Dec. 31, 1940. H. S. JONES 2,226,722

MANIFOLD SET

Filed May 6, 1937

Fig. 1

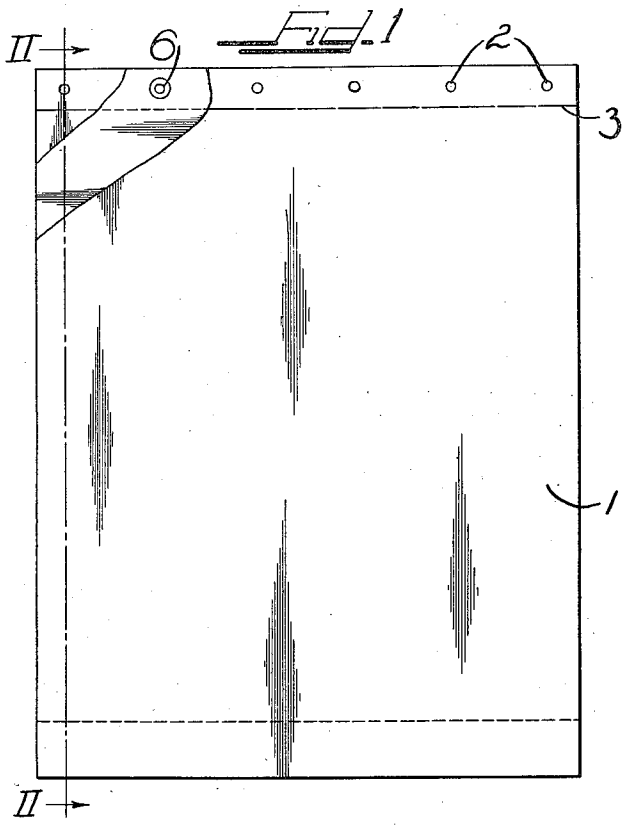


Fig. 2

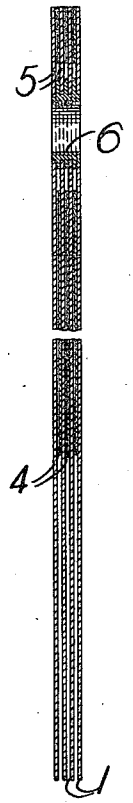


Fig. 3

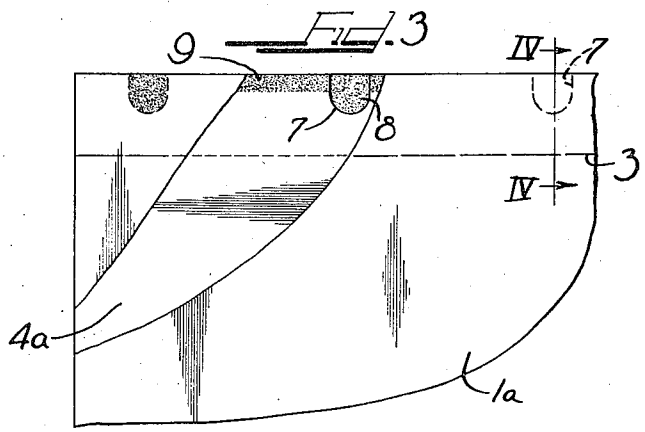
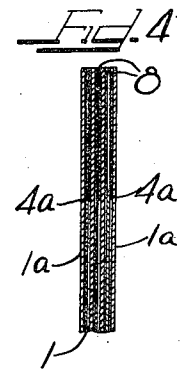


Fig. 4



Inventor

HARRY SLOPER JONES

by Charles A. Miller Atty.

Patented Dec. 31, 1940 2,226,722

UNITED STATES PATENT OFFICE

2,226,722

MANIFOLD SET

Harry Sloper Jones, Chicago, Ill.

Application May 6, 1937, Serial No. 141,059

1 Claim. (Cl. 282—22)

This invention relates to a set or assembly of sheets for manifold writing which comprises several alternate sheets of carbon paper and writing paper secured together in a particular way.

While my novel fastening means is primarily designed to secure sheets of writing and carbon paper together at one edge for use in a typewriter, it is equally well adapted for securing any plurality of sheets together at one edge.

At the present time, there is a tendency to make cheap carbon sheets that are designed to be used but once. This invention is primarily designed for the fastening of carbon sheets with writing or printing sheets in which the carbon sheets are used but once.

The invention is equally well adapted for fastening together such sheets, irrespective of whether the carbon paper is coated upon one or both sides.

At the present time, such sheets are attached together by wire-stitching, sewing, spot-gumming or pasting. These methods are more or less objectionable. The wire stitching or machine sewing is objectionable for machine use. The gumming method has the drawback in that the coated side of the carbon sheet will not adhere to the writing sheet, whereby the sheets will become separated in use. When the pasting or gluing method is used, the paste or glue must be of a special variety that adheres to the coated side of the carbon sheets, and there is no such glue or paste that adheres well enough to be practical.

