

Nov. 9, 1954

E. A. HAIG ET AL

2,693,756

ADDRESS PRINTING PLATE SUPPORTING MEANS

Filed Feb. 24, 1953

2 Sheets-Sheet 1

FIG. 1

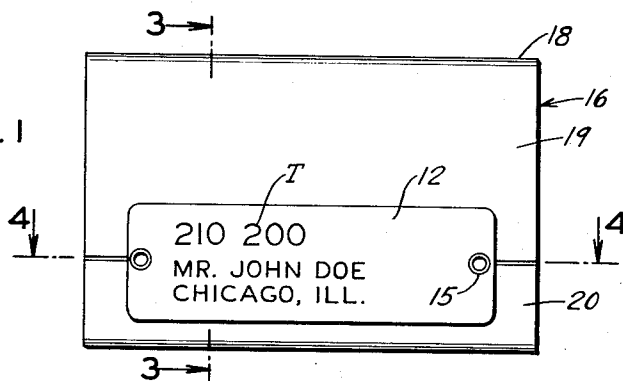


FIG. 2

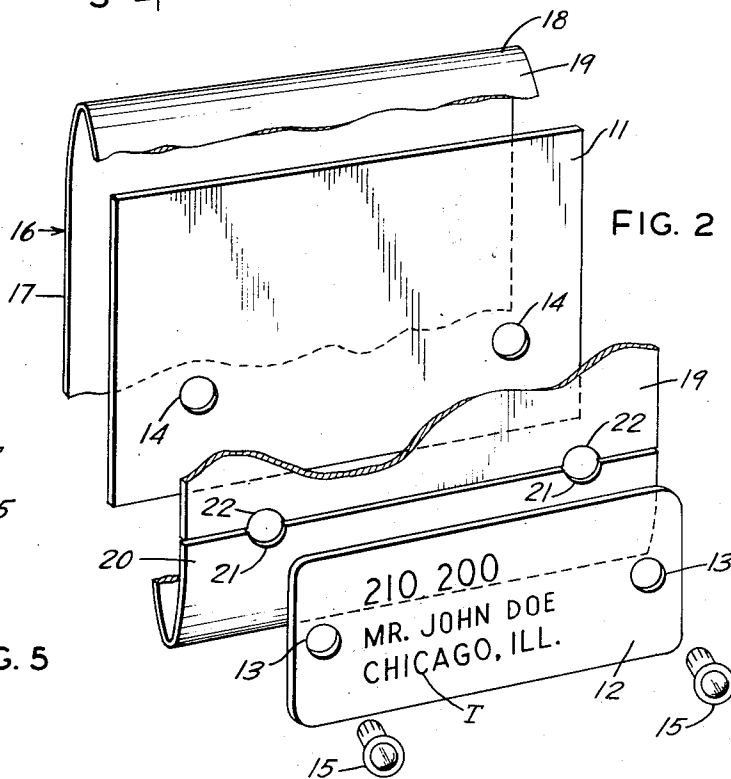


FIG. 5

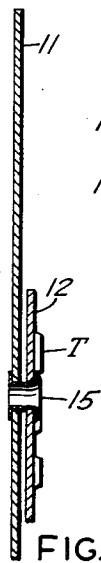


FIG. 3

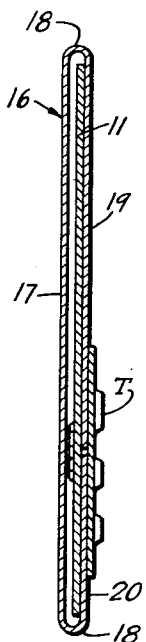
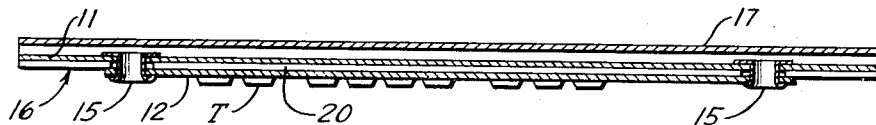


