Oct. 10, 1939. W. T. GOLLWITZER 2,175,260

PRINTING DEVICE

Filed April 12, 1938 2 Sheets-Sheet 1

Fig. 1.

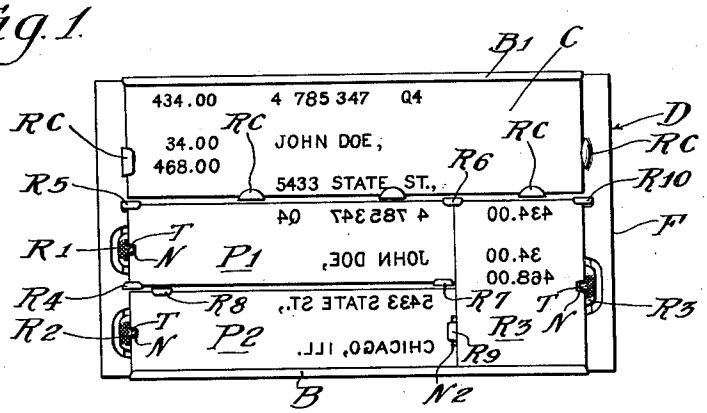


Fig. 3.

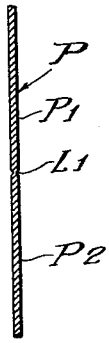


Fig. 2.

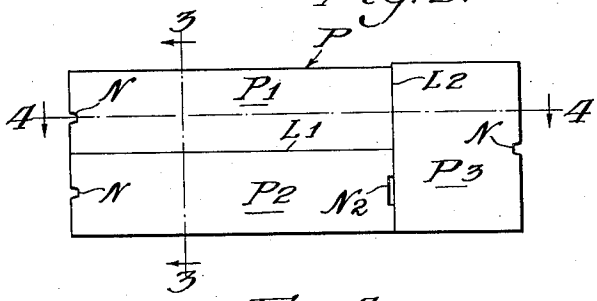


Fig. 4.



Fig. 5.

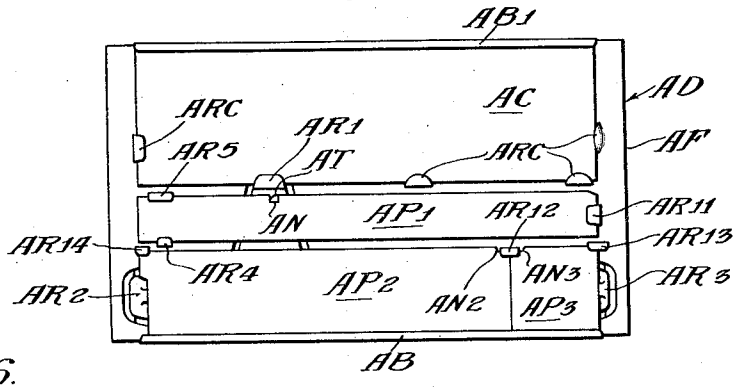
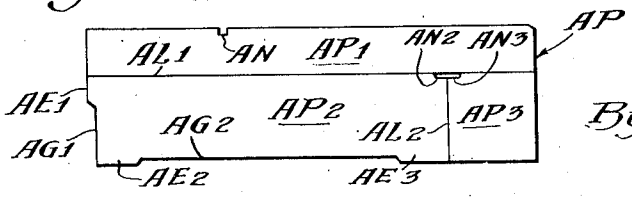


Fig. 6.



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PRINTING DEVICE

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Fig. 7.

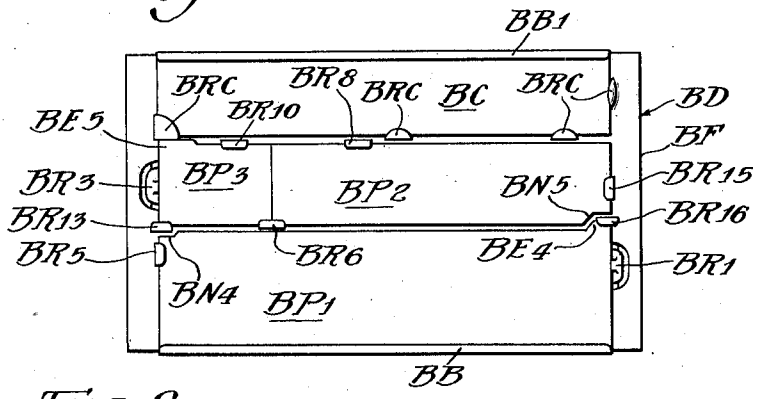


Fig. 8.

