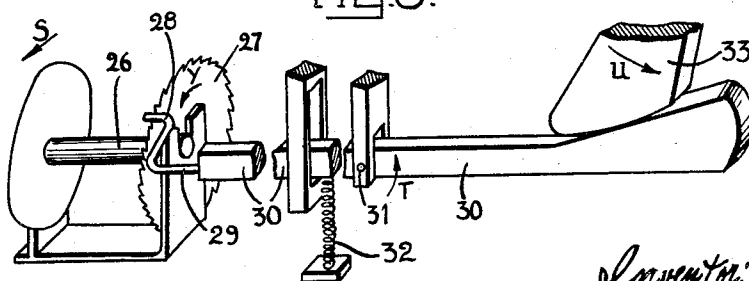


Fig. 5.

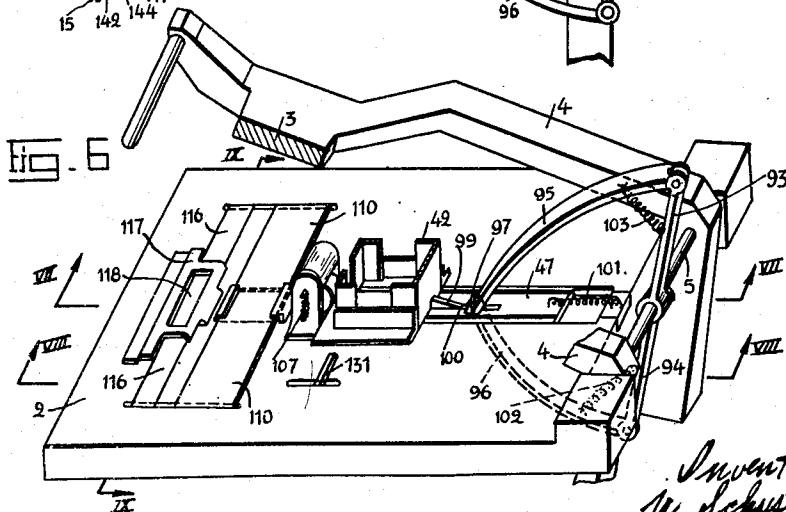
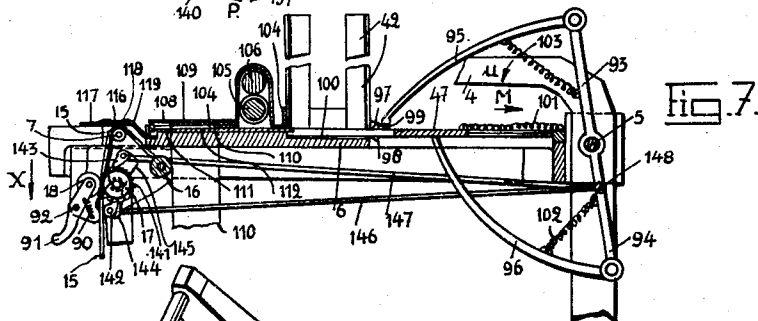
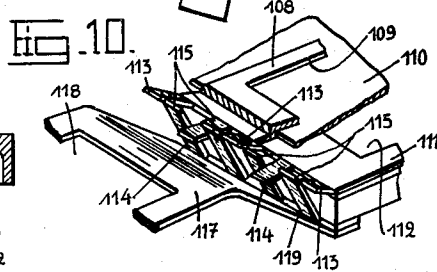
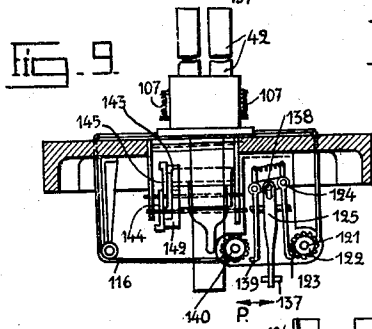
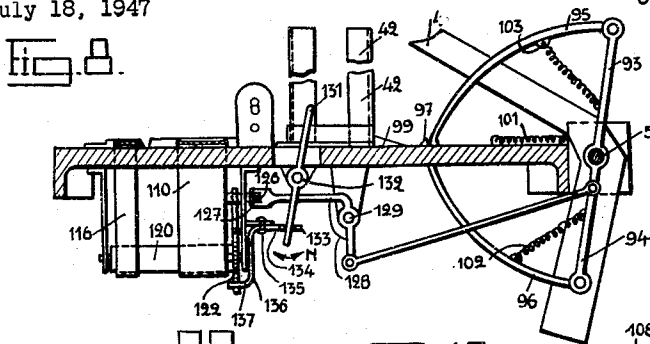


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**2,626,565**

3 Sheets-Sheet 3

Fig. 1.



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## UNITED STATES PATENT OFFICE

2,626,565

## TICKET AND STRIP PRINTING MACHINE

Ulysse Schuster, Ixelles-Brussels, Belgium

Application July 18, 1947, Serial No. 761,795  
In Belgium January 7, 1944Section 1, Public Law 690, August 8, 1946  
Patent expires January 7, 1964

15 Claims. (Cl. 101-287)

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The present invention relates to a machine by means of which, on the one hand, inscriptions are produced on individual documents presented thereto in succession, and, on the other hand, inscriptions which may be described as "abridged" are produced on an audit strip, which is actuated after each impression by a mechanism different from that which actuates the individual documents, these abridged impressions corresponding individually to each of the effected on the individual documents.

In the present specification the expression "abridged impression" is to be understood to include inscriptions which contain certain elements of the inscriptions effected upon the aforesaid individual documents, these abridged impressions being constituted either by a portion of the impressions upon the individual documents, or by a summary, which may be codified, of the inscriptions upon the individual documents.