FIG. 4



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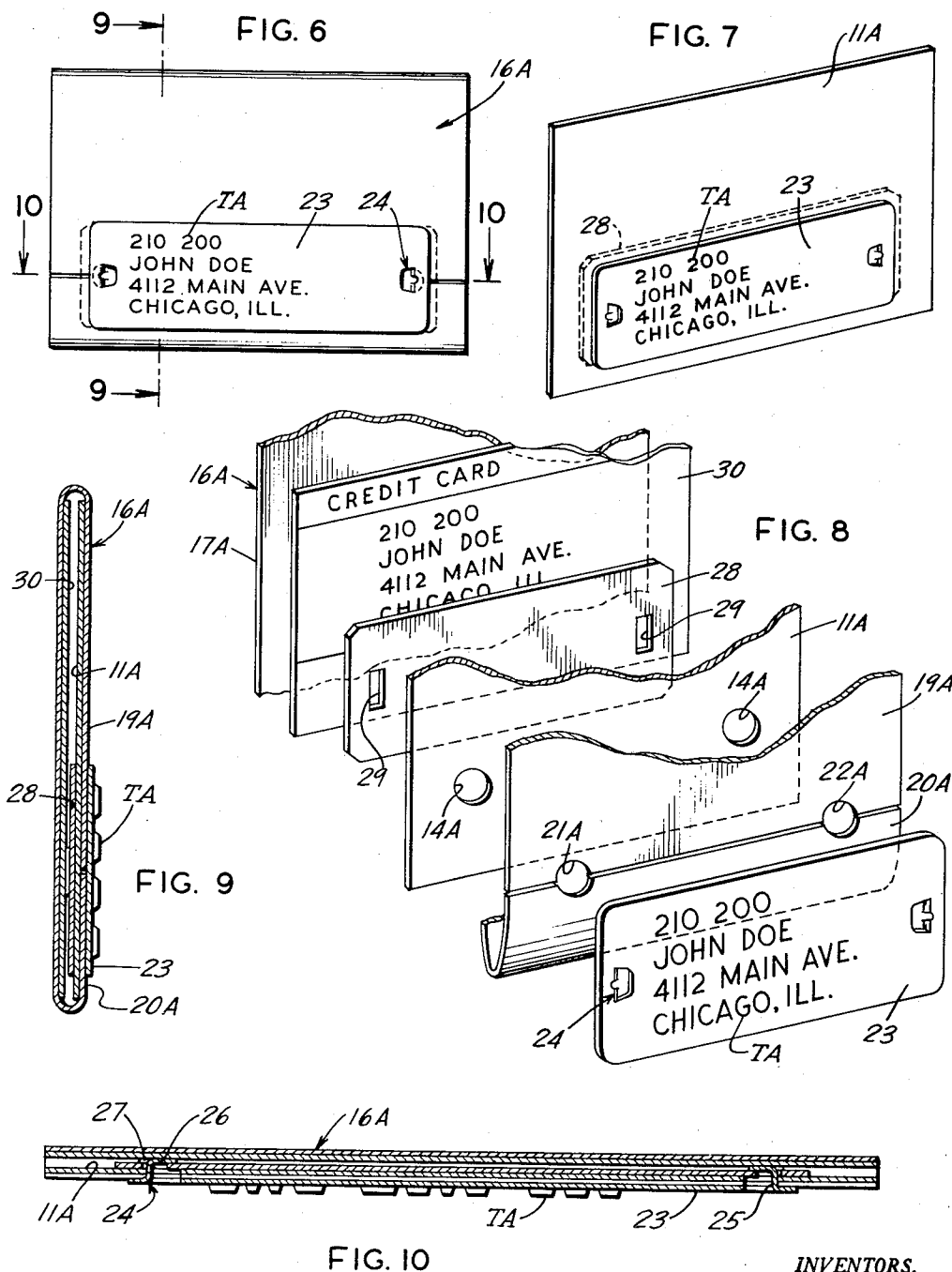
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ADDRESS PRINTING PLATE SUPPORTING MEANS

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2 Sheets-Sheet 2



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2,693,756

ADDRESS PRINTING PLATE SUPPORTING MEANS 5

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Application February 24, 1953, Serial No. 338,416

10 Claims. (Cl. 101—369)

This invention relates to printing devices, and more particularly to printing devices associated with credit cards such as are carried by the customers of mercantile establishments, gasoline and oil distributors and like commercial enterprises.

