Aug. 10, 1937. H. W. BASS 2,089,328

UNITARY MANIFOLD RECORD ASSEMBLY

Filed June 23, 1932

Fig. 1.

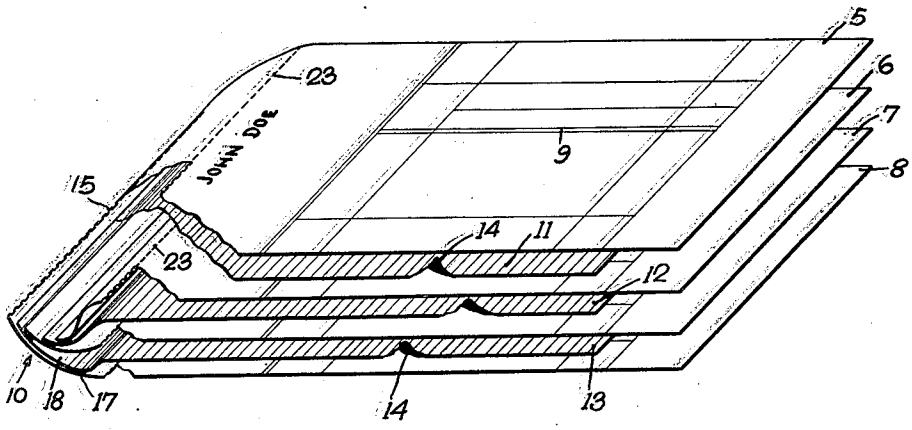
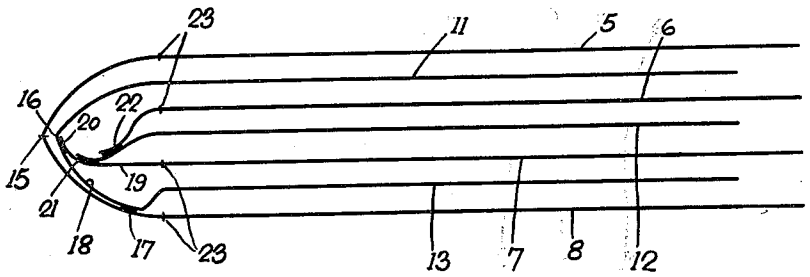


Fig. 2.



INVENTOR.
H. W. BASS,
BY Duell, Dunn and Anderson
ATTORNEYS.

Patented Aug. 10, 1937

2,089,328

UNITED STATES PATENT OFFICE

2,089,328

UNITARY MANIFOLD RECORD ASSEMBLY

Harold W. Bass, Elmira, N. Y., assignor to American Sales Book Company, Inc., Niagara Falls, N. Y., a corporation of Delaware

Application June 23, 1932, Serial No. 618,823

16 Claims. (Cl. 282—22)

This invention relates to improvements in manifolding assemblies of record and transfer leaves wherein a plurality of such leaves are attached together to form a flexible and pliable manifolding set adapted for receiving inscriptions manually or to be used in connection with manifolding machines of various types such as autographic registers, typewriters, billing machines, etc.

It is a general object of the invention to provide a manifolding assembly of the class mentioned having an improved arrangement of the leaf attachments whereby the bulk or thickness of the assembly is reduced to a minimum and flexibility promoted.

Another object of the invention is to provide a manifolding assembly of the class mentioned having an improved attaching arrangement of the record and transfer leaves whereby wrinkles, bulges, puckers and like irregularities are effectually avoided, thus promoting clear and full transfer inscription and facilitating reception of the set into the writing machines.

A further object of the invention is to provide a manifolding assembly of record and transfer leaves having an improved protective envelope or fold at the top or forward end of the assembly so as to avoid unprotected or projecting edges or corners and the like that might interfere with free insertion of the assembly into the writing machine.

Another object is to provide in a manifolding assembly of the class mentioned, an improved selective attaching arrangement of the leaves of the assembly whereby the inscribed record leaves may be quickly and easily detached from their binding and separated from interleavement with the transfer leaves.

According to an important feature of the invention, the leaves of the assembly have individual attachment with each other and these attachments are staggered or disaligned with each other depthwise of the assembly, thus avoiding objectionable thickness and stiffness of the assembly and providing an assembly of exceptional thinness and flexibility adapting it for more satisfactory use, especially in connection with writing machines.

Other objects of the invention will be, in part, pointed out in the following description of an illustrative but preferred embodiment of the invention and will be, in part, obvious in connection therewith.

The invention accordingly comprises the features of construction, combinations of elements and arrangement of parts, which will be exemplified in the construction hereinafter set forth and the scope of the application of which will be indicated in the claims.