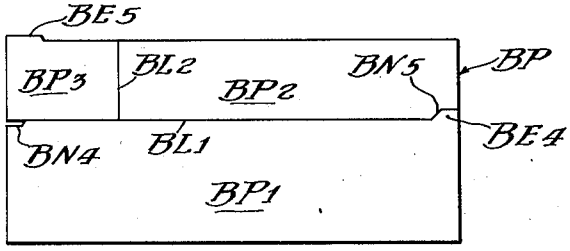


Fig. 9.

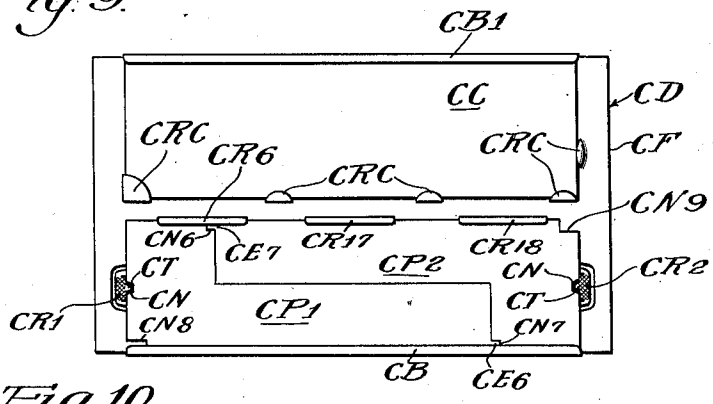
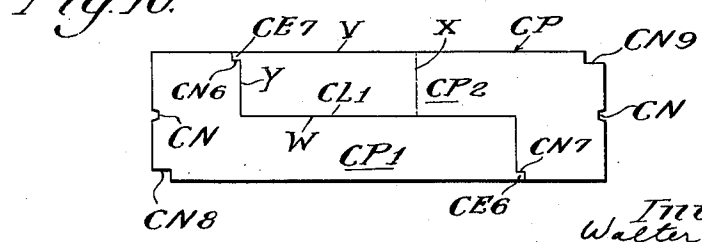


Fig. 10.



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2,175,260

UNITED STATES PATENT OFFICE

2,175,260

PRINTING DEVICE

Walter T. Gollwitzer, Euclid, Ohio, assignor to Addressograph-Multigraph Corporation, Cleveland, Ohio, a corporation of Delaware

Application April 12, 1938, Serial No. 201,546

18 Claims. (Cl. 101—369)

This invention relates to printing devices and more specifically to the kind embodying a carrier or frame having a plurality of plates, from which impressions may be made, removably secured thereon.

Printing devices of this kind are disclosed in, among others, United States Letters Patent 1,375,683, 1,654,040 and 1,632,519. Such printing devices are usually stored in drawers or the like when not in use and in use are sequentially fed through suitable printing machines to have impressions made therefrom, the machines disclosed in United States Letters Patent 1,274,350, 1,982,374, 2,041,183 and 2,070,549 being exemplary of such machines.

Printing devices such as those to which this invention pertains are used extensively by insurance companies and other enterprises whose transactions embody data that may be conveniently incorporated on printing devices and usually some of such data are relatively permanent whereas other of the data may be relatively transitory in that the data are changed more or less frequently.

By way of illustration a printing device such as could be used by an insurance company might embody a plurality of sections constituted, for example, by different plates on the carrier or frame of the device. One of such sections or plates might, for instance, pertain to more or less permanent data, such as the name of the policyholder and the number of the policy, and sometimes an explanation of the manner in which premiums due on the policy are paid, for example, whether the premiums are paid annually, semi-annually or quarterly. Another of the sections or plates might pertain to data such as the post office address of the policyholder which, it will be recognized, may be transitory in that such address may change from time to time. Another of the sections might pertain to data such as the amount of premium due according to the policy, the amount of interest due and payable by reason of a loan on the policy, and the net or total premium due and payable to the company, and such data, especially the total, may vary, and hence may be considered as being transitory.

Of course printing devices of the kind to which this invention pertains bear many other combinations of data and the foregoing is merely illustrative of what is meant by permanent data and transitory data.

My invention primarily relates to the sections or plates of printing devices such as are described above and it is an important object of the invention to facilitate incorporation of the data or, better, of type characters or the like from which impressions may be made to print the data, onto the sections or plates.

Plates or sections of the kind to which my invention primarily relates are usually of metal and the type characters or the like from which data may be printed are provided thereon in a suitable way, as by embossing the plates to provide type characters which appear in relief on one face of such a plate and in intaglio on the opposite face. Such embossing may be done in any suitable manner but is usually effected in embossing machines of the kind disclosed, for example, in United States Letters Patent 921,600, 1,243,273 and 1,961,156.

