Oct. 8, 1940. E. K. BOTTLE 2,217,507

RECORD ASSEMBLY

Original Filed July 1, 1930

Fig. 1.

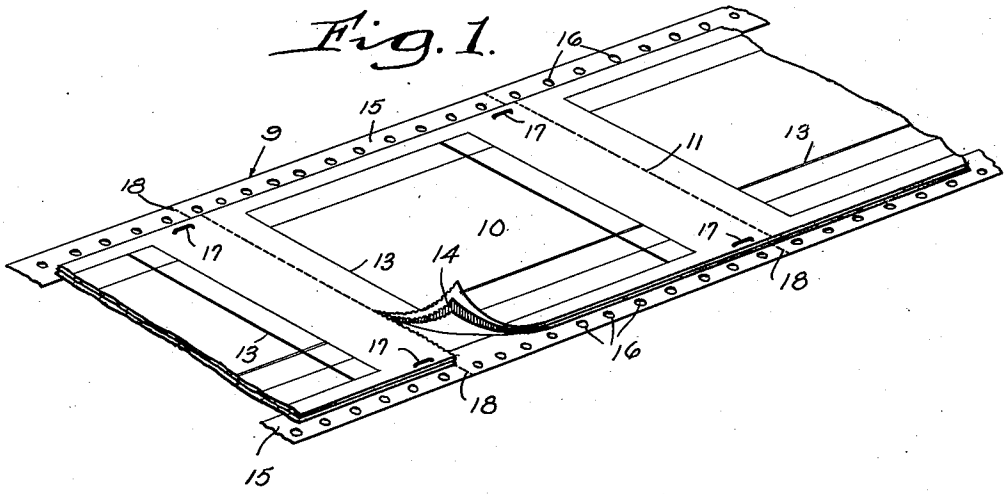


Fig. 2.

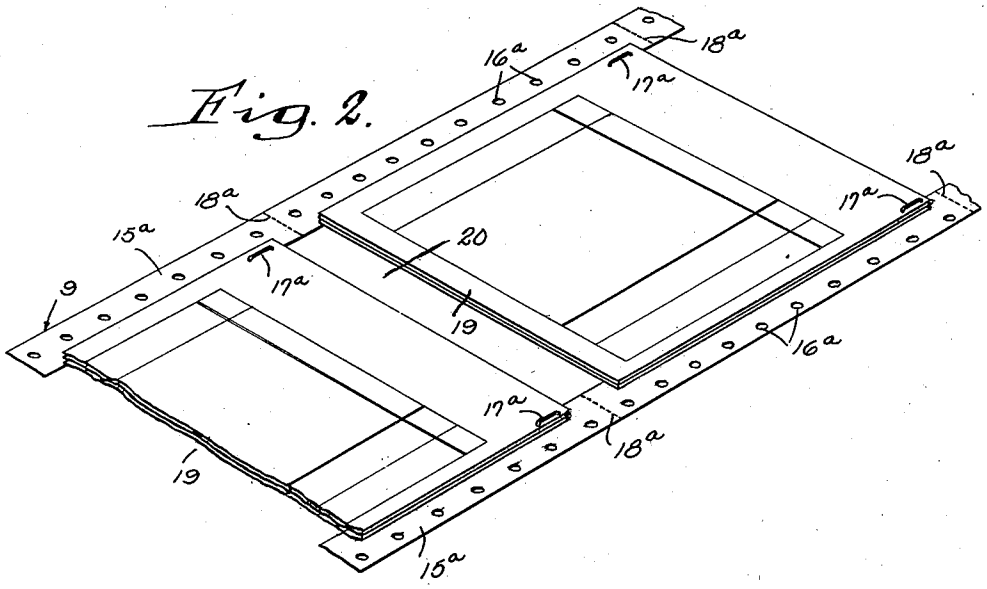
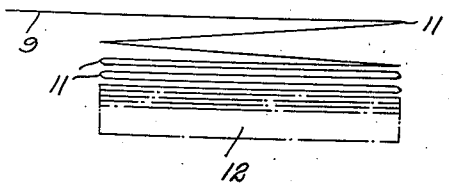


Fig. 3.



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UNITED STATES PATENT OFFICE

2,217,507

RECORD ASSEMBLY

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Original application July 1, 1930, Serial No. 465,113. Divided and this application May 25, 1940, Serial No. 337,310

7 Claims. (Cl. 282—3)

This invention relates to improvements in record assemblies capable of use in numerous different associations for machine or manual inscription but primarily intended for employment in connection with autographic registers, typewriters and the like, inscribing machines and particularly machines of this character known as teletypewriters.

It is an object of the invention to provide a record assembly comprising a plurality of superposed layers or strips which will maintain their relative positions throughout their travel towards and through the inscribing station of a machine and which may be handled efficiently by a relatively inexperienced operator and in which separation of the strips or layers may be accomplished readily.

