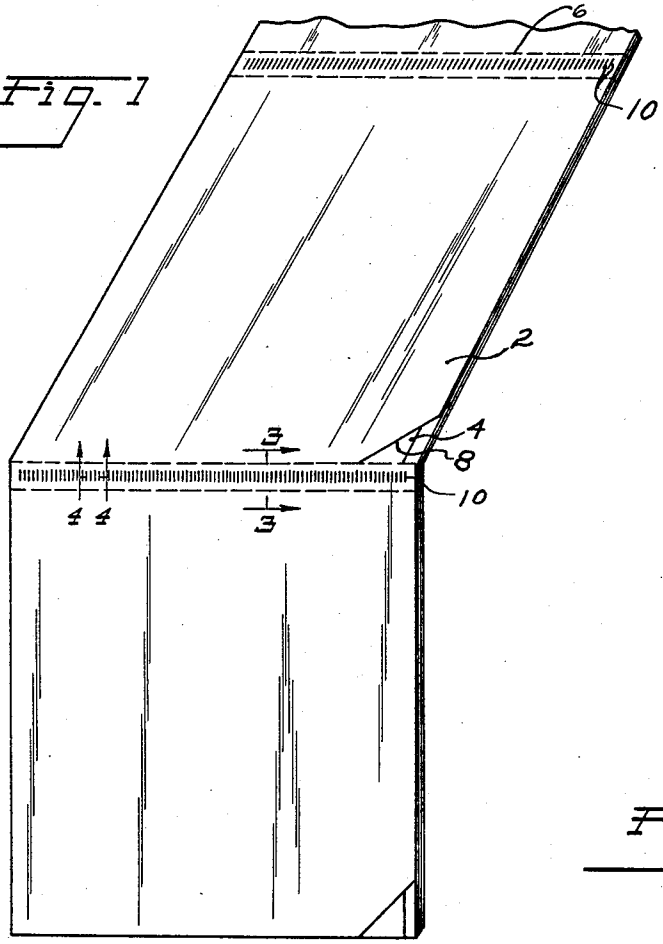
Oct. 22, 1963 W. J. BOHMERT 3,107,929

IMPROVEMENT IN MANIFOLD ASSEMBLY

Filed May 8, 1958

Fig. 1



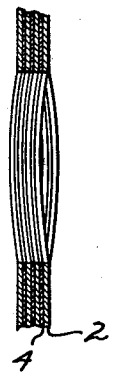


Fig. 3



Fig. 2

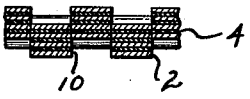


Fig. 4

INVENTOR

William J. Bohmert

BY R. G. Pelton

ATTORNEY

United States Patent Office 3,107,929 Patented Oct. 22, 1963

3,107,929

IMPROVEMENT IN MANIFOLD ASSEMBLY

William J. Bohmert, Mamaroneck, N.Y., assignor to Acme Manifolding Company, Inc., Tuckahoe, N.Y., a corporation of New York

Filed May 8, 1958, Ser. No. 733,905
1 Claim. (Cl. 282—11.5)

The present invention relates to improvements in tabulating record sheets either of the manifolding or continuous roll feed type wherein a plurality of copying strips are interleaved with carbon transfer strips and particularly to a new and improved means for attaching such an assembly of strips whereby inscribed sections may be detached from the complete assembly and the carbon transfer strips removed.

It is the principal object of the present invention to provide an improved continuous assembly of tabulating strips and interleaved carbon transfer strips wherein the assembly is firmly attached at spaced intervals by a simplified and improved attaching means.

It is a further object of the present invention to provide new and improved interlocking structure for the tabulating strips and interleaved carbon transfer strips.

These and other objects will become obvious as the description of the details of the invention proceeds in connection with the drawing in which;

FIGURE 1 is a fragmentary diagrammatic perspective view of a continuous assembly of tabulating strips and interleaved carbon transfer strips incorporating the improved interlocking structure of the invention;

FIGURE 2 is a cross-sectional view of the assembly of tabulating strips and interleaved carbon transfer strips illustrated in FIGURE 1;

FIGURE 3 is an enlarged fragmentary cross-sectional view taken along the lines 3—3 of FIGURE 1 and illustrating the interlocking structure of the invention, and

FIGURE 4 is another enlarged fragmentary cross-sectional view taken along the lines 4—4 of FIGURE 1 and further illustrating the interlocking structure of the invention.