It will be recognized that the printing devices themselves are of necessity of restricted size so that when a plurality of plates are provided thereon such plates must of course be relatively small. Not only is it a somewhat arduous task to handle such small plates, especially during the embossing thereof, but separate handling of relatively small plates entails extra labor and is time-consuming.

Hence, still another important object of the present invention is to provide a unitary plate divisible into sections suitable for use in printing devices but which plate, prior to the separation thereof into individual sections, may be handled as a unit whereby the embossing and other handling thereof may be expeditiously effected.

As is understood in the art, the carriers or frames of the printing devices are provided with suitable means for retaining the plates or sections thereof and frequently such retaining means cooperate with notches, protuberances or other formations on the plates or sections and therefore a further object of my invention is to so arrange a unitary plate, that may be divided into separate sections, that when the plate is divided into sections each of such sections will embody the formations required thereon to cooperate with the retaining means on the frames with which the sections are to be used.

Still further objects of my invention are to score or otherwise provide weakened portions on a unitary plate so that it may be divided along such lines or portions into separate sections, and an object ancillary to the foregoing is to form the score lines or otherwise weakened portions simultaneously with at least one other step in the process of manufacture of the plates, and an object related to the foregoing is to provide the formations on the plates or sections adapted

for cooperation with the retaining means on the carriers or frames simultaneously with the formation of the score lines or otherwise weakened portions on the plates.

Selected embodiments of my invention are illustrated in the accompanying drawings wherein

Fig. 1 is an elevation of a printing device such as that to which the present invention pertains and which embodies a carrier having a plurality of embossed printing plates or sections removably retained thereon;

Fig. 2 is an elevation of a unitary printing plate such as that to which the present invention particularly relates and showing the same prior to its being embossed and divided into separate sections;

Figs. 3 and 4 are sectional detail views drawn to an enlarged scale and taken respectively on the lines 3—3 and 4—4 on Fig. 2;

Figs. 5, 7 and 9 are elevational views of other printing devices such as that to which the present invention pertains; and

Figs. 6, 8 and 10 are views similar to Fig. 2 and respectively illustrating the plates adapted for use with the printing devices shown in Figs. 5, 7 and 9.

In the form of my invention illustrated in Fig. 1, a printing device D is shown which includes a frame F having plates or sections P1, P2 and P3 removably retained thereon by suitable retaining devices generally indicated by the prefix R. The retaining devices R1, R2 and R3 are in the form of depressible tongues and may for example be made in accordance with my Patent 2,030,685 to include protuberances T adapted for cooperation with notches N in the adjacent ends of the plates.

The depressible tongue R1 may be forced downwardly to permit the plate P1 to be slid thereover to thereby be detached from the retaining devices R4, R5, R6 and R7 that cooperate with the plate P1 along the longer edges and at the corners thereof. The depressible tongue R2 may be forced downwardly to enable the plate P2 to be freed from the retaining devices R8 and R9 and the bead B along the lower edge of the frame F. It will be noted that the retaining device R8 cooperates with the edge of the plate P2 opposite that retained by the bead B while the retaining device R9 cooperates with a notch N2 in the adjacent end of the plate P2. Furthermore, the depressible tongue R3 may be forced downwardly and thereupon the plate P3 may be freed from the retaining device R6, which is disposed to cooperate with both the plate P1 and the plate P3, and the retaining device R10 as well as the bead B.

In addition to the foregoing, the carrier F includes a bead B1 along the upper edge thereof and suitably disposed retaining devices RC, which bead and devices cooperate to removably retain an index card C on the frame. This card C is adapted to bear impressions from at least a part of the type characters on the plates P1, P2 and P3 to facilitate identification of the printing device and reading of the data to which the type characters provided on such plates pertain.

In the printing device illustrated in Fig. 1, the plate P1 is considered to be and will be referred to herein as a permanent plate or section for it bears type characters from which the name of the policyholder and the policy number, to which the particular device D pertains, may be printed. This plate also bears the type characters from which "Q4" may be printed, this indicating that premiums are to be paid on the policy quarterly. The plate P2 in this instance is considered to be a changeable or transitory plate or section for the type characters embossed thereon are utilized to print the post office address of the policyholder, which may be changed from time to time, whereas the policy number and name of the policyholder will not so change. The plate P3 bears type characters for printing the amount of premium due according to the policy, the amount of interest due by reason of a loan on the policy and the total of the premium due and payable. It will be recognized that this plate or section is also changeable or transitory since, if the loan is paid up, the interest charge will be cancelled, and this will also change if the loan is increased or decreased, and obviously any such changes alter the total premium due and payable.

