Oct. 12, 1937. F. S. COOPER 2,095,792

BACKING SHEET ASSEMBLY FOR PREPARING MANIFOLD COPIES

Filed Aug. 3, 1936

Fig. 1

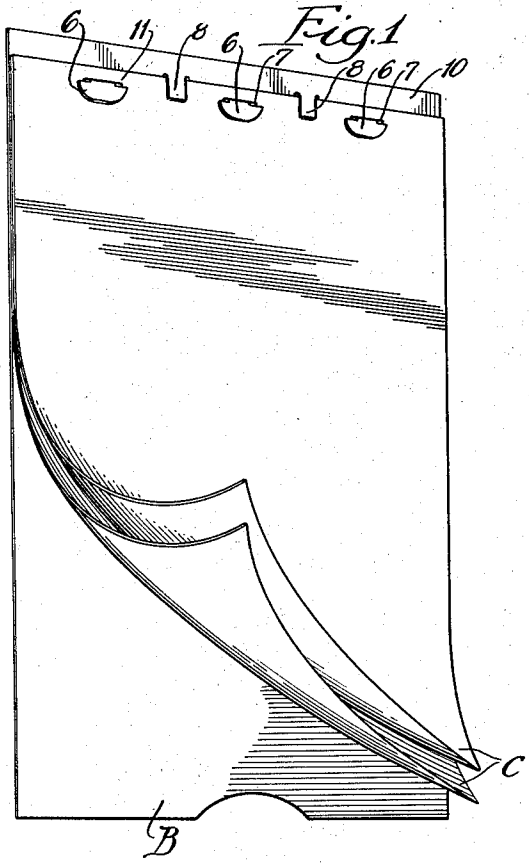


Fig. 2

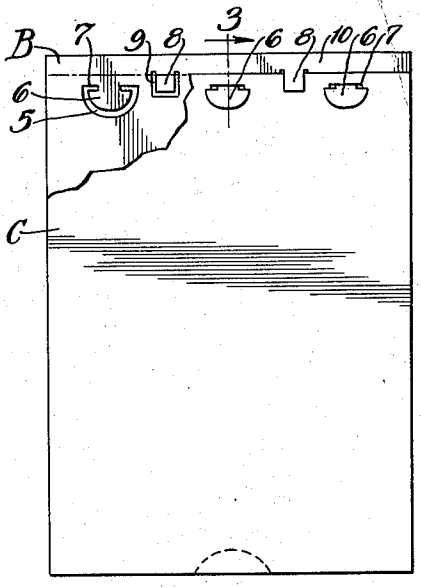


Fig. 3

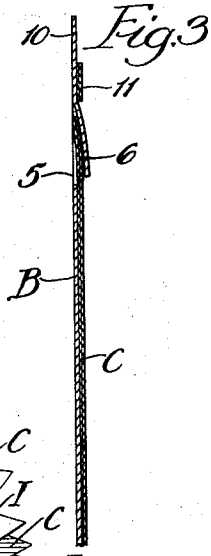