Referring now to the drawing and particularly to FIGURES 1 and 2 there is illustrated a compact continuous record assembly comprising a plurality of tabulating strips **2** and interposed carbon transfer strips **4**. At equally spaced intervals along the continuous assembly of record strips there are located parallel transverse rows of spaced slits **6** penetrating the complete assembly and providing for easy severance of the strips along these rows of slits. Adjacent one of the rows of slits and one edge of the continuous record assembly triangular portions are removed from the tabulating strips to provide an oblique edge **8** exposing a portion of the carbon transfer strip **4**. These triangular portions are removed to provide ease of access to the carbon strips for removal from between the tabulating strips when a section has been torn free from the record assembly.

Disposed between the parallel rows of slits and preferably in a direction substantially parallel to the longitudinal dimension of the continuous record assembly are a plurality of space disconnected interlocking slits **10**. These slits penetrate the complete depth of the assembly and interlock the tabulating strips and interleaved carbon transfer strips to provide relatively exact relationship between each of the plurality of record strips of the assembly.

It is to be noted that since the slits **10** are disconnected the strips formed by the plurality of slits **10** are joined at both ends to the main or body portion of the sheets. In other words those sections are continuous; neither end is cut to form a tongue for instance.

The slits **10** and resulting alternately depressed strips

may run in any desired direction. Although the preferred and illustrated embodiment is parallel to the longitudinal dimension these could extend at an angle thereto if so desired.

FIGURES 3 and 4 illustrate the relative positions of the edges of the record strip and interleaved carbon strip adjacent the slits. Alternate strips or sections are displaced in one direction normal to the plan of the paper while alternate strips are displaced in the opposite direction. In this relationship the strips mating edges adjacent the slits are displaced with respect to each other through the depth of the assembly of strips and this displacement provides an interlocking of tabulating and carbon strips which provides for relative stability of the assembly of strips. The edges of the strip preferably are rough to increase the interlocking effect.

The slits **10** may be formed by a cog wheel type of cutting tool, for instance, which when applied to the assembly depresses and severs alternate sections so as to produce the sectional strips and slits as shown and described.

The dimensions of the slits and resulting strips are not critical. Slits **10** approximate one-quarter of an inch in length separated by strips approximately three-thirty seconds of an inch in width have been found to work well in paper nine inches by eleven inches, and in assemblies of a half-dozen or so sheets of paper with interleaved carbon transfer sheets.

Where it is desirable to utilize the continuous record assembly in a roll feeding tabulating device utilizing revolving sprockets to feed the record, spaced perforations (not shown) may be provided through the depth of the assembly and adjacent the marginal edges thereof.

With a spaced slit interlocking structure such as I have shown and described in connection with the continuous records of tabulating strips and interleaved carbon strips of my invention I have provided a simple and inexpensive means for maintaining the stability of recording record assemblies during the most strenuous of tabulating procedures.

What I claim as new and desire to secure by Letters Patent of the United States is:

An assembly of a plurality of stacks of sheets of paper, each of said sheets being joined end to end with a sheet in a contiguous stack, each of the sheets in each stack having substantially the same end to end length as all of the other sheets in the same stack; and means to hold all of the layers of each of said stacks together, said means comprising a plurality of narrow strips formed by a multiplicity of parallel slits disconnected from each other and closely and evenly spaced apart side by side in a row at the end of each of said sheets, each of said strips forming an integral bridge linking each of said sheets to the contiguous sheet of the same layer in the contiguous stack, the centers of said strips being displaced in a direction perpendicular to the plane of the layers, with alternate strips being displaced in opposite directions, perpendicular to the plane of the layers, said means further comprising parallel rows of aligned severance slits extending transversely of said assembled sheets at the ends thereof, one row of severance slits being on each side of said row of narrow strips to define a narrow somewhat elastic tear-off band interconnecting the ends of the sheets in contiguous stacks.

References Cited in the file of this patent

UNITED STATES PATENTS

2,108,595	Phillips et al.	Feb. 15, 1938
2,115,392	Mabon	Apr. 26, 1938
2,300,255	Kerr	Oct. 27, 1942