It will be manifest that if the plates or sections P1, P2 and P3 are separated one from the other, as they are when installed on the frame F, then in the embossing or other handling three separate pieces are involved. This however may be avoided by providing the plates P1, P2 and P3 as sections of the single unitary plate P, Fig. 2. In the plate P, the plate P1 is joined to the plate P2 along the score line or otherwise weakened portion L1, while the plates P1 and P2 are joined to the plate P3 along the score line or otherwise weakened portion L2.

The plate P is preferably struck from a blank sheet or the like as, for example, by the use of a suitable punch and die. The punch and die or other means provided for separating the plate P from the blank or the like may be equipped with suitable means for forming the score lines or otherwise weakened portions L1 and L2 and preferably, as shown best in Figs. 3 and 4, the score lines or otherwise weakened portions L1 and L2 are formed by scoring or otherwise deforming opposite faces of the plate P at aligned positions.

Each of the plates P1, P2 and P3 is provided with a notch N adapted for respectively cooperating with the protuberances T on the depressible tongues R1, R2 and R3. These notches, as well as the score lines or otherwise weakened portions L1 and L2, may be formed at any desired step in the course of manufacture of the plate P and may be formed in a separate operation if so desired. It is convenient however to form such notches along with the formation of the weakened portions L1 and L2 in the blanking out operation of the plate P. Hence, the punch and die or other means employed to blank out the plate P and/or to form the weakened portions L1 and L2 are equipped with means which will form the notches N and this is also true in so far as the notch N2 is concerned. This notch N2 appears in the plate P2 at the end thereof opposite the notch N in this plate and is formed by striking metal from the plate P2 so that what is to be the open end of this notch will lie on the score line or otherwise weakened portion L2.

It will be manifest that the plate P may be handled as a unit and may therefore be readily installed in the jaws of an embossing machine such as for example those to which reference has been made hereintofore or for any other desired purpose. However, after all of the desired operations have been performed on or from the plate P and it is desired to install the sections thereof on a frame such as the frame F, the plate is grasped and then flexed first along the score line or otherwise weakened portion L2 and then along the other weakened portion L1 whereupon the plate P is divided into sections constituting the plates

P1, P2 and P3 which are then ready for insertion in a frame as F.

The score lines or otherwise weakened portions L1 and L2 are of such a nature that they will retain the various sections of a plate as P joined together during handling thereof, and especially when operations are performed on or from the plate and also these weakened portions are such that but slight flexing of the plate along these portions is required to separate the sections one from the other, it being understood that by slight flexing is meant such flexing as can readily be effected by the operators of embossing machines such as those to which reference has been made heretofore.

In the form of my invention illustrated in Figs. 1 to 4, one of the separable sections of the plate extends across corresponding ends of the other sections, while in the form of my invention shown in Figs. 5 and 6 one of the three sections is arranged in endwise alignment with another while still another section extends along corresponding edges of the aligned sections.

The plate AP, Fig. 6 is divisible into plates or sections AP1, AP2 and AP3 adapted for use in the frame of the printing device AD. The plate or section AP1 is removably retained on the frame AF by the depressible tongue AR1 (the notch AN in this section, which notch corresponds to the notches N, cooperates with the protuberance AT on the tongue AR1) and the retaining devices AR4, AR5 and AR11, while the plate AP2 is removably retained on this frame by the bead AB, the depressible tongue AR2 and the retaining devices AR14 and AR12 (the notch AN2 being provided in this section for cooperation with the retaining device AR12) and the section AP3 is removably retained on the frame AF by the depressible tongue AR3, the bead AB and the retaining devices AR12 and AR13 (the notch AN3 being formed in this plate and also cooperating with the retaining device AR12). An index card AC, which corresponds to the index card C, is retained on the frame by the bead AB1 and the retaining device ARC.

In order to remove the plate AP1 from the frame AF, the tongue AR1 is forced downwardly to disengage the protuberance AT from the notch AN whereupon the plate AP1 may be slid over the frame to disengage it from the retaining device AR11 and thereafter the plate may be slid along to disengage it from the retaining devices AR4 and AR5. The plates AP2 and AP3 may be respectively detached from the frame AF by depressing the proper of the depressible tongues AR2 or AR3.

The plates or sections AP1, AP2 and AP3 are initially sections of a unitary plate AP. The plates AP2 and AP3 are arranged in endwise alignment and are joined along the score line or otherwise weakened portion AL2. The plate AP1 is disposed along the corresponding edges of the plates AP2 and AP3 and is joined thereto along the score line or otherwise weakened portion AL1.

The plate AP, as the plate P, is preferably struck from a blank sheet or the like as, for example, by the use of a suitable punch and die and, as in the case of the plate P, the punch and die or other means for imparting the proper configuration to the plate P may be equipped with suitable means, such as sharp knife edges, for forming the score lines or otherwise weakened portions AL1 and AL2 and also, as in the case of the plate P, these portions are provided by deforming opposite faces of the plate AP at aligned positions.