Machines of this type are known, in which the two kinds of impressions are located one above the other upon a typing unit which is movably mounted in a base underneath the impression head of a press. With these machines the inscriptions on the individual documents and the abridged inscription are printed separately and successively, owing to the fact that the impression supports for the individual documents and for the audit strip are so disposed relative to each other that they are not simultaneously covered by the typing unit in the impression head. The latter and the typing unit it contains are then displaced laterally after the printing of the complete text right into a position over an impression support for the audit strip, for which the remainder of the typing unit no longer bears upon a support.

Certain other machines are known which have two impression heads, acting alternately for printing the complete text and the abridged text. In this case the typing unit alone is displaced laterally.

Other machines are known which likewise have a support for the documents to be printed, arranged side by side, this support being displaced laterally with these documents, so as to bring the latter successively over the typing unit, which remains in position, a single impression head being adapted to print the complete text and the abridged text alternately.

These machines have the disadvantage of necessitating a double printing operation for the reproduction of the complete text and of the

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abridged text. Furthermore they do not enable the printing to be effected upon the upper or visible face of the documents.

Machines have likewise been proposed which obviate these disadvantages, but in which the abridged inscriptions, instead of being entirely different from the complete inscriptions, form part of these latter inscriptions, and are located beside the remainder thereof. In this case the audit strip passes beneath a part of the individual documents, and the printing of the abridged text is effected as a duplicate at the same time as the printing of a portion of the complete text. These machines necessitate the use of relatively wide individual documents, and it is practically impossible to effect the impression by means of confidential unit, because this would necessitate the use of confidential unit of excessive dimensions. One is therefore limited in practice to the use of inscriptions made by hand or with a typewriter.

The present invention relates to a machine which enables the inscription of the complete text and that of the abridged text to be executed in a single operation, in the case in which one of these inscriptions is before the other, or above, or within the body of the complete text, or else either below, or above, or within the body of the remainder of the complete text.

According to one form of construction, the machine comprises, in addition to a support for sustaining the individual document that is to receive the complete text but not the audit strip, another support, which is designed to support this strip, and which is arranged, in relation to the first support, either above, or below, the first support.

In the case in which the printing is effected by means of a typing unit mounted in the impression head, and in which the audit strip is arranged in the base, the ribbon for printing the abridged text may advantageously be arranged over the audit strip, in such a way as to keep the latter hidden at the printing place. Because of this arrangement, the possibilities of falsification of the recapitulatory note are reduced.

Because the document bearing the complete text normally has to be subjected to verification before it is dispatched, it is not desirable to arrange the printing ribbon of the complete text in the base above the document to be printed upon, which would moreover render it more difficult to place the documents in position for printing in the case where the documents are independent of one another. It is therefore preferable to

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mount, in the impression head, the ribbon for printing the complete text, upon the documents, in such a way as to render the printed documents directly readable in their printing position.

According to another form of construction, which is likewise applicable to the case in which the complete text is printed upon relatively thick documents, the machine according to the invention comprises a magazine for documents to be printed upon, in which the latter are stacked, and from which these documents are brought individually to the printing position by means of a pushing member which is connected to the movable impression head by a mechanical connection which causes it to advance one-half of its total displacement towards the printing position while the impression head is removed from the printing position, and the other half of its total displacement while the impression head is close to its printing position, the said pushing member being constantly urged to occupy its starting position, and being disengaged from the afore-mentioned mechanical connection at the end of its advancing movement.

This embodiment presents the advantage of reducing the speed of displacement of the documents relatively to cases in which they are advanced throughout their length during one only of the two strokes of the impression head that are effected between two successive impressions.

According to a further embodiment the above-mentioned movable head is carried by an oscillating arm which is fixed to two other arms, so arranged that one of them approaches the magazine when the other is moving away from it, and to each of them is articulated a dog which abuts against a pusher stop when it approaches the magazine, and furthermore a cam co-operating with that one of the two dogs which occasions the second half of the stroke of the pushing member towards the front is arranged in the path of this dog in such a way as to disengage the latter from the corresponding stop at the end of the forward stroke of the pushing member.

With a view to obviating frauds, the machine may advantageously be equipped with a thin ribbon support, in which a window aperture is provided at the printing position, which is interposed between the ribbon and the document to be printed upon, this ribbon support being provided, along that one of its edges by which the printed document is pushed out of the machine, with oblique flexible teeth, some directed upwardly and the others downwardly, to prevent the introduction of foreign bodies between the ribbon and the document to be printed upon.

Another feature of the machine according to the invention consists in the fact that the device for advancing the audit strip is connected to the impression head by a mechanical connection which causes it to advance one half of the distance required between two impressions while the impression head is removed from the printing position, and the other half of this distance while the impression head is close to its printing position.

According to one particular embodiment, the machine comprises a roller for driving the audit strip, which may be actuated by two driving devices in a single direction, mounted one on each side of a wheel which is fixed to the said roller, and set in motion through the medium of links leading to one and the same point which is movable with the impression head.

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The machine according to the invention may furthermore advantageously be equipped with a single driving drum for the ribbon serving for the impression of the complete texts upon the individual documents and for the ribbon serving for the impression of the abridged texts upon the audit strip, these two ribbons being spaced from one another.

Finally, with a view to compelling the simultaneous impression of the complete and abridged texts, it is proposed to equip the machine with a device for printing a network of fine lines on the documents, which is arranged between the magazine and the printing station of the complete inscriptions, in such a way as to print automatically, in the course of the displacement of the documents between the magazine and the printing point of the complete inscriptions, a network of fine lines on the face of these documents upon which the complete inscriptions are printed.

Other features and details of the invention will appear in the course of the description of the drawings accompanying the present specification, which represent diagrammatically, and merely by way of example, two forms of construction of a machine according to the invention.

Figure 1 is a view in perspective of a first embodiment of a machine according to the invention, certain elements of the latter being partly broken away.

Figure 2 is a view in perspective of a printing block designed to be utilised with the machine according to Figure 1.

Figure 3 is a longitudinal sectional elevation in the base of the machine according to Figure 1, effected towards the middle of the breadth of this machine.