A further object of the invention is that of providing a record assembly capable of embracing a relatively large number of superposed layers or strips and which may be fed through the mechanism of the machine without modification of the latter and also without danger of the record assembly becoming jammed or injured.

Another object of the invention is that of devising a record assembly capable of manufacture by automatic machinery and which may consequently be placed upon the market to sell at a favorable price.

Another object of the invention is to provide an improved record assembly for uses as above indicated, which is capable of being folded along transverse lines into a zigzag supply pack so as to be convenient for storage, handling, and loading into the various types of inscribing machines.

Further objects of the invention will be in part pointed out in the following detailed description of certain illustrative but preferred embodiments of the invention, and will be in part obvious as the description proceeds.

The invention accordingly comprises the features of construction, combination of elements, and arrangements 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 disclosure of the nature, objects and advantages of the invention, reference is had to the following detailed description and to the accompanying drawing, in which:

Fig. 1 is a perspective view of a record assembly embodying one form of the invention,

Fig. 2 is a perspective view similar to Fig. 1 and showing a modification of the assembly of Fig. 1,

Fig. 3 is a diagrammatic side elevation showing how the different embodiments of the record assembly may be folded into a zigzag supply pack.

All of the subject matter of this application is disclosed in the inventor's prior application Serial No. 465,113, filed July 1, 1930. Therefore, the present application is a division of said prior application.

Record assemblies of the nature illustrated comprise a number of superposed layers or strips of inscription receiving material, the uppermost strip receiving the original inscription which is simultaneously reproduced upon the lower strips or layers. To this end carbon paper in the form of layers or strips may be interleaved between the inscription receiving layers or else, if desired, the latter may have their upper faces treated with a so-called carbonless film which has the characteristic of legibly translating any impression to which it is subjected. Moreover, the several strips or layers of the record assembly are preferably formed with transverse lines of fold so that a continuous series of sheet piles is provided, these piles being individually separable successively from the record assembly as a whole preferably along the lines of fold which to this end are also conveniently formed with lines of weakening. When the record assembly is reversely folded along the lines of fold as described, it assumes a zigzag folded supply pack, as suggested diagrammatically in Fig. 3, that is convenient for handling and for loading into various forms of writing or inscribing machines.

Referring more particularly to the embodiment of Fig. 1, the assembly indicated generally at 9 includes a plurality of long continuous traveler record strips 10 arranged in superposed manifolding relation with each other, and each being provided with a longitudinal series of transverse weakened severance lines 11. These severance lines may be formed in any well-known manner as by perforating and are longitudinally spaced apart at substantially uniform intervals, thus dividing each layer or record strip into a longitudinal series of record sheets of substantially equal length. These weakened transverse lines 11 also form transverse lines of fold along which the assembly may be reversely folded in zigzag fashion to form a supply pack 12, as shown diagrammatically in Fig. 3. Each of the record leaves has an inscription receiving area and may be provided with a blank form such as indicated at 13. As shown, the severance or fold lines 11 are preferably arranged in depth-wise groups in the assembly, thus dividing the record strips into

record sets or groups of record sheets arranged in a longitudinal series along the assembly, said sheets being positioned respectively in manifolding transfer relation in each of the sets. Any desired number of record strips or layers may be utilized and these may be continued to any desired length to make the desired size of supply pack 12.

Interleaved between adjacent record layers or strips 10 is a continuous transfer layer or carbon strip 14 which ordinarily extends for the full length of the record layers. This transfer layer 14 provides in effect a series of transfer sheets, one of which is interleaved in transfer relation between the record sheets of each record unit or set so as to transfer to the underlying record sheet the inscriptions that are made upon the top record sheet. The superposed record and transfer layers may all be of the same width as shown.

It will be seen from the foregoing description that the record assembly of Fig. 1 includes a series of sets or groups of record sheets and interleaved carbon or transfer sheets positioned along the length of the assembly. These sets of sheets are united with each other at their ends along the respective transverse lines 11, this arrangement being distinguished from a similar arrangement disclosed in Fig. 2 in which the sets of leaves are detached and separate from each other as later more fully described.