As stated heretofore, the plate AP1 is provided with a notch AN which is adapted for cooperation with the protuberance AT on the depressible tongue AR1. The end of the plate AP2 opposite that adjoining the plate AP3 is preferably recessed inwardly for a portion of its extent to provide an inset edge AG1 wherefore, in effect, an extension or projection AE1 is provided at the upper corner of the plate AP2. The edge of the plate AP2 opposite that adjoining the section AP1 is adapted to rest in the bead AB of the frame AF and, to avoid having this entire edge of the plate bear in the bead and to facilitate insertion and removal of the plate AP2 on the frame AF, extensions AE2 and AE3 are formed at opposite ends of the plate along the edge thereof opposite that adjoining the plate AP1 by recessing, that is, cutting away, the edge of the plate as indicated at AG2. It will thus be seen that, in effect, recesses AG1 and AG2 are provided in the free edges of the plate AP.

As can best be seen in Fig. 5, the retaining device AR12 is aligned with edges of the plates AP2 and AP3 and it is for this reason that the notches AN2 and AN3 are respectively formed in the plates AP2 and AP3 by striking metal from these plates or sections so that the open ends of these notches will lie on the score line or otherwise weakened portion AL1.

The recesses AG1 and AG2 and the notches AN2 and AN3 may conveniently be formed along with the formation of the weakened portions AL1 and AL2 in the blanking out operation of the plate AP. It is however to be understood that the blanking out operation, the formation of the weakened portions as AL1 and AL2, and the formation of the recesses and notches, may be performed as separate operations but the production of the plates is speeded up and the cost of manufacture thereof is reduced by performing all of these operations simultaneously. It is however to be understood to be within the ambit of my invention to perform these operations separately or in any desired combinations.

It will be readily appreciated that the plate AP prior to the separation thereof into its separate sections may be handled as a unit and that so to do facilitates handling, embossing or the performance of other operations on or from the sections as AP1, AP2 and AP3. When, however, these sections are to be installed on a frame as AF, the plate AP is grasped and flexed along with the score line or weakened portion AL1 whereupon the plate AP1 is separated from the plates AP2 and AP3 and thereafter the plate is flexed along the score line AL2 to separate the sections AP2 and AP3 from each other.

In the forms of my invention thus far described, the score lines or weakened portions extended straight across the unitary plate. It is to be understood however that my invention is not limited to score lines so extending.

Thus, for example, in Figs. 7 and 8 I have illustrated plates or sections BP1, BP2 and BP3 which may be provided as separable sections of the unitary plate BP. As in the case of the plate AP, the sections BP2 and BP3 are provided in endwise alignment, and the plate BP1 is arranged along corresponding edges of the plates BP2 and BP3. In the plate BP the plates BP2 and BP3 are joined to each other along the score line or otherwise weakened portion BL2, and the

plates or sections BP2 and BP3 are joined to the plate or section BP1 along the score line BL1.

It will be noted that the plate BP1 includes, at one of the corners thereof, a projection or extension BE4 that is adapted for cooperation with the retaining device BR16 and that a notch BN5 is formed at a corner of the plate BP2 so that the plate BP2 will clear the retaining device BR16 when the plate BP2 is engaged with the retaining devices BR6, BR8 and BR15 on the frame BF. The plate BP3 is retained on the frame BF by the depressible tongue BR3 and the retaining devices BR10, BR13 and BR6.

When it is desired to remove either the plate BP2 or the plate BP3, the depressible tongue BR3 is forced downwardly whereupon the plate BP3 may be disengaged from its retaining devices and thereafter the plate BP2 may be so moved relative to the frame BF that it also may be disengaged from its retaining devices.

The plate BP1 is retained on the frame BF by the depressible tongue BR1 and the retaining devices BR16 and BR5 and the bead BB. This plate is removable from the frame BF by forcing the tongue BR1 downwardly. It is also to be noted that the plate BP1 is equipped with a notch BN4 to afford clearance for the plate BP1 from the retaining device BR13.

The notch BN5 is intended to provide clearance for the retaining device BR16 and since the extension BE4 is to cooperate with this retaining device, the edges of this notch and this extension are complementary. Therefore the score line or weakened portion BR1, instead of extending straight across the plate BP, extends from the inner upper edge of the notch BN4 to the point whereat the extension BE4 begins and this score line or weakened portion is then so extended that it defines the extension BE4 on the plate BP1 and the notch BN5 in the plate BP2.

As in the case of the unitary plates P and AP, the score lines or weakened portions BL1 and BL2 in the unitary plate BP and the extensions as BE4 and BE5 and the notches as BN4 and BN5 may be formed in the blanking operation of the plate BP or as separate operations although it is preferred that all of these operations be performed as a single operation in order to expedite and reduce the cost of manufacturing the plates.