Figure 4 is a view in perspective, partly broken away, of the mechanism designed to cause the advance of the audit strip.

Figure 5 is a view in perspective, partly broken away, of one of the mechanisms designed to cause the advance of the printing ribbon of an abridged text.

Figure 6 is a view in perspective, partly broken away, of the upper part of a second embodiment of a machine according to the invention, for the positioning of the elements before a printing operation.

Figure 7 is a longitudinal section, partly broken away, through a vertical plane which intersects the upper face of the table of the machine and which is denoted by VII—VII in Figure 6, this section being made for the position of the elements shortly before printing.

Figure 8 is a longitudinal section, partly broken away, through a vertical plane which intersects the upper face of the table of the machine and which is denoted by the line VIII—VIII in Figure 6.

Figure 9 is a cross-section, partly broken away, through a vertical plane which intersects the upper face of the table of the machine according to the invention and which is denoted by the line IX—IX in Figure 6.

Figure 10 is a perspective view on a larger scale of a part of the machine illustrated in Figures 6 to 9.

In the various figures like reference characters indicate like elements.

The machine illustrated in Figure 1 comprises a base 2, to which is articulated an impression head 3. This head is carried by arms 4, pivoting about pivots 5 and 5' mounted in the base. The base contains a first impression support 6, cov-

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ered with a layer of hardened rubber, and a second impression support, consisting for example of a steel roller 7 covered with hardened rubber, and capable of pivoting about a pivot 8.

The machine illustrated is intended for printing simultaneously a complete text and an abridged text, both carried by a typing unit 3 (Figures 1 and 2), which is engaged in the impression head. This typing unit comprises a part, marked 10 in Figure 2, which corresponds to the location of the complete text, and another part, denoted by 11, which corresponds to the location of the abridged text. It will be understood that the corresponding parts of the typing unit project from the lower face of the latter below the parts 10 and 11, particularly from the fact of the embossing of the texts.

A front flange 12 forming a slideway serves to maintain a label 13, which facilitates the sorting of the typing units. Two lateral flanges 14 serve to facilitate the introduction of the printing slug 9 into the impression head 3. In the case illustrated, the abridged text is located underneath the corresponding complete text. For this reason, the corresponding impression support, consisting of the roller 7, is arranged before the impression support 6 corresponding to the complete text.

The printing of the abridged text is effected upon the audit strip 15 passing over the roller 7. This strip comes from a roll 16 (Figure 3) and is moved in the direction of the arrow X by two rollers 17 and 18, between which it is pressed. One of these rollers, in the case of the machine illustrated, the roller marked 17, is rigid with a ratchet wheel 19 (Figure 4), with which there meshes a pawl 20, which is displaced at each impression by the movement of the impression head. This pawl may for example form part of a rod 21, articulated at 22, to a connecting rod 23, driven by a crank 24. The latter is keyed on to the pivot 5. As will readily be seen, each time the impression head 3 moves away from the base 2, the pivoting of the arm 24 in the direction of the arrow Y occasions the displacement of the pawl 20 in the direction of the arrow Z and drives the roller 17 in the direction of the arrow R, corresponding to the advance of the strip 15 in the direction of the arrow X. The movement of the impression head 3 towards the base 2 does not cause any displacement of the rollers 17 and 18, since the pawl 20 slides freely over the teeth of the ratchet wheel 19. The length of the crank 24 should obviously be so selected that the stroke of the roller 17 will correspond at each impression to the height of the spacing of the abridged texts.

The printing of the abridged text upon the audit strip is effected by virtue of the interposition of a printing ribbon between the typing unit 9 and the roller 7. This printing ribbon, a portion of which has been shown broken away in Figure 1, in order to render visible the roller 7 mounted in the base, is marked 25 at the two places where it issues from the base 2. This printing ribbon is displaced at each impression as a result of the movement of the impression head. It is movable transversely in the direction of the arrow S or in the opposite direction, that is to say, transversely to the direction of advance of the audit strip 15. To this end it is mounted upon spools the axes of which are horizontal and perpendicular to the direction of advance of the ribbon, this direction being denoted by the arrow S. One of these spools is represented in

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Figure 5, together with the mechanism that actuates it. It is denoted by 26. One of its flanges is rigid with a ratchet wheel 27, in the teeth of which there engages the extremity 28 of a rod 29 which is bent into the shape of a swan's neck. This rod is so mounted as to be able to pivot about an axis substantially parallel to the axis of the spool 26, in a lever 30 pivoting about a pivot 31, the axis of which is horizontal and is perpendicular to the pivotal axis of the swan-neck rod 29. The lever 30 is subjected to the action of a return spring 32, which constantly tends to make it pivot in the direction of the arrow T, but it can be set in rotation in the direction opposite to this arrow when a cam 33 (Figures 1 and 5), integral with one of the arms 4 carrying the impression head 3, moves in the direction of the arrow U in the course of the down-stroke of the impression head.

During this downward movement of the head, the end 28 of the swan-neck-shaped rod 29 slides over the teeth of the ratchet wheel 27 in the manner of a pawl, but during the upward movement of the impression head under the action of a return spring 34 (Figure 1), the end 28 of the swan-neck-shaped rod moves the ratchet wheel 27 in the direction of the arrow V (Figure 5).

The printing ribbon 25 is wound upon the core of the spool 26 in such a way as to move in the direction of the arrow S under the action of the rotation of the spool in the direction of the arrow V. The ribbon thus displaced unwinds from a spool similar to the spool 26, but situated in the base 2 on the side opposite to that in which the spool 26 is located.

To allow the ribbon to unwind, this second spool must be free to revolve, but, since it is desirable to be able to displace the ribbon 25 in the direction opposite to that of the arrow S when it is almost completely wound upon the spool 26, it is provided, according to the invention, that this second spool should be arranged like the spool 26, and should be capable of being set in rotation by a mechanism similar to that which has just been described.