A long continuous traveler strip 15 extends along a longitudinal marginal portion of the assembly of record and transfer strips, being preferably positioned as shown in overlapping relation therewith. There are preferably two of these strips 15, one of which extends along each of the opposite longitudinal marginal portions of the assembly. These strips are preferably longitudinally coextensive with the record and transfer layers, and as shown, are relatively narrow. Each strip 15 is provided along its outer longitudinal marginal portion with a longitudinal series of feed apertures 16 adapted for cooperation in feeding relation with the feed pins of the feeding mechanism of the various types of machines above referred to, in which the record assembly is adapted to be used. The assembly of record and transfer layers overlaps at its longitudinal margins with the inner longitudinal margins of the strips 15, the longitudinal edges of the record strips lying intermediate the longitudinal edges of the respective strips 15 with the feed apertures outside of the adjacent longitudinal edges of the record layers. Attaching means, such as staples 17, are used to attach the assembly of record and transfer layers in normal inscription receiving position upon the strips 15. It will thus be seen that these long continuous traveler strips 15 form carrier strips or feed bands or belts for supporting, guiding and directing the feeding movements of the other assembly strips that are unprovided with such feed apertures.

Each sheet set of the assembly is preferably, as shown, connected by the attaching devices 17 to the feed bands 15. Also, the feed bands 15 are preferably formed with transverse weakened severance lines 18 longitudinally spaced at intervals corresponding to the spacing of the lines 11 of the record layers. Also, the severance lines 18 are ordinarily positioned substantially in alignment with the respective weakened lines 11, or at points substantially intermediate adjacent record sets of the assembly. When thus arranged, a set of record leaves, after receiving its inscription, can be very quickly and easily severed from the complete assembly along the weakened lines 11, 18. The leaves of the inscribed severed set are thus temporarily retained in their original relative position for the reception of supplemental inscriptions when desired. The sheets of the inscribed severed sets can then be quickly detached from each other and from the severed sections of the feed bands 15 merely by stripping the leaves to release them from the attaching means 17. The inscribed record sheets can then be distributed as desired, while the carbon sheets and sections of feed band can be discarded.

In employing a record assembly of this nature, it will be understood that it is presented to the operator in the form of a zigzag pack as indicated in Fig. 3 which will occupy a minimum amount of space. The operator, by simply threading the record assembly through the machine and past the inscribing station thereof, may now proceed to use the machine.

Referring to Fig. 2, a modified construction is shown that is similar in many respects to that disclosed in detail above with reference to Fig. 1. Accordingly, parts of the construction of Fig. 2 corresponding to those of Fig. 1 are indicated by the same reference numerals with the addition of the index *a*. However, in this embodiment the layers of record and transfer material are arranged in separate record units or sheet sets 19, including record sheets and interleaved transfer sheets. These sheet sets or record units are individual and separate from each other and arranged one after another in series along the assembly. In this embodiment spaces or interruptions 20 are provided between adjacent sheet sets 19, these being preferably positioned at the respective transverse weakened lines 18*a* of the feed bands 16*a*. These weakened lines 18*a* are thus positioned intermediate adjacent sheet sets as in the embodiment of Fig 1 above described. Also, as in Fig. 1, each individual sheet set 19 is attached by staples 17*a* or the like to the feed band sections between successive lines 18*a*. Therefore, each sheet set after being inscribed can be detached from the complete assembly with the attached feed band sections as a unit. Also, as in the embodiment of Fig. 1, the complete assembly 9 can be folded into a compact supply pack along the transverse lines 18*a* of the continuous traveler strips or feed bands 15*a*. The assembly of the modification of Fig. 2 can be utilized in the inscribing machines in the manner indicated above in connection with Fig. 1.

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 the invention, what is claimed as new and desired to secure by Letters Patent is:

1. In a record assembly, in combination, a long continuous traveler strip having transverse weakened severance lines longitudinally spaced at substantially equal intervals dividing the strip into severable sections of substantially equal length, said severance lines forming fold lines providing for reversely folding the assembly in zigzag fashion into a supply pack, said traveler

strip having a longitudinal series of feed apertures extending along a longitudinal marginal portion thereof, and a plurality of manifolding record units individual and separate from each other and arranged one after another along the assembly, said record units having record leaves and being positioned in overlapping relation with said traveler strip which forms a carrier strip for said units, each of said record units including transfer material secured in interleaved transfer relation with the record surface of one of the record leaves thereof, said carrier strip being narrower than said record units, one of said record units being attached in inscription receiving position to each of said severable strip sections so it can be severed therewith from the complete assembly along certain of said weakened severance lines, said transverse severance lines being respectively positioned between adjacent said record units and said feed apertures being positioned outside of the adjacent edges of the respective record units.

2. In a record assembly, in combination, a long continuous traveler strip having transverse weakened severance lines longitudinally spaced at substantially equal intervals dividing the strip into severable sections of substantially equal length, said severance lines forming fold lines providing for reversely folding the assembly in zigzag fashion into a supply pack, said traveler strip having a longitudinal series of feed apertures extending along a longitudinal marginal portion thereof, and a plurality of manifolding record units individual and separate from each other and arranged one after another along the assembly, said record units having record leaves and being superposed upon said traveler strip which forms a carrier strip for said units, one of said manifolding record units being attached in inscription receiving position on each of said severable strip sections so it can be severed therewith from the complete assembly along certain of said weakened severance lines, said transverse severance lines being respectively positioned between adjacent said record units and said feed apertures being positioned outside of the adjacent edges of the respective record units, said traveler strip being in the form of a narrow band narrower than said record units and longitudinal edges of said record units being positioned intermediate the longitudinal edges of said traveler strip.