It is to be recognized that the printing device BD in general corresponds to the printing devices D and AD and that it is equipped with an index card BC that is retained in position by the retaining devices BRC and the bead BB1. This is also true of the printing device CD, Fig. 9, which also includes an index card CC that is retained on the frame CF of the printing device CD by the retaining devices CRC and the bead CB1.

The plates CP1 and CP2 on the frame CF are generally L-shaped and are arranged in the unitary plate CP and on the frame CF so as to be complementary, that is to say, so that the foot portion of the general L shape of one plate extends across the end of the stem of the general L shape of the other plate and the stems are arranged in parallel relation. In order to insure neat interfitting and to insure against displacement of the plates CP1 and CP2 from the frame CF, the plate CP1 is equipped with an extension CE6 that fits into a complementary notch CN7 in the plate CP2, and the plate CP2 is equipped with an extension CE7 that fits into a complementary notch CN6 in the plate CP1. Each of the plates CP1 and CP2 has the free corners thereof relieved by the formation therein of notches CN8 and CN9. Furthermore, like the plates P1, P2 and P3, the plates CP1 and CP2 are equipped with notches as CN adapted for cooperation with protuberances as CT on the depressible tongues CR1 and CR2. When the tongue CR1 is forced downwardly the plate CP1 may be disengaged from the bead CB and the retaining device CR6 whereupon this plate may be removed from the frame. Likewise, upon depression of the depressible tongue CR2 the plate CP1 may be disengaged from the bead CB and the retaining devices CR17 and CR18.

The plates CP1 and CP2 are preferably made as parts of a unitary plate CP and are joined to each other in the plate CP along a score line or otherwise weakened portion CL1 which is so extended in the palte CP that it defines the complementary general L shape of the two plates CP1 and CP2 and also so that it defines the extensions CE6 and CE7 and the notches CN7 and CN6 complementary to such extensions. As in the case of the unitary plates hereintofore described, the unitary plate CP enables the sections or plates CP1 and CP2 to be handled as a unit during embossing or other handling thereof.

Furthermore, the notches CN, CN6, CN7, CN8 and CN9 and the extensions CE6 and CE7 as well as the score line or otherwise weakened portion CL1 may be formed in the blanking out operation of the plate CP or in separate operations or in combinations of such operations. Likewise, the sections CP1 and CP2 of the plate CP may be separated from each other along the score line or otherwise weakened portion CL1 by flexing the plate CP and in this connection it should be noted that each of the plates that have been discussed herein is preferably made of relatively light metal and therefore, and particularly in the case of irregular score lines or weakened portions such as the score lines BL1 and CL1, the flexing of the plate to effect separation of the sections may be done in stages so that the separation of sections as CP1 and CP2 even along a score line or weakened portion as irregular in its extent as the line or portion CL1 may be effected without damage either to the plates or to extensions or notches thereon or therein as CE6 and CE7 and CN6 and CN7.

It has been explained that the sections CP1 and CP2 are of general L shape and that the stem portions thereof are arranged in parallel relation. This arrangement is resorted to even if, for example, the stem portions of the plates are not of the same length. Sometimes the stem portion of one plate may be shorter than the other as, for example, where the plate CP2 would be cut along the line X. If this arrangement were resorted to the section of the plate bounded by the lines X, W, Y, V would be cut away, the line X in such an instance being extended to the line V so as to eliminate an extension as C7. It will be recognized that a plate embodying such a cut away portion could be arranged to be divisible into sections just as the plates herein above described are so divisible.

The plates shown in Figs. 2, 6, 8 and 9 are substantially rectangular in outline. It is to be noted, however, that since the plate P3 is to be co-extensive with the plates P1 and P2 when they are installed on the frame F, the section P3 is of somewhat greater extent than the combined width of the plates P1 and P2, such greater extent of the plate P3 being equivalent to the spacing between the plates P1 and P2 when they are

installed on the frame F. Furthermore, the general rectangular outline of the plate AP is interrupted by the recesses AG1 and AG2 and this likewise applies to the plate CP whose outline is interrupted by the notches CN8 and CN9. The extension BE2 also interrupts the general rectangular outline of the plate BP. Notwithstanding such slight irregularities the plates may aptly be described as being generally rectangular in outline.

It will be recognized that the plates AP, BP and CP just as the plate P embody a plurality of sections and it will be understood that some of these sections may be embossed to receive type characters for printing data which may be considered permanent, as hereinabove explained, while other sections may be embossed to receive type characters for printing data which may be considered to be transitory and that therefore the plates AP, BP and CP in general correspond to the plate P.