The swan-neck-shaped rod of this second mechanism should be capable of being brought into a position in which it is not engaged in the teeth of the corresponding ratchet wheel while the ribbon is being driven in the direction of the arrow S. Similarly, the swan-neck-shaped rod 29 must be capable of being kept out of engagement with the teeth of the ratchet wheel 27 while the ribbon is being driven by the other spool in the direction opposite to that of the arrow S.

The complete text carried by the typing unit 9 is printed upon tickets brought on to the impression support 6, by means of a printing ribbon 35 mounted upon the impression head 3, this ribbon being displaced at each impression as a result of the movement of the impression head. To this end it is mounted upon spools 36 and 37, each rigid with a ratchet wheel denoted by 38 and 39 respectively. The teeth of these ratchet wheels can come into contact with a swan-neck-shaped rod at the end of the upward movement of the head 3. The two swan-neck-shaped rods are denoted by 40 and 41. Each of these rods is so mounted as to be able to pivot about an axis substantially parallel to the axis of the spools 36 and 37 when the latter are moving in its vicinity. The two ratchet wheels co-operate with the swan-neck-shaped rods in such a way as to drive the ribbon in opposite directions, but of course only one of the swan-neck-shaped rods is in contact

with the corresponding ratchet wheel at any given time.

If it be assumed, for example, that the swan-neck-shaped rod 41 is in contact with the teeth of the ratchet wheel 39, the swan-neck-shaped rod 40 should be held out of engagement with the teeth of the ratchet wheel 38. Under these conditions, at the end of the upward movement of the impression head, the meeting of the teeth of the ratchet wheel 39 with the swan-neck-shaped rod 41 occasions the rotation of the spool 37 in the direction of the arrow W, while the ribbon 35 unwinds from the spool 36. When the ribbon 35 is almost completely wound upon the spool 37, it can be wound on to the spool 36 by bringing the swan-neck-shaped rod 40 into contact with the teeth of the ratchet wheel 38, and disengaging the swan-neck-shaped rod 41 from the ratchet wheel 39.

The individual documents intended to be printed upon in the machine illustrated are relatively thick documents. They are stored in three magazines, one of which is arranged at 42, behind the printing position, and the other two at 43 and 44, one at each side of this position. The documents stacked in each magazine have for instance a color different from those stacked in an other magazine. They are used at will by the operator according to the category of individual document to be obtained. In these magazines the documents are stacked as represented in Figure 3 for the magazine 42. Each pile of documents is constantly urged upwards under the action of a counterweight 45. A slideway 46 is provided above the stack in question, and a pushing member 47 is movable in this slideway, so as to enable the operator to push the top document of the pile in question into the common printing position. The pushing member is provided for this purpose with a handle 48, which forms at the same time an abutment for limiting the stroke of the pushing member, corresponding to the positioning of a document at the printing position.

Slideways 46' and 46'', corresponding to the magazines 43 and 44 respectively, are so arranged that pushing members denoted by 49 and 50 can move the documents into the printing position. The pushing member 49 is provided with a handle 51 serving as an abutment to limit its stroke, and the pushing member 50 is provided with a similar handle 52.

In Figures 6-10 another form of construction of a machine according to the invention is illustrated, which is designed to print the complete texts upon relatively rigid documents, for instance upon pieces of cardboard such as those utilised as railway tickets.

The audit strip 15 is carried along in the direction of the arrow X, starting from the spool 16, by the roller 17, against which it is pressed by the roller 18, which is subjected to the action of a spring 99. The actuation of the roller 17 will be hereinafter explained.

The pushing member 47 is connected to the impression head 3 by a mechanical connection which it causes it to advance by one-half of its total displacement in a forward direction while the impression head is moved away from the impression position. The pushing member 47 advances by the other half of its total displacement while the impression head is close to its impression position. The pushing member is constantly urged to occupy its starting position, and is disengaged from the above-mentioned mechanical

connection at the end of its advancing movement.

The arms 4 carrying the movable head 3 are virtually integral, through the medium of the pivot 5, with two other arms 93 and 94, so arranged that one of them is approaching the magazine 42 while the other is moving away from it. To each of these arms is articulated a dog. The two dogs, denoted by 95 and 96, bear against abutments 97 and 98 respectively on the pushing member 47 when they are approaching the magazine. A cam 99 co-operates with the dog 95, which causes the second half of the stroke of the pushing member in the forward direction, so as to disengage this dog from the corresponding abutment 97 at the end of the forward stroke of the pushing member. This cam 99 passes into a slot 100 formed in the pushing member 47. It is so arranged as to occasion this disengagement slightly before the impression head has reached its impression position.

It is to be assumed that the impression head is in its lowered position, illustrated in Figure 7, for which the dog 95 is about to be disengaged from the stop 97 by the cam 99 if the pivoting of the arms 4 carrying the base is continued in the direction of the arrow U, at the moment when this disengagement occurs the pushing member 47 is returned in the direction of the arrow M under the action of a spring 101 until the stop 98 abuts against the dog 96 occupying a position adjacent to that illustrated in Figure 7.

If, after the printing has been completed, the impression head is allowed to ascend again right into a position such as that illustrated in Figures 6 and 8, for example under the action of a return spring, not shown, the dog 95, in striking against the stop 98 of the pushing member 47 under the action of the spring 102 attached to the arm 94, pushes the pushing member 47 in the direction opposite to that of the arrow M to an extent equal to half the total stroke of this pushing member. In the course of this displacement the bottom document in the pile contained in the magazine 42 is pushed toward the printing position 6 by a distance equal to half its length, at the same time as the dog 95 is returned from the position shown in Figure 7 to that of Figures 6 and 8. If the impression head is then lowered, the pushing member 47 continues its stroke in the direction opposite to that of the arrow M, because the dog 95 has come into contact with the stop 97 under the action of a spring 103 fixed to the arm 93, and is approaching the magazine 42 while the dog 96 is moving away from it.