It is an object of this invention to overcome the objections of the methods and articles heretofore used without stitching or sewing or applying adhesive to the exposed edges.

According to this invention, the sheets are provided with slots or perforations in a manner hereinafter explained and an adhesive is applied in the slots or perforations which, in addition to securing the ends together, act as posts that hold the sheets in proper alignment.

A further novel feature resides in perforating the writing sheets or providing a weakened section adjacent the attached ends and making the carbon sheets somewhat shorter than the writing sheets so that the free ends of such writing sheets may be grasped by one hand and detached at the line of perforation while the attached ends are held with the other hand.

The invention comprises the novel method and article hereinafter described and more particularly set forth in the appended claim.

In the accompanying drawing, which illustrates a preferred form of this invention, and in which similar reference numerals refer to similar features in the different views:

Figure 1 is an elevational view of a set of attached sheets involving this invention, with a part broken away.

Figure 2 is an enlarged and broken sectional view taken upon the line II—II of Figure 1.

Figure 3 is a fragmentary elevational view of a modified form of the invention with a part broken away.

Figure 4 is an enlarged fragmentary sectional view taken upon the line IV—IV of Figure 3.

In accordance with the present invention, the writing sheets 1, which it will be understood also include printing sheets, are provided with a series of perforations 2 adjacent one edge and a perforated line or weakened section 3 at a suitable distance below the perforations 2.

The carbon sheets 4 which are interposed between the writing sheets 1 are provided with apertures 5 that are larger than the apertures 2 in the writing sheets. The centers of the apertures 2 and 5, however, coincide. Any suitable number of writing sheets and carbon sheets may be assembled in a set. In the present instance, there is shown a set consisting of four writing sheets 1 and three carbon sheets 4.

In assembling a set of properly perforated writing sheets and carbon sheets, the different sheets are naturally alternately arranged with a writing sheet 1 coming upon each outer side of the set. Thus, a carbon sheet 4 is first superposed upon a writing sheet, then a second writing sheet is superposed upon the carbon sheet, then a second carbon sheet is superposed upon the second writing sheet, and a third writing sheet is then superposed upon the second carbon sheet, etc., until the desired number of writing sheets are contained in the set. These sheets are, of course, properly aligned so that the centers of the apertures 2 and 5 will be in alignment.

After a set of sheets has been thuswise properly arranged, a suitable adhesive 6 is applied in the apertures 2 and 5, as shown in Figure 2. It will be noted that this adhesive will spread out in the larger apertures 5 of the carbon sheets and between the writing sheets, thereby gluing the writing sheets together with the carbon sheets therebetween. Thus, the set of sheets is firmly held together without any necessity for applying adhesive between the carbon sheets and the writing sheets. Thus the carbon sheets may be coated upon both sides. The adhesive, when it hardens, will act as a flanged post in holding the parts together. The adhesive will, of course, stick to the walls of the apertures of the outermost writing sheets.

The writing sheets are a little longer than the

carbon sheets, as shown in Figures 1 and 2, with the result that the operator may grasp the free ends of the sheets 1 in one hand and hold the attached portion in the other hand and detach the writing sheets by tearing them off along the weakened section lines 3.

In the modified form of the invention, as shown in Figures 3 and 4, the carbon sheets 4a are provided with open apertures or notches 7 in their attached ends, while the writing sheets 1a are not provided with apertures. When a set of sheets 1a and 4a are properly assembled, adhesive 8 is applied in the apertures 7. This adhesive will contact and unite the writing sheets upon the sides of the carbon sheets. The adhesive in the notch 7 of the first carbon sheet from one side of the set will unite the first two writing sheets. The adhesive in the notch 7 of the second carbon sheet will unite the third writing sheet to the second, while the adhesive in the notch 7 of the third carbon sheet will unite the fourth writing sheet to the third. Thus, the writing sheets are attached together.

The carbon sheets 4a are maintained in the assembly by means of adhesive 9 which is applied to the upper edge of each sheet 1a, as shown in Figure 3, for uniting each with the adjacent writing sheet 1a, during assembling of the sheets. The sheets 1a are also provided with a weakened section or line of perforations 3 for detachment thereof, as in the first form.

From the foregoing, it will be appreciated that a novel method has been devised for attaching a plurality of writing sheets and carbon sheets for use either as a permanent or temporary set, and which set results in a novel article from which the writing sheets may be readily and easily detached.

I am aware that many changes may be made and numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I, therefore, do not purpose limiting the patent granted hereon otherwise than is necessitated by the prior art.

I claim as my invention:

An article of manufacture comprising a pad of alternate writing sheets and carbon sheets, said sheets having apertures adjacent one edge, the apertures in the carbon sheets being larger than those in the writing sheets, and adhesive on the walls of said apertures and extending into the larger apertures of said carbon sheets.

HARRY SLOPER JONES.