It will be manifest from the foregoing description that in accordance with my invention the necessity of handling the separate plates or sections on a printing device including a frame adapted to bear a plurality of sections is avoided and that therefore the incorporation of data, or better, the embossing of type characters from which data may be printed, on the plates may be expeditiously performed. This is accomplished by providing all of the sections adapted for use on a particular printing device as separable parts of a unitary plate which is so arranged that the various sections thereof may be readily separated from each other by merely flexing or otherwise properly manipulating the unitary plate. To this end score lines or otherwise weakened portions are provided on the unitary plate and it is along such portions that the various sections are joined one to the other. Such score lines or otherwise weakened portions may be formed along with the blanking out operation of the unitary plate or this may be effected as a separate and independent operation. Moreover, notches or extensions or other irregularities in the outline of the unitary plates or the separable sections may be formed either along the score lines or otherwise weakened portions or at other positions and this may also be effected in the blanking out operation of the plates or in any other desired way or manner.

In the foregoing I have illustrated and described preferred forms of my invention but it is to be understood that these are capable of variations and modifications and I therefore do not wish to be limited to the precise details set forth but desire to avail myself of such changes and alterations as fall within the purview of the following claims.

I claim:

1. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, said sections being joined along weakened portions formed in the plate and which constitute edges of said sections, certain of said weakened portions extending in angular relation with respect to other of such portions and merging thereinto to establish such interrelation between said portions that said plate may be flexed therealong to effect separation of the sections one from the other upon breakage of said plate along said weakened portions as an incident to the flexing of the plate along said weakened portions.

2. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, said sections being joined along weakened portions formed in the plate that are positioned to define, in cooperation with the marginal edges of the plate, the outline of each of said sections, certain of said weakened portions extending in angular relation with respect to other of such portions and merging thereinto to establish such interrelation between said portions that said plate may be flexed therealong to effect separation of the sections one from the other upon breakage of said plate along said weakened portions as an incident to the flexing of the plate along said weakened portions.

3. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device by retaining means provided on said carrier, said sections being joined along weakened portions formed in the plate and which constitute edges of said sections, certain of said weakened portions extending in angular relation with respect to other of such portions and merging thereinto to establish such interrelation between said portions that said plate may be flexed therealong to effect separation of the sections one from the other upon breakage of said plate along said weakened portions as an incident to the flexing of the plate along said weakened portions, selected of said weakened portions being directed to define a formed part on certain of said sections adapted for cooperation with predetermined of said retaining means.

4. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device by retaining means provided on said carrier, said sections being joined along weakened portions formed in the plate that are positioned to define, in cooperation with the marginal edges of the plate, the outline of each of said sections, certain of said weakened portions extending in angular relation with respect to other of such portions and merging thereinto to establish such interrelation between said portions that said plate may be flexed therealong to effect separation of the sections one from the other upon breakage of said plate along said weakened portions as an incident to the flexing of the plate along said weakened portions, selected of said weakened portions being directed to define a formed part on an edge on certain of said sections adapted for cooperation with predetermined of said retaining means.

5. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device by retaining means provided on said carrier, said sections being joined along weakened portions formed in the plate that are positioned to define, in cooperation with the marginal edges of the plate, the outline of each of said sections, certain of said weakened portions extending in angular relation with respect to other of such portions and merging thereinto to establish such interrelation between said portions that said plate may be flexed therealong to effect separation of the sections one from the other upon breakage of said plate along said weakened portions as an incident to the flexing of the plate along said weakened portions, selected of said weakened portions being directed to define an ear on an edge of certain of said sections adapted for cooperation with predetermined of said retaining means.

6. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device by retaining means provided on said carrier, said sections being joined along weakened portions formed in the plate that are positioned to define, in cooperation with the marginal edges of the plate, the outline of each of said sections, certain of said weakened portions extending in angular relation with respect to other of such portions and merging thereinto to establish such interrelation between said portions that said plate may be flexed therealong to effect separation of the sections one from the other upon breakage of said plate along said weakened portions as an incident to the flexing of the plate along said weakened portions, selected of said weakened portions being directed to define a notch on an edge of certain of said sections adapted for cooperation with predetermined of said retaining means.

7. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device by retaining means provided on said carrier, said sections being joined along weakened portions formed in the plate that are positioned to define, in cooperation with the marginal edges of the plate, the outline of each of said sections, certain of said weakened portions extending in angular relation with respect to other of such portions and merging thereinto to establish such interrelation between said portions that said plate may be flexed therealong to effect separation of the sections one from the other upon breakage of said plate along said weakened portions as an incident to the flexing of the plate along said weakened portions, selected of said weakened portions being directed to define an ear on an edge of one of said sections and a complementary notch in an edge of another of said sections to thereby afford a formed part on at least one of said sections adapted for cooperation with predetermined of said retaining means.

8. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, said sections being joined along weakened portions formed in the plate that are positioned to define, in cooperation with the marginal edges of the plate, the outline of each of said sections, certain of said weakened portions extending in angular relation with respect to other of such portions and merging thereinto to establish such interrelation between said portions that said plate may be flexed therealong to effect separation of the sections one from the other upon breakage of said plate along said weakened portions as an incident to the flexing of the plate along said weakened portions, selected of said sections having a portion thereof cut away adjacent one of said weakened portions to thereby afford a notch in such section adapted for cooperation with predetermined of said retaining means upon separation of said section from the adjoining section.

9. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, two of said sections being substantially rectangular in outline and having shorter end edges thereof in alignment with each other and having adjacent of the longer end edges thereof united along a weakened portion, a third section including a straight edge joined to aligned shorter ends of the first two sections along a weakened portion, said third section being separable from the first two sections upon flexing of the plate at the weakened portion along which the third and first two sections are joined and said first two sections being separable upon flexing of the plate at the weakened portion along which such sections are joined.

10. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, two of said sections being substantially rectangular in outline and being arranged in endwise alignment and having adjacent edges thereof united along a weakened portion, at least one other section of said plate including a straight edge joined to the aligned sections at aligned edges thereof along a weakened portion, said sections being separable from each other upon flexing of the plate at said weakened portions.

11. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, said plate having aligned grooves in opposite faces extending between opposite edges thereof and providing a weakened portion intermediate two of the sections, said plate also having other aligned grooves in opposite faces thereof and extending between the first grooves and another edge of the plate and providing a weakened portion dividing one of said two sections into two sections, said sections separating from each other upon flexing of the plate at said weakened portions.

12. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, said plate having aligned grooves in opposite faces extending between opposite edges thereof and providing a weakened portion intermediate two of the sections, said plate also having other aligned grooves in opposite faces thereof and extending between the first grooves and another edge of the plate and providing a weakened portion dividing one of said two sections into two sections, said sections separating from each other upon flexing of the plate at said weakened portions, the aligned grooves between the two sections as aforesaid having at least a part of the extent thereof extended in angular relation with the main extent thereof to thereby form an extension on an edge of one of the two sections and a notch in an edge of the other of the two sections upon separation of the sections from each other.

13. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, said sections being substantially L-shaped in outline and each having the foot portion thereof disposed in alignment with the free end of the stem portion of the other and having the stem portions thereof arranged in parallel relation, at least one of said foot portions being joined to the adjacent end of the stem portion with which it is aligned along a weakened portion and at least part of the stem portion of one section being joined to at least a part of the stem portion of the other section along a weakened portion, said sections separating from each other upon flexing of the plate at said weakened portions.

14. A plate embodying a plurality of sections each adapted to be removably retained on the carrier of a printing device, said plate being substantially rectangular in outline and having aligned grooves in opposite faces thereof, said aligned grooves extending inwardly from one of the edges of the plate for a selected distance and

then extending parallel to said edge for a selected distance and then extending to the edge opposite the first named edge and thereby defining said sections, the aligned grooves providing weakened portions in said plate, said sections separating from each other upon flexing of the plate at said weakened portions..

15. The method of making a plate embodying sections adapted to be removably retained on the carrier of a printing device which includes blanking out the plate and simultaneously forming weakened portions in the plate at positions defining the sections and extending in such relation with each other that the plate may be flexed therealong to enable separation of the sections from each other.

16. The method of making a plate embodying sections adapted to be removably retained on the carrier of a printing device which includes blanking out the plate to provide formations on the exposed edges that are adapted for cooperation with retaining means on the carrier and providing weakened portions in the plate defining the sections therein and so merged with each other that the plate may be flexed therealong to enable separation of the sections from each other along such portions.

17. The method of making a plate embodying sections adapted to be removably retained on the carrier of a printing device which includes blanking out the plate, providing weakened portions in the plate defining the sections therein and so merged with each other that the sections may be separated from each other along such portions upon flexing of the plate at such portions, and striking metal from at least one of said sections adjacent a weakened portion to form a notch in an edge of said section upon separation thereof from the adjoined section.

18. The method of making a plate embodying sections adapted to be removably retained on the carrier of a printing device which includes blanking out the plate and simultaneously providing formations on the exposed edges of the blank that are adapted for cooperation with retaining means on the carrier, forming aligned grooves in opposite faces of the plate to define the sections therein and formed parts on the sections adapted for cooperation with retaining means on the carriers and so merged that the plate may be flexed therealong and thereby enable the sections to be separated from each other.

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