In passing from the magazine 42 to the printing position 6 each relatively rigid document 104 passes underneath a device for printing a network of lines on this document. This device includes a marking roller 105, surmounted by an inking roller 106, pressed against the latter under the action of springs 107. The network is printed automatically upon that face of the documents 104 upon which the complete inscriptions are printed by the impression head.

Seeing that between the position where the network of lines is applied and the exit of the printed documents from the machine the latter are covered by a plate 108 concealing the ribbon and provided with a window aperture 109 to permit the printing, it is not possible to print the complete text partly on a document 104 and partly on a thin sheet covering it without this thin sheet having been introduced into the ma-

chine through the magazine. Consequently when the printed document issues from the machine part of its surface would not exhibit the network of lines. It results from this that it would not be possible to complete the inscription of this document fraudulently by means of a typing unit not arranged in the impression head, without it being evident that the complete inscription has not been wholly produced in the machine simultaneously with the production of the corresponding abridged inscription.

As will be seen, the document magazine is so arranged in relation to the printing position 6 that the printed document is pushed individually by the pushing member 47 beyond the printing position through the medium of another document, expelled from the magazine during the removal of the impression head following a printing operation.

When the impression head is raised again, it is easy to take hold of the document that has just been printed, since it is already partly projecting from the machine.

The impression over the first impression support 5 is effected by means of a ribbon 110, which passes between the ribbon-hiding plate 100 and a thin supporting ribbon 111 (Figure 10) provided with a window aperture 112 enabling the ribbon 110 to be pressed on to the document 104 that it is to be printed on.

The thin ribbon support 111 is provided along the edge by which the printed document is pushed out of the machine with flexible teeth 113, directed obliquely upwards, and with flexible teeth 114, directed obliquely downwards. These inclined teeth 113 and 114 are for the purpose of preventing the fraudulent introduction of thin documents between the document to be printed upon and the printing ribbon.

In the intervals between the teeth 113 and 114 are arranged other oblique teeth 115, forming a deflector, which deflects upwards the printed document expelled from the machine. These teeth 115 likewise help to prevent the introduction of foreign bodies between the ribbon 110 and the document 104 to be printed upon.

In order to prevent the document that has been printed upon from catching in the ribbon 116 that serves for printing the audit strip 15 which passes in front of the place for printing the individual documents, and to assist in the disengagement of the printed document when the latter is pushed out of the machine, a covering ribbon 117 is provided, in which a window aperture 118 for printing is formed, this covering ribbon extending not only above the ribbon 116, which is spaced away from the ribbon 110, but likewise obliquely towards the individual document in its printing position, and right below this document. The oblique part of the covering ribbon 117 is denoted by 119. The ribbons 110 and 116 are actuated by a single driving drum, while kept spaced away from one another. This drum is denoted by 120. It is rigid with a pivot 121, on to which is keyed a ratchet wheel 122, which can be set in motion when a detent 123 is raised. This detent is mounted at 124 upon a piece 125, having a vertical alternating movement at each printing movement. This piece 125 is rigid with a spindle 126, which slides in a hole in a claw 127 formed at the end of a bent lever 128, rocking about a horizontal pivot 129. This bent lever is connected by a link 130 with the arm 94, which oscillates together with the arms 4 carrying the printing base.

When the ribbons 110 and 116 have reached the end of their travel in one direction they can be driven in the opposite direction by being automatically wound up by a single drum, from which they have just been unwound. This displacement in the opposite direction is released by manipulating a lever 131 pivoting at 132 and engaged in a fork 133 provided at the end of a lever which is bent both horizontally and vertically. The intermediate flange 134 of this lever pivots about a vertical axis 135, while the vertical flange 136 comprises a claw 137, in which slides the end of the piece 125. The displacement of the lever 131 in the direction of the double arrow N in Figure 8 therefore causes the displacement of the claw 137 in the direction of the double arrow P in Figure 9.

The oscillation of the piece 125 about its pivot 138 occasions the disengagement of the detent 123 from the teeth of the ratchet wheel 122, and the engagement of another detent 139 in the teeth of a ratchet wheel 140, keyed upon the pivot of the drum that is to cause the displacement of the ribbons 110 and 116 in the direction opposite to that which has been described above.

The displacement of the audit strip 15 is effected in two stages, just like that of the documents to be printed upon. To this end the roller 17 is rendered rigid with a ratchet wheel 141, which can be actuated by one or the other of two pawls 142 and 143, each articulated to an arm mounted loose upon the pivot of the roller 17. These two arms are denoted by 144 and 145. The two pawls 142 and 143 are mounted one on each side of the ratchet wheel 141. The arms 144 and 145 are connected by links 146 and 147 to the same point 148 on the arm 94. It follows that at each oscillation of the impression head in the direction of the arrow U or in the opposite direction, the ratchet wheel 141 is advanced by a certain extent, either by the pawl 142 or by the pawl 143. Any attempt at fraudulent printing upon the recapitulatory note when the impression head is raised would be disclosed by the fact that the impression had been made at a place not corresponding to the normal distance between two successive inscriptions. The mechanical connection between the device for advancing the audit strip and the impression head can therefore advance the audit strip by half the extent required between two impressions, while the impression head is moved away from the impression position, and by the other half of this extent while the impression head is close to its impression position.

The machine according to the invention may also advantageously be equipped with a numbering device, which automatically prints upon the recapitulatory note the number of successive impressions effected. In this case, when utilising in the machine individual documents which have been previously numbered and which are stacked in the order of their numbers, it is possible ultimately to discover that one or other of these documents has been removed from the series for the purpose of being fraudulently printed upon apart from the machine.

It is evident that the invention is not exclusively limited to the forms of construction illustrated and that many modifications can be made in the form, the arrangement and the constitution of certain of the elements involved in its construction, on condition that these modifications are not opposed to the subject matter in each of the following claims.