Printing devices of the aforesaid character which are carried by customers of various kinds of commercial enterprises usually each comprise a printing plate bearing type characters from which an impression may be made onto invoices and the like to facilitate recordation of a transaction and to insure accurate transcription. Such a printing plate is usually associated with a permanent card or the like bearing the name and kindred data pertaining to the business enterprise which furnishes the device to the customer. Additionally, a transitory card is usually associated with such a permanent card, such transitory card including data such as the period of time for which the printing device is validated and kindred information. It is customary to enclose cards of the aforesaid nature in a transparent envelope and the arrangement was such that the printing plate was disclosed through an opening afforded in such a transparent envelope which is usually made of a synthetic material such as a vinyl chloride resin or the like. Such a transparent envelope has been formed from continuous sheet and a flange has been provided at one marginal end thereof that was adapted to overlie the other marginal end when the sheet was folded upon itself and sometimes the marginal flap was attached to the underlying marginal portion of the sheet so as to thereby provide a continuous sleeve having open end portions through which cards of the aforesaid nature were inserted into the envelope. The presence of the printing plate on one of the cards has complicated accomplishing the foregoing so that sometimes resort has been had to a transparent envelope that was permanently associated with at least the card carrying the printing plate so as to thereby insure that the printing plate would be disclosed through an opening in the transparent envelope.

It has been observed, however, that transparent envelopes of the aforesaid character, in the course of use of printing and identifying devices embodying the same, become scratched or cloudy and unattractive in appearance even to such an extent as to so impair the transparency thereof as to interfere with reading of the data included on the cards housed therein, and this and kindred circumstances have made it advisable to arrange for replacement of the transparent envelope from time to time. In the past it has usually been necessary for the customer to return the entire assembly to the issuer thereof in order that the transparent envelope could be replaced and to enable other changes to be made in the assembly such as replacement of the permanent or transitory card. In view of this and kindred circumstances, the primary object of our invention is to embody a transparent envelope of the aforesaid character in an identifying and printing device in such a way that installation and removal of the transparent envelope may be expeditiously effected.

Inasmuch as the type characters on the printing plate are to be disclosed through the transparent envelope in an assembly of the aforesaid character, it is a further object of our invention to avoid providing an opening in the transparent envelope corresponding in size to the printing plate so as to enable the type characters on the printing plate to be disclosed, and an object ancillary to the foregoing is to extend marginal portions of a transparent envelope of the aforesaid character beneath the

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printing plate and intermediate such plate and the card or the like on which it is customarily mounted so that the type characters on the printing device will be disclosed as desired, and a yet further object is to so arrange the transparent envelope of the aforesaid character that it will cooperate with the means which retain the printing plate on the card or the like so as to insure against accidental displacement of the envelope from the assembly.

A further object is to so arrange the novel transparent envelope of this invention that a transitory card or the like may be readily installed therein or removed therefrom when so desired.

Other and further objects of the present invention will be apparent from the following description and claims and are illustrated in the accompanying drawings which, by way of illustration, show preferred embodiments of the present invention and the principles thereof and what we now consider to be the best mode in which we have contemplated applying these principles. Other embodiments of the invention embodying the same or equivalent principles may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claims.

In the drawings:

Fig. 1 is a front elevational view of an identifying and printing device embodying our invention;

Fig. 2 is a perspective view showing the elements of our device separated one from the other but arranged in the order in which the same are included in the completed assembly;

Figs. 3 and 4 are sectional views taken substantially and respectively on the lines 3—3 and 4—4 on Fig. 1;

Fig. 5 is a vertical sectional view of the printing plate and the carrier therefor and showing the manner in which these two elements are interconnected;

Fig. 6 is a view similar to Fig. 1 showing a modified form of our invention;

Fig. 7 is a perspective view of the printing plate and the carrier therefor and showing the plate mounted on such carrier;

Fig. 8 is a view similar to Fig. 2 but showing the elements included in the device as illustrated in Fig. 6; and

Figs. 9 and 10 are sectional views taken substantially and respectively on the lines 9—9 and 10—10 on Fig. 6.

The form of our invention shown in Figs. 1 to 5, inclusive, includes a relatively permanent element or card 11 that is rectangular in outline and which is formed of cardboard or like material. Such a card or carrier usually bears printed information such as the name and address of the commercial institution which issues identifying and printing devices to its customers and this card may also frequently bear the name and address of the particular customer to whom a particular device is furnished and kindred data.

A printing plate 12 is provided that is substantially rectangular in outline but which is of smaller size than the permanent element 11. The printing plate has type characters as T provided thereon, such type characters being embossed on the plate when it is formed from sheet material such as metal, a synthetic resinous product or the like. Desirably the type characters as T are direct reading although in some instances it may be desirable to resort to conventionally arranged type characters.