3. In a record assembly, in combination, a long continuous traveler strip having transverse weakened severance lines longitudinally spaced at substantially equal intervals dividing the strip into severable sections of substantially equal length, said severance lines forming fold lines on which the assembly can be reversely folded in zigzag fashion into a supply pack, said traveler strip having a longitudinal series of feed apertures extending along a longitudinal marginal portion thereof, and a plurality of manifolding record units individual and separate from each other and arranged one after another along the assembly, said record units having record leaves and being positioned in overlapping relation with said traveler strip, one of said record units being attached in inscription receiving position to each of said severable strip sections so it can be severed therewith from the complete assembly along certain of said weakened severance lines, said transverse severance lines being respectively positioned between adjacent said record units and said feed apertures being positioned outside of the adjacent edges of the respective record units, each of said record units including transfer material secured in overlapping transfer relation with record surfaces of the record leaves thereof, said traveler strip being in the form of a narrow band narrower than said record units and longitudinal edges of said manifolding record units being positioned intermediate the longitudinal edges of said traveler strip.

4. In a record assembly, in combination, two long continuous traveler strips, each having a longitudinal series of feed apertures extending along a longitudinal marginal portion thereof so as to form a feed band, layers of record and transfer material in relatively superposed transfer relation in the assembly and forming a series of sets of record sheets positioned along the length of said traveler strips or feed bands substantially for the length of the assembly, said traveler strips being spaced apart laterally of the assembly and respectively extending along each of the opposite longitudinal marginal portions of said assembly of layers of record and transfer material and being narrower than said record sheets, and means securing the opposite longitudinal marginal portions of said assembly layers to the respective said feed bands at various points along the assembly.

5. In a record assembly, in combination, two long continuous traveler strips, each having a longitudinal series of feed apertures extending along a longitudinal marginal portion thereof so as to form a feed band, layers of record and transfer material in relatively superposed transfer relation in the assembly and forming a series of sets of record sheets positioned along the length of said traveler strips or feed bands substantially for the length of the assembly, said traveler strips being spaced apart laterally of the assembly and respectively extending along and overlapping each of the opposite longitudinal marginal portions of said assembly of layers of record and transfer material and being narrower than said record sheets, each of the opposite longitudinal edges of said sets of record sheets being positioned intermediate the opposite longitudinal edges of the corresponding feed band and said feed apertures being outside of said record sheets, and means securing the opposite longitudinal marginal portions of said layers to the respective said feed bands at various points along the assembly, and longitudinally spaced transverse weakened severance lines in each of said feed bands respectively positioned intermediate adjacent said record sheets.

6. In a record assembly, in combination, two long continuous traveler strips, each having a longitudinal series of feed apertures extending along a longitudinal marginal portion thereof so as to form a feed band, layers of record and transfer material in relatively superposed transfer relation in the assembly, said layers of record and transfer material being long continuous traveler layers forming a transfer record assembly substantially longitudinally coextensive with said feed bands, said transfer record assembly having longitudinally spaced transverse weakened severance lines dividing it into a longitudinal series of sets of record and transfer sheets, said traveler strips being spaced apart laterally of the assembly and respectively extending along each of the opposite longitudinal marginal portions of said assembly of layers of record and transfer material and being narrower than said record sheets, and means securing the opposite longitudinal marginal portions of said assembly

layers to the respective said feed bands at various points along the assembly.

7. In a record assembly, in combination, two long continuous traveler strips, each having a longitudinal series of feed apertures extending along a longitudinal marginal portion thereof so as to form a feed band, layers of record and transfer material in relatively superposed transfer relation in the assembly, said layers of record and transfer material being long continuous traveler layers forming a transfer record assembly substantially longitudinally coextensive with said feed bands, said transfer record assembly having longitudinally spaced transverse weakened severance lines dividing it into a longitudinal series of sets of record and transfer sheets, said traveler strips being spaced apart laterally of the assembly and respectively extending along each of the opposite longitudinal marginal portions of said assembly of layers of record and transfer material and being narrower than said record sheets, each said feed band having longitudinally spaced transverse weakened severance lines respectively substantially aligned with said first mentioned severance lines, and means securing the opposite longitudinal marginal portions of said assembly layers to the respective said feed bands at various points along the assembly.

SARA JANE BOTTLE,
Administratrix of the Estate of Edward Kirby Bottle, deceased.