What I claim is:

1. A machine for simultaneously printing, on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing, and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising, an impression support for the individual rigid documents in their printing position, an impression support for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, a guide for guiding said impression head in its movements, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to an other line of the inscriptions on the individual documents, a mechanical connection between said impression head and said pushing member which advances the latter by half its total displacement in a forward direction while the impression head is remote from the printing position and by the other half of its total displacement while the impression head is close to the printing position, means for permanently urging said pushing member to occupy its starting position, means for disengaging said mechanical connection at the end of the advancing movement of said pushing member, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and said guide for actuating these means by the displacement of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position, during their presence in the machine, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

2. A machine for simultaneously printing on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising, an impression

support for the individual rigid documents in their printing position, an impression support for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, a stop on this pushing member, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, an oscillating arm for carrying said impression head, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to an other line of the inscriptions on the individual documents, two arms rigid with the oscillating arm carrying the impression head and so arranged relatively to each other that one is approaching the magazine when the other is moving away from it, a dog articulated to each of these two arms and disposed so as to abut each against the stop of the pushing member when it is approaching the magazine, said dogs being so mounted that they move successively the pushing member in the forward direction by one-half of its total stroke, a cam cooperating with that one of these dogs which causes the second half of the stroke of the pushing member in the forward direction in such a way as to disengage the latter from said stop at the end of the forward stroke of the pushing member, means for permanently urging said pushing member to occupy its starting position, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and the oscillating arm carrying the impression head for actuating these means by the oscillation of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents to be printed except at their printing position during their presence in the machine, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

3. A machine for simultaneously printing, on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising an impression support for the individual rigid documents in their printing position, an impression support for

the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, a stop on this pushing member, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, an oscillating arm for carrying said impression head, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to another line of the inscriptions on the individual documents, two arms rigid with the oscillating arm carrying the impression head and so arranged relatively to each other that one is approaching the magazine when the other is moving away from it, a dog articulated to each of these two arms and disposed so as to abut each against the stop of the pushing member when it is approaching the magazine, said dogs being so mounted that they move successively the pushing member in the forward direction by one-half of its total stroke, a cam cooperating with that one of these dogs which causes the second half of the stroke of the pushing member in the forward direction in such a way as to disengage the latter from said stop at the end of the forward stroke of the pushing member just before the impression head reaches its printing position, means for permanently urging said pushing member to occupy its starting position, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and the oscillating arm carrying the impression head for actuating these means by the oscillation of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during their presence in the machine, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

4. A machine for simultaneously printing, on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising, an impression support for the individual rigid documents in their printing position, an impression support

for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, a stop on this pushing member, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, an oscillating arm for carrying said impression head, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to another line of the inscriptions on the individual documents, two arms rigid with the oscillating arm carrying the impression head and so arranged relatively to each other that one is approaching the magazine when the other is moving away from it, a dog articulated to each of these two arms and disposed so as to abut each against the stop of the pushing member when it is approaching the magazine, said dogs being so mounted that they move successively the pushing member in the forward direction by one half of its total stroke, springs fixed to the two arms and to the articulated dogs for permanently urging the latter towards the pushing member, a cam cooperating with that one of these dogs which causes the second half of the stroke of the pushing member in the forward direction in such a way as to disengage the latter from said stop at the end of the forward stroke of the pushing member, means for permanently urging said pushing member to occupy its starting position, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and the oscillating arm carrying the impression head for actuating these means by the oscillation of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during their presence in the machine, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

5. A machine for simultaneously printing, on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising an impression support for the individual rigid documents in

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their printing position, an impression support for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, a guide for guiding said impression head in its movements, a hand interchangeable stamped printing slug engaged in said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to another line of the inscriptions on the individual documents, a mechanical connection between said impression head and said pushing member which advances the latter by half its total displacement in a forward direction while the impression head is remote from the printing position and by the other half of its total displacement while the impression head is close to the printing position, means for permanently urging said pushing member to occupy its starting position, means for disengaging said mechanical connection at the end of the advancing movement of said pushing member, a passageway for the document printed upon so disposed relatively to the printing position and to the pushing member that the document printed upon is pushed indirectly by the pushing member beyond the printing position through the medium of a document to be printed upon pushed out of the magazine during the removal of the impression head following an impression, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and said guide for actuating these means by the displacement of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions considered in said direction, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during the presence in the machine, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

6. A machine for simultaneously printing, on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising an impression support for the individual rigid documents in

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their printing position, an impression support for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents toward the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, a guide for guiding said impression head in its movements, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to another line of the inscriptions on the individual documents, a mechanical connection between said impression head and said pushing member which advances the latter by half its total displacement in a forward direction while the impression head is remote from the printing position and by the other half of its total displacement while the impression head is close to the printing position, means for permanently urging said pushing member to occupy its starting position, means for disengaging said mechanical connection at the end of the advancing movement of said pushing member, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and said guide for actuating these means by the displacement of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during their presence in the machine, flexible teeth along that one of the edges of the ribbon support by which the printed individual rigid document is pushed out of the machine, some of these teeth being directed obliquely upwards and the others obliquely downwards for preventing the introductions of foreign bodies between the printing ribbon and the document to be printed upon, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

7. A machine for simultaneously printing, on the one hand inscriptions on individual rigid documents which it delivers successively at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising an impression support for the individual rigid documents in their printing position, an impression support

for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, a guide for guiding said impression head in its movements, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to another line of the inscriptions on the individual documents, a mechanical connection between said impression head and said pushing member which advances the latter by half its total displacement in a forward direction while the impression head is remote from the printing position and by the other half of its total displacement while the impression head is close to the printing position, means for permanently urging said pushing member to occupy its starting position, means for disengaging said mechanical connection at the end of the advancing movement of said pushing member, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and said guide for actuating these means by the displacement of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during their presence in the machine, flexible teeth along that one of the edges of the ribbon support by which the printed individual rigid document is pushed out of the machine, some of these teeth being directed obliquely upwards and the others obliquely downwards for preventing the introduction of foreign bodies between the printing ribbon and the document to be printed upon, a deflector near the edge of the ribbon support by which the printed document is pushed out of the machine for deflecting said document upwards, teeth on this deflector directed obliquely upwards and penetrating into intervals provided between the teeth of the ribbon support that are directed upwards and those which are directed downwards for helping to prevent the introduction of foreign bodies between the ribbon and the document to be printed upon, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