The printing plate as 12 has openings 13 formed therein adjacent to the shorter edges thereof and the openings are desirably located substantially midway between the longer edges of the plate. Openings as 14 are provided in the permanent element or card 11 and these are spaced apart correspondingly to the spacing apart of the openings 13 so that the openings 13 may be respectively aligned with the openings 14 when the printing plate is brought into face-to-face relationship with the card 11 with the type characters T exposed. The openings 14 are preferably spaced from one of the longer edges of the card 11 in such an amount that when the openings in the card and plate are aligned as aforesaid, one edge of the plate will be spaced a short distance from the adjacent edge of the card. When the card 11 and the plate 12 are assembled as aforesaid, hollow

rivets as 15 or the like are respectively passed through the aligned openings 13 and 14 and the unflanged portions thereof are upset on the face of the card 14 opposite that with which the plate 12 is engaged. In so upsetting the rivets the plate 12 is secured to the card 11 and desirably the connection is such that there is a slight clearance between the card 11 and plate 12 for a purpose that will be explained presently.

In the present instance, an enclosure generally indicated by 16 for the card 11 is provided, such enclosure being formed from a transparent material such as a vinyl chloride resin or other synthetic resinous product or the like. The enclosure or envelope 16 includes a continuous wall 17 desirably of an outline complementary to the outline of the card 11 but of slightly greater dimensions than the related dimensions of the card 11 so that the edge portions of the card 11 may be disposed slightly inwardly of at least the longer edges of the wall 17 when the card 11 is enclosed within the envelope 16. Substantially U-shaped unitary end portions 18 are provided along the longer edges of the wall 17 and these are unitarily joined with wall sections 19 and 20 of the envelope 16 which are adapted to overlie the face of the card 11 on which the printing plate 12 is disposed and which afford a discontinuous wall that lies parallel with the continuous wall. The wall section 20 is of such an extent inwardly from the U-shaped end portion 18 as to extend between the plate 12 and the card 11 and the free edge of the wall section 20 is terminated so as to be aligned with substantially the medial portions of the rivets as 15, recesses as 21 being provided in this edge in position to respectively embrace substantially one-half of the rivets as 15. The wall section 19 is also of such an extent that the free marginal portion thereof may be disposed between the plate 12 and the card 11 and the free marginal edge of this wall section is also arranged to terminate substantially in alignment with the medial portions of the rivets 15, recesses as 22 being provided in this edge of this wall section so as to respectively embrace portions of the rivets 15.

In assembling our devices as illustrated in Figs. 1 to 5, the plate 12 is first assembled on the card or carrier 11 by utilizing the rivets 15, as described hereinabove. Then the enclosure or envelope 16 is brought into association with these assembled parts and either the wall section 19 or 20 is bent outwardly to enable a portion of the card 11 to be slid thereunder toward the wall 17, and thereafter the free marginal edge portion of this wall section is disposed between the card 11 and the plate 12 with the recesses in the free edge of such marginal portion embracing the rivets 15. Thereafter the other wall section has the free marginal portion thereof disposed between the plate 12 and the card 11 and the recesses in the free edge of this marginal portion are also arranged to embrace the rivets as 15. Consequently, the plate 15 is disposed outwardly of the envelope 16 so that impressions may be readily made from the type characters T thereon. Moreover, since the marginal portions adjacent the ends of the envelope 16 are disposed between the plate 12 and the card 11, these marginal portions are secured in position. Yet further, by reason of the rivets 15 being embraced in recesses in the free edges of the respective wall sections of the envelope 16, the envelope 16 is prevented from moving transversely relative to the card 11 and plate 12. It will therefore be seen that the envelope 16 may be expeditiously installed on the assembled card 11 and plate 12, and it will also be apparent that it will be expeditiously removed therefrom when so desired by merely withdrawing the free marginal portions thereof from beneath the plate 12. Consequently, the envelope 16 may be expeditiously replaced whenever this is desired. However, notwithstanding the fact that the device may be readily disassembled in this manner, the various elements of the device are securely retained in assembled relation when brought into association one with the other in a manner explained hereinabove.

If desired, another card, of a size similar to the card 11 may be provided and suitable data may be imprinted on this card as, for example, the period for which our novel identifying and printing device is valid for use by the person to whom the same is issued. Such a card may be slid into the envelope 16 between the wall 17 and the card 11, a card of this nature being illustrated in the form of our invention shown in Figs. 6 to 10, inclusive.