For a more complete understanding of the nature and objects of the invention, reference is had to the following detailed description and to the accompanying drawing in which

Fig. 1 is a top perspective view of a manifolding set of record and transfer leaves arranged and connected with each other in accordance with the invention and

Fig. 2 is a longitudinal vertical section through the assembly of Fig. 1.

As shown in the illustrative embodiment, the manifolding assembly includes four record leaves, an original **5**, a duplicate **6**, a triplicate **7** and a quadruplicate **8**. Each of these record leaves may be made of paper of any desired quality and weight suitable for manifolding purposes and each may be provided with an appropriate blank form **9** which will be normally arranged in register with each other in the assembly. These record leaves are normally positioned in superposed interleaved manifolding relation with each other and they are connected together in a binding stub **10** to provide a unitary assembly. It will be understood that these assemblies or sets may be made in individual units as shown or they may be bound together in an appropriate binder or book from which they may be separated one by one as desired for use.

Also attached in the assembly to the binding stub **10** and arranged in interleaved transfer relation with the record leaves are transfer leaves **11**, **12** and **13** preferably having transfer material only on their undersurfaces as indicated at **14** for transferring the inscriptions to the respective blank forms **9**. These transfer leaves may conveniently be made of light, thin, relatively inexpensive paper and provided with a relatively light coating of transfer material inasmuch as they are ordinarily used but once, that is, they are used for transferring the inscriptions in a single set of record leaves. As shown, the transfer leaves preferably terminate at their rearward or bottom ends short of the adjacent ends of the record leaves, thus providing a selective grip arrangement whereby the record leaves can be gripped by the user to the exclusion of the transfer leaves. This arrangement is utilized for selective severance of the record leaves from the assembly as later described more fully.

It will be noted that the outer record leaves **5** and **8** of the assembly are preferably as shown

formed of a single integral sheet of paper transversely folded at 15 and also preferably provided along this fold line with perforations, scoring, or similar weakness to facilitate severance along this line. This fold is at the top or forward end of the assembly and provides a protective envelope for the other leaves, the forward ends of which are enclosed in this fold. Also, the transfer leaves 11 and 13 are preferably formed of a single integral sheet of paper transversely folded at 16. The fold of the transfer sheet is thus positioned within the protective fold of the outer record sheet.

The transfer sheet including the two transfer leaves 11 and 13 is connected as indicated at 17 to the outer record sheet, this connection being shown in this embodiment at the forward end of the quadruplicate record leaf 8 and some distance to the rearward of the fold line 15. This provides a flexible attaching extension or stub 18 for the attachment of additional leaves in the assembly. The attachment 17 is preferably a line of transversely arranged spots of adhesive, although stitches of textile thread or staples of light wire or the like may serve for this purpose.

The triplicate record leaf 7 also has an attaching stub or extension 19 at its forward end attached at 20 to the stub 18 in a manner similar to the attachment 17 but positioned forwardly of the latter. The transfer leaf 12 is connected at its forward end to the stub 19 by another attachment 21 similar to attachment 17 and the duplicate record leaf 6 is similarly attached at 22 to the forward part of the transfer leaf 12.

It will thus be noticed that all of the attachments 17, 20, 21 and 22, between the record and transfer leaves are disaligned or staggered with each other depthwise of the assembly so that no two of the attachments lie opposite to each other. Although the attachments are herein shown as being offset or displaced from each other longitudinally of the assembly to effect this staggering, it will be readily understood by those skilled in the art that the offsetting of the attachments may be otherwise arranged while still accomplishing the same or similar advantageous results. By means of this improved arrangement of the attachments the bulk or thickness of the assembly is kept at a minimum and its flexibility and pliability promoted.

The record leaves, as shown, are preferably provided with transverse severance lines 23 dividing the body part of each leaf from its binding or stub portion. The transfer leaves are preferably correspondingly unweakened between the body parts thereof and their binding portions.

It will be observed that the protective fold of the outer record sheet prevents any projecting edges or corners of the intermediate sheets. Also, the forward end of the assembly is kept thin and free from bulges or puckers by the method described. This arrangement greatly facilitates entry of the assembly into the manifolding machine with a minimum of effort and a maximum saving of time. It will be seen that this is of importance when it is remembered that the assembly may be inserted a large number of times into the writing machine before a statement covering a considerable period of time is completed. Also, the flexible connecting stub 18 provides an arrangement whereby the connection of the leaves in the assembly avoids puckering or bulging at the forward end and assures that the leaves lie in correctly aligned position with each other.

After the inscriptions have been completed the record leaves may be conveniently severed from the stub portion 10 by grasping them at their outer ends to the exclusion of the record leaves and exerting a tearing pull. This operation severs the record leaves from the binding along the weakened lines 23 and at the same time the record and transfer leaves are separated from each other. It will be understood that a smaller number of leaves than herein shown or a larger number may be employed if desired. If but three copies are required, the record leaf 6 and transfer leaf 12 will be omitted.