8. A machine for simultaneously printing, on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising an impression support for the individual rigid documents in their printing position, an impression support for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, a guide for guiding said impression head in its movements, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to another line of the inscriptions on the individual documents, a mechanical connection between said reciprocating impression head and said pushing member which advances the latter by half its total displacement in a forward direction while the impression head is remote from the printing position and by the other half of its total displacement while the impression head is close to the printing position, means for permanently urging said pushing member to occupy its starting position, means for disengaging said mechanical connection at the end of the advancing movement of said pushing member, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and said guide for actuating these means by the displacement of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding in said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during their presence in the machine, a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip, a ribbon concealer above this last printing ribbon, and a window in this ribbon concealer for permitting the impression of the audit strip by the impression head, the said ribbon concealer extending obliquely towards the individual document in its printing position, right underneath this document so as to prevent the printing ribbon of the audit strip from being caught by the individual printed document when the latter is pushed out

of the machine and so as to contribute to the liberation of the individual printed document at this moment.

9. A machine for simultaneously printing, on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising an impression support for the individual documents in their printing position, an impression support for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, a guide for guiding said impression head in its movements, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to an other line of the inscriptions of the individual documents, a mechanical connection between said reciprocating impression head and said pushing member which advances the latter by half its total displacement in a forward direction while the impression head is remote from the printing position and by the other half of its total displacement while the impression head is close to the printing position, means for permanently urging said pushing member to occupy its starting position, means for disengaging said mechanical connection at the end of the advancing movement of said pushing member, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and said guide for actuating these means by the displacement of the impression head in such a manner that the audit strip is advanced by half of the amount required between two successive impressions while the impression head is removed from the printing position, and by the other half of this amount while the impression head is brought nearer to its printing position, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during their presence in the machine, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

10. A machine for simultaneously printing, on the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising an impression support for the individual rigid documents in their printing position, an impression support for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the magazine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, a guide for guiding said impression head in its movements, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to an other line of the inscriptions on the individual documents, a mechanical connection between said reciprocating impression head and said pushing member which advances the latter by half its total displacement in a forward direction while the impression head is remote from the printing position and by the other half of its total displacement while the impression head is close to the printing position, means for permanently urging said pushing member to occupy its starting position, means for disengaging said mechanical connection at the end of the advancing movement of said pushing member, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and said guide for actuating these means by the displacement of the impression head, a roller for moving the audit strip, a wheel rigid with said roller, two driving devices in a single direction for rotating this wheel, these driving devices being mounted on each side of said wheel, links for actuating said driving devices, leading to one and the same point movable with the reciprocating impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions considered in said direction, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during their presence in the machine, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip.

11. A machine for simultaneously printing, on



the one hand, inscriptions on individual rigid documents which it delivers at the rate of one after each printing and, on the other hand, a résumé of these inscriptions on an audit strip which remains in it, comprising an impression support for the individual documents in their printing position, an impression support for the audit strip in its printing position, a fixed base in which these impression supports are mounted, one magazine for individual rigid documents to be printed upon in which these rigid documents form a stack, means for constantly urging said rigid documents towards the exit of the machine, a slideway leading from said magazine to the printing position, a pushing member movable in this slideway, an impression head mounted so as to be able of being moved towards the impression supports until it is applied simultaneously against the individual document to be printed and the audit strip on their respective impression supports and of being moved away from these supports in a direction opposite to that of the approaching movement, a guide for guiding said impression head in its movements, a hand interchangeable stamped printing slug engaged into said impression head in such a manner that the part corresponding to the printing of the résumé on the audit strip and the part corresponding to the printing of the inscriptions on the individual documents are placed one after the other in the direction followed when passing from a line to an other line of the inscriptions on the individual documents, a mechanical connection between said reciprocating impression head and said pushing member which advances the latter by half its total displacement in a forward direction while the impression head is remote from the printing position and by the other half of its total displacement while the impression head is close to the printing position, means for permanently urging said pushing member to occupy its starting position, means for disengaging said mechanical connection at the end of the advancing movement of said pushing member, means for advancing the audit strip between two successive impressions, a mechanical connection between these last means and said guide for actuating these means by the displacement of the impression head, a printing ribbon for the printing of the individual rigid documents mounted in said rigid base, a thin support for this ribbon between the latter and an individual rigid document in its printing position, a window in this support for enabling the printing, said window having in the direction of displacement in the machine of the individual rigid documents a length at least substantially equal to the dimension in said direction of the area covered by the printed inscriptions, a plate for hiding said printing ribbon except in front of said window, means for preventing the individual rigid documents from being printed except at their printing position during their presence in the machine, and a printing ribbon for the printing of the audit strip mounted in said fixed base above said strip, and a device for printing a network of lines upon the individual documents arranged between the magazine and the printing position, this device being placed so that the network of lines is printed on the face of the individual documents upon which the said inscriptions are to be printed.

12. A machine for simultaneously printing of an inscription on individual documents separately delivered after each printing and of printing an abridgement of the same inscription on an

audit strip, comprising a base, an impression head mounted to move towards the printed inscription and audit strip in their respective printing positions and to afterwards move away from said position, a guide for guiding said impression head in its movements, receiving means in said head to hold a manually interchangeable embossed typing unit provided with a stamped portion for the printing of the inscription on the individual documents and with another embossed portion for the printing of the abridgement on the audit strip, said typing unit being designed to present one of its two embossed portions before the other, an impression support for the individual document in its printing position, an impression support for the audit strip in its printing position so disposed relative to the impression support for the individual documents that said two embossed portions of an embossed typing unit engage in the impression head to simultaneously print the text on an individual document and on the audit strip, a magazine for the individual documents printed in said base, a pushing member to place each individual document from the magazine into the printing position between two successive printings, mechanical connecting means between said impression head and said pushing member for actuating said pushing member simultaneously with said impression head, advancing means to advance the audit strip for a new impression between two successive impressions, mechanical connection between said advancing means and said impression head to actuate said advancing means simultaneously with said impression head, a printing ribbon mounted on said base above the individual documents in their printing position to print the individual documents and a printing ribbon to print the audit strip mounted in the base above the audit strip in its printing position, both ribbons being responsive to the actuation of the impression head, and means for periodically moving this printing ribbon by the actuation of the impression head.