The form of our invention shown in Figs. 6 and 10, inclusive, is quite similar to that described hereinabove and those elements in the form of our device shown in Figs. 6 to 10 which correspond to those described hereinabove with reference to Figs. 1 to 5, inclusive, are identified by the same reference character as that employed hereinabove except that the suffix "A" is added thereto where these reference characters are employed in Figs. 6 to 10, inclusive.

The form of our invention shown in Figs. 6 to 10, inclusive, includes a printing plate 23 somewhat like the printing plate 12 except that instead of the plate 23 being equipped with openings as 13, the printing plate 23 includes retaining clips generally indicated by 24. The clips 24 are formed by striking sections 25 from the body of the plate 23, and these sections are extended in normal relation to the plate 23 and terminate in retaining portions 26 which are extended inwardly relative to the adjacent marginal portions of the plate 23. Lips as 27 are struck from the retaining portions 12 and are disposed in the same plane as these portions but respectively extend in a direction opposite to the extent of the retaining portion from which it is formed. A printing plate embodying retaining clips of this nature is disclosed in the copending application of one of the applicants herein, Lyle W. Seifried, Serial No. 213,790, filed March 3, 1951, now U. S. Patent No. 2,633,080.

The card as 11A has openings 14A formed therein through which the normally extending portions 25 of the respective clips 24 may be extended and these portions so extend through the card 11A that the retaining lips as 26 are spaced from the face of the card 11A opposite that engaged by the printing plate 23. A flexible retaining member 28 is provided which has openings as 29 formed therein and the normally extending portions 25 are adapted to project through these openings 29. In order to connect the plate 23 to the card 11A, marginal portions adjacent one of the openings 29 are disposed between the card 11A and the retaining portion 26 and lip 27 of one of the clips 24. The flexible retaining member 28 is then flexed to facilitate passage of the other opening 29 past the retaining portion 26 and lip 27 of the other retaining device 24, and thereafter the marginal portions adjacent this opening 29 are disposed beneath the retaining portion 26 and lip 27 of this other retaining clip 24 and thereupon the printing plate 23 is firmly connected to the card 11A to expose the type characters TA thereon.

As in the form of our invention disclosed in Figs. 1 to 5, inclusive, an enclosure or retaining envelope 16A is provided which corresponds to the envelope 16 and which therefore includes wall sections 17A, 19A and 20A. Recesses as 21A and 22A are formed in the free edges of the respective wall sections 20A and 19A and these recesses cooperate with the normally extending portions 25 of the retaining clips 24 in the same manner and for the same purpose as the recesses 21 and 22 cooperate with the rivets 15, this being brought about when free marginal portions of the wall sections 19A and 20A are disposed between the plate 23 and the card 11A in a manner described hereinabove with reference to Figs. 1 to 5, inclusive.

In the form of our invention shown in Figs. 6 to 10, inclusive, we include a card 30 which corresponds in outline to the outline of the card 11A and this card is adapted to be disposed in the envelope 16A between the wall 17A and the card 11A. The card 30 may bear suitable indicia such as the period for which the device in which it is included is to be valid and other related data may be included thereon as, for example, the name and address of the person to whom our device is furnished. The card 30 may be freely slid into or from the envelope 16A from either open end thereof when so desired.

It will be apparent from the foregoing that we have provided a device whereby the hereinabove set forth and kindred objects of this invention may be realized, and while we have illustrated and described the preferred embodiments of our invention, it is to be understood that these are capable of variation and modification, and we therefore do not wish to be limited to the precise details set forth, but desire to avail ourselves of such changes and alterations as fall within the purview of the following claims.

We claim:

1. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate mounted on one face of the carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford a continuous wall and a discontinuous wall parallel with the continuous wall, the carrier being disposed between said walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and overlaid completely by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall contiguous to the printing plate being disposed between the printing plate and the carrier whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure.

2. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate mounted on one face of the carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford two spaced-apart creased edges having a continuous wall extended therebetween and also a discontinuous wall parallel with the continuous wall and having the marginal portions adjacent to the free edges of the discontinuous wall disposed between said creased edges, the carrier being disposed between said walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and completely overlaid by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall contiguous to the printing plate being disposed between the rear face of the printing plate and the face of the carrier on which the printing plate is mounted whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure.

3. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate, fastening means connecting the plate to one face of the carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford a continuous wall and a discontinuous wall parallel with the continuous wall, the carrier being disposed between said walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and overlaid completely by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall contiguous to the printing plate being disposed between the printing plate and the carrier whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure, the free edge of at least one of said marginal portions being formed to cooperate with said fastening means to secure the enclosure and carrier against endwise displacement one from the other.

4. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate, fastening means connecting the plate to one face of the carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford a continuous wall and a discontinuous wall parallel with the continuous wall, the carrier being disposed between said walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and overlaid completely by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall contiguous to the printing plate being disposed between the printing plate and the carrier whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure, at least one of the free edges of said marginal portions being formed and disposed to embrace fastening means to secure the enclosure and carrier against edgewise displacement one from the other.

5. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate, fastening means adjacent to opposite ends of the printing plate and passed through the carrier for interconnecting the plate and carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford a continuous wall and a discontinuous wall parallel with the con-

tinuous wall with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and overlaid completely by said continuous wall, the carrier being disposed between said walls, the marginal portions at the respective ends of the discontinuous wall being disposed between the printing plate and the carrier whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure, at least the free edge of one of said marginal portions having a recess formed therein in position to at least partially surround said fastening means to secure the enclosure and carrier against endwise displacement.

6. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate, rivets passed through said carrier and plate adjacent to opposite edges of the plate and effective to secure the plate to one face of the carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford a continuous wall and a discontinuous wall parallel with the continuous wall, the carrier being disposed between said walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and overlaid completely by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall contiguous to the printing plate being disposed between the printing plate and the carrier whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure, at least one of the free edges of said marginal portions having recesses formed therein in position to at least partially surround the rivets to secure the enclosure and carrier against endwise displacement.

7. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate, clips formed on said printing plate adjacent to opposite edges thereof and including portions extended in normal relation to the plate, said portions being passed through openings in the carrier, inwardly extending retaining portions and outwardly extending lips at the free ends of the normally extended portions, a retaining member having openings therein through which the normally extended portions are passed whereby the marginal portions of the retaining member adjacent to said openings and disposed between the carrier and the inwardly extending retaining portions and the outwardly extending lips whereby the plate is secured on the carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford a continuous wall and a discontinuous wall parallel with the continuous wall, the carrier being disposed between said walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and overlaid completely by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall contiguous to the printing plate being disposed between the printing plate and the carrier whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure, at least one of the free edges of said marginal portions having recesses formed therein in position to at least partially surround the normally extended portions to secure the enclosure and carrier against endwise displacement.

8. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate mounted on one face of the carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford a continuous wall and a discontinuous wall parallel with the continuous wall, the carrier being disposed between said walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and overlaid completely by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall being disposed between the rear face of the printing plate and the face of the carrier on which the printing plate is mounted whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure.

9. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate, means connecting the plate to one face of the carrier, and an enclosure formed from

a continuous sheet of transparent material folded upon itself to afford a continuous wall and a discontinuous wall parallel with the continuous wall, the carrier being disposed between said walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and overlaid completely by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall being disposed between the rear face of the printing plate and the face of the carrier on which said printing plate is mounted whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure, at least one of the free edges of said marginal portions being formed and disposed to embrace said fastening means to secure the enclosure and carrier against edgewise displacement one from the other.

10. A printing device of the kind described including a relatively permanent substantially flat part affording a carrier, a printing plate, fastening means connecting the plate to one face of the carrier, and an enclosure formed from a continuous sheet of transparent material folded upon itself to afford two spaced-apart creased edges having a continuous wall extended therebetween and also a discontinuous wall parallel with the continuous wall and having the marginal portions adjacent to the free edges of the discontinuous wall disposed between said creased edges, the carrier being disposed between said

walls with the face of the carrier opposite that on which said printing plate is mounted being disposed toward and completely overlaid by said continuous wall, at least a part of the free marginal portions at the respective ends of the discontinuous wall contiguous to the printing plate being disposed between the rear face of the printing plate and the face of the carrier on which the printing plate is mounted whereby the carrier is enclosed within the enclosure and the printing plate is disclosed exteriorly of the enclosure, and the free edge of at least one of said marginal portions of the discontinuous wall being formed to cooperate with said fastening means to secure the enclosure and carrier against endwise displacement one from the other.

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