Since certain changes may be made in the above construction and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A unitary manifolding assembly including, in combination, a plurality of record leaves and a plurality of transfer leaves arranged in superposed manifolding relation, a plurality of attachments positioned in the vicinity of one margin of the assembly and providing a marginal binding for the leaves and holding said leaves in position, each of said attachments including an adhesive positioned between two adjacent leaves of the assembly and being confined to an area disaligned with the other adhesive attachments depthwise of the assembly, the two outside leaves of the assembly including a sheet transversely folded to provide a protective marginal fold positioned at said marginal binding and in which the latter is enclosed, and a weakened severance line for each of the record leaves positioned between the body of the leaf and the respective attachment for selective severance of the record leaves while the transfer leaves are correspondingly unweakened.

2. A unitary manifolding assembly including, in combination, a record sheet folded to form two relatively superposed record leaves, a transfer sheet folded to form two transfer leaves superposed in transfer relation in the assembly and having its folded edge enclosed in the fold of the record sheet, a line of adhesive connecting the transfer sheet to the record sheet at the margins thereof adjacent the folded edges to form a binding margin, an additional record leaf positioned between the transfer leaves, and a line of adhesive connecting said additional leaf to said transfer sheet at said binding margin, said second line of adhesive being out of depthwise alignment with the first line of adhesive said leaves having weakened lines whereby separation of the same one from the other may be effected.

3. A unitary manifolding assembly including, in combination, a record sheet folded to form two relatively superposed record leaves, a transfer sheet folded to form two transfer leaves superposed in transfer relation in the assembly and being enclosed in the fold of the record sheet, a line of adhesive connecting the transfer sheet to the record sheet, an additional record leaf, a line of adhesive connecting said additional leaf to said transfer sheet out of depthwise alignment with the first line of adhesive, and transverse weakened severance lines only in the record leaves and positioned between said adhesive and the leaf bodies.

4. A unitary manifolding assembly including, in combination, a plurality of record leaves and a plurality of transfer leaves arranged in superposed manifolding relation with each other and a plurality of attachments positioned in the vicinity of one margin of the assembly and providing marginal binding means for the leaves, each of said attachments including an adhesive individual to two adjacent leaves and positioned between the latter, each of said adhesive attachments being confined to areas disaligned with the others depthwise of the assembly so as to minimize thickness at said binding means said leaves having weakened lines whereby separation of the same one from the other may be effected.

5. A unitary manifolding assembly including, in combination, a plurality of record and transfer leaves arranged in superposed manifolding relation with each other, and a plurality of attachments positioned in the vicinity of one margin of the assembly providing a marginal binding for the leaves and holding said leaves in position, said attachments being disaligned with each other depthwise of the assembly, the two outside leaves of the assembly including a sheet transversely folded to provide a protective marginal fold positioned at said marginal binding and in which the latter is enclosed said leaves having weakened lines whereby separation of the same one from the other may be effected.

6. A unitary manifolding assembly including, in combination, a plurality of record and transfer leaves arranged in superposed manifolding relation with each other, a plurality of attachments positioned in the vicinity of one margin of the assembly and providing a marginal binding for the leaves and holding said leaves in position, each of said attachments being individual to two adjacent or companion leaves of the assembly and each being disaligned with the others depthwise of the assembly so as to minimize thickness at said binding, and a weakened severance line on each of the record leaves positioned between the body of the leaves and the respective attachment providing for selective severance of the record leaves, while the transfer leaves are correspondingly unweakened.

7. A unitary manifolding assembly including, in combination, a plurality of record and transfer leaves arranged in superposed manifolding relation with each other, adhesive attachments positioned respectively between adjacent leaves of the assembly along one of the marginal portions of the latter providing a binding margin for the leaves, each of said adhesive attachments being positioned out of alignment with all of the others depthwise of the assembly said leaves having weakened lines whereby separation of the same one from the other may be effected.

8. A unitary manifolding assembly including, in combination, a record sheet folded to form two relatively superposed record leaves, a transfer sheet folded to form two transfer leaves superposed in transfer relation in the assembly and having its folded edge enclosed in the fold of the record sheet, a line of adhesive connecting the transfer sheet to the record sheet at the margins thereof adjacent the folded edges to form a binding margin, an additional record leaf positioned between the transfer leaves, and a line of adhesive connecting said additional leaf to said transfer sheet at said binding margin, said second line of adhesive being out of depthwise alignment with the first line of adhesive, transverse weakened severance lines only in the record leaves adjacent to said binding margin, and a selective grip formation remote from said binding margin providing for gripping the record leaves to the exclusion of the transfer leaves.