13. A machine for simultaneously printing of an inscription on individual documents separately delivered after each printing and of printing an abridgement of the same inscription on an audit strip, comprising a base, an impression head mounted to move towards the printed inscription and audit strip in their respective printing positions and to afterwards move away from said position, a guide for guiding said impression head in its movements, receiving means in said head to hold a manually interchangeable embossed typing unit provided with a stamped portion for the printing of the inscription on the individual documents and with another embossed portion for the printing of the abridgement on the audit strip, said typing unit being designed to present one of its two embossed portions before the other, an impression support for the individual document in its printing position, an impression support for the audit strip in its printing position so disposed relative to the impression support for the individual documents that said two embossed portions of an embossed typing unit engage in the impression head to simultaneously print the text on an individual document and on the audit strip, said impression supports being mounted in said base, a magazine for the individual documents to be printed situated in said base, a pushing member for pushing one individual document from the magazine into the printing position between two successive printings, mechanical con-

necting means between said impression head and said pushing member to actuate said pushing member simultaneously with said impression head, advancing means to advance the audit strip for a new impression between two successive impressions, mechanical connecting means between said advancing means and said impression head for actuating said advancing means simultaneously with said impression head, a printing ribbon mounted on said base above the individual documents in their printing position, a printing ribbon mounted in the base above the audit strip in its printing position, and means for periodically moving these printing ribbons by the actuation of the impression head.

14. A machine for simultaneously printing of an inscription on individual documents separately delivered after each printing and of printing an abridgement of the same inscription on an audit strip, comprising a base, an impression head mounted to move towards the printed inscription and audit strip in their respective printing positions and to afterwards move away from said position, a guide for guiding said impression head in its movements, receiving means in said head to hold a manually interchangeable embossed typing unit provided with a stamped portion for the printing of the inscription on the individual documents and with another embossed portion for the printing of the abridgement on the audit strip, said typing unit being designed to present one of its two embossed portions before the other, an impression support for the individual document in its printing position, an impression support for the audit strip in its printing position so disposed relative to the impression support for the individual documents that said two embossed portions of an embossed typing unit engage in the impression head to simultaneously print the text on an individual document and on the audit strip, a magazine in said base for the individual documents being printed, pressing means to constantly urge said individual documents towards the exit of said magazine, a slideway extending from the printing position to a part beyond the exit of the magazine, a pushing member movable in said slideway to permit the individual documents at the exit of the magazine to be manually pushed into the printing position between two successive impressions, advancing means to advance the audit strip for a new impression between two successive impressions, mechanical connecting means between said advancing means and said impression head to actuate said advancing means simultaneously with said impression head, a printing ribbon for the printing of the individual document, a printing ribbon for the printing of the audit strip, said printing ribbon for printing the individual documents mounted on said base above the individual documents in their printing position, said printing ribbon for printing the audit strip mounted in the base above the audit strip in its printing position, both ribbons being responsive to the actuation of the head, and means for periodically moving this printing ribbon by the actuation of the impression head.

15. A machine for simultaneously printing of an inscription on individual documents separately delivered after each printing and of printing an abridgement of the same inscription on an audit

strip, comprising a base, an impression head mounted to move towards the printed inscription and audit strip in their respective printing positions and to afterwards move away from said position, a guide for guiding said impression head in its movements, receiving means in said head to hold a manually interchangeable embossed typing unit provided with a stamped portion for the printing of the inscription on the individual documents and with another embossed portion for the printing of the abridgement on the audit strip, said typing unit being designed to present one of its two embossed portions before the other, an impression support for the individual document in its printing position, an impression support for the audit strip in its printing position so disposed relative to the impression support for the individual documents that said two embossed portions of an embossed typing unit engage in the impression head to simultaneously print the text on an individual document and on the audit strip, a plurality of magazines in said base for the individual documents being printed, pressing means in each magazine to constantly urge said individual documents towards the exit of the magazine, slideways extending from a common printing position to a part beyond the exit of each magazine, a pushing member movable in each slideway to permit the individual document at the exit of the corresponding magazine to be manually pushed into its printing position between two successive impressions, advancing means to advance the audit strip for a new impression between two successive impressions, mechanical connecting means between said advancing means and said impression head for actuating the advancing means simultaneously with said impression head, a printing ribbon for the printing of the individual documents, a printing ribbon for the printing of the audit strip, said printing ribbon to print the individual documents being mounted on said base above the individual documents in their printing position, said printing ribbon for printing the audit strip mounted in the base above the audit strip in its printing position, both ribbons being responsive to the actuation of the impression head, and means for periodically moving said printing ribbon by the actuation of the impression head.

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#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

Number	Name	Date
198,855	Pole	Jan. 1, 1878
891,521	Brown	June 23, 1908
1,188,519	Wills	June 27, 1916
1,595,519	Hubbard	Aug. 10, 1925
1,814,923	Henry	July 14, 1931
1,960,918	O'Connor	May 29, 1934
1,997,372	Lupton	Apr. 9, 1935
2,004,202	Horton	June 11, 1935
2,014,707	Thomson	Sept. 17, 1935
2,304,386	Vahle	Dec. 8, 1942
2,328,934	Turner	Sept. 7, 1943
2,342,898	Sand	Feb. 29, 1944
2,359,855	Gruver	Oct. 10, 1944