9. A unitary manifolding assembly including in combination, a record sheet folded to form two relatively superposed record leaves, a transfer sheet folded to form two transfer leaves superposed in transfer relation in the assembly, the fold line of the transfer sheet being enclosed in the fold of the record sheet, said folded transfer sheet having attachment near its fold line with said record sheet below the fold line of the latter, and having a free flexible attaching extension above said attachment, and an additional record leaf attached to said free flexible extension of said transfer sheet at a point spaced above said first attachment.

10. A unitary manifolding assembly including, in combination, a plurality of manifolding leaves arranged in superposed manifolding relation with each other, two of said leaves having connection with each other at edge portions thereof, additional ones of said manifolding leaves having binding attachment to one of said two leaves, said binding attachment including a zone of attachment between one of said two leaves and one of said additional leaves, said binding attachment including also an additional zone of attachment between another of said additional leaves and another assembly leaf, said zones of attachment being out of registry with each other and with said connection depthwise of the assembly, and being all positioned at the same side of said connection between the two leaves.

11. A unitary manifolding assembly including, in combination, a plurality of manifolding leaves arranged in superposed manifolding relation with each other, two of said leaves having connection with each other at edge portions thereof, additional ones of said manifolding leaves being interposed between said two leaves and having binding attachment to one of said two leaves, said binding attachment including a zone of attachment between one of said two leaves and one of said additional leaves which extends beyond said zone toward said connection, and said binding attachment including also an additional zone of attachment between another of said additional leaves and another assembly leaf at a point of the latter disposed between said first mentioned zone and said connection.

12. A unitary manifolding assembly including, in combination, a plurality of manifolding leaves arranged in superposed manifolding relation with each other, two of said leaves having connection with each other at edge portions thereof, additional ones of said manifolding leaves being interposed between said two leaves and having binding attachment to one of said two leaves, said binding attachment including a zone of attachment between one of said two leaves and one of said additional leaves which extends beyond said zone toward said connection, said binding attachment including also an additional zone of attachment between another of said additional leaves and another assembly leaf at a point of the latter disposed between said first mentioned zone and said connection, said zones of attachment being positioned at the same side of said connection between the two leaves.

13. A unitary manifolding assembly including, in combination, a plurality of manifolding leaves arranged in superposed manifolding relation with each other, two of said leaves having connection

with each other at edge portions thereof, additional ones of said manifolding leaves having binding attachment to one of said two leaves, said binding attachment including a zone of attachment between one of said two leaves and one of said additional leaves, and said binding attachment including also an additional zone of attachment between another of said additional leaves and another assembly leaf, said zones of attachment being out of registry with each other and with said connection depthwise of the assembly.

14. A unitary manifolding assembly including, in combination, a plurality of record and transfer leaves arranged in superposed manifolding relation with each other, two of said leaves having connection with each other at edge portions thereof, additional ones of said first mentioned leaves being interposed between said two leaves and having binding attachment with one of the latter, said binding attachment including a zone of attachment between one of said two leaves and one of said additional leaves, and said binding attachment including also an additional zone of attachment between another of said additional leaves and another assembly leaf, said zones of attachment being out of registry with each other and with said connection depthwise of the assembly, certain of said leaves having weakened severance lines adjacent to said binding attachment to facilitate leaf severance, and said leaves having relatively offset marginal portions remote from said binding and providing a selective grip formation whereby certain of the leaves may be gripped to the exclusion of another.

15. A unitary manifolding assembly including, in combination, a plurality of record and transfer leaves arranged in superposed manifolding relation with each other, two of said leaves having connection with each other at edge portions thereof, additional ones of said first mentioned leaves being interposed between said two leaves and having binding attachment with one of the latter, said binding attachment including a zone of attachment between one of said two leaves and one of said additional leaves, and said binding attachment including also an additional zone of attachment between another of said additional leaves and another assembly leaf, said zones of attachment being out of registry with each other and with said connection depthwise of the assembly, and being positioned at the same side of connection between the two leaves, certain of said leaves having weakened severance lines adjacent to said binding attachment to facilitate leaf severance, and said leaves having relatively offset marginal portions remote from said binding and providing a selective grip formation, whereby certain of the leaves may be gripped to the exclusion of another.

16. A unitary manifolding assembly including, in combination, a plurality of record and transfer leaves arranged in superposed manifolding relation with each other, an attachment between two adjacent said leaves at marginal portions thereof but inwardly spaced from the edge so as to provide a free, flexible attaching extension of one leaf, and an attachment between another of said leaves and said attaching extension at a point spaced from and out of depthwise alignment with said first mentioned attachment.

HAROLD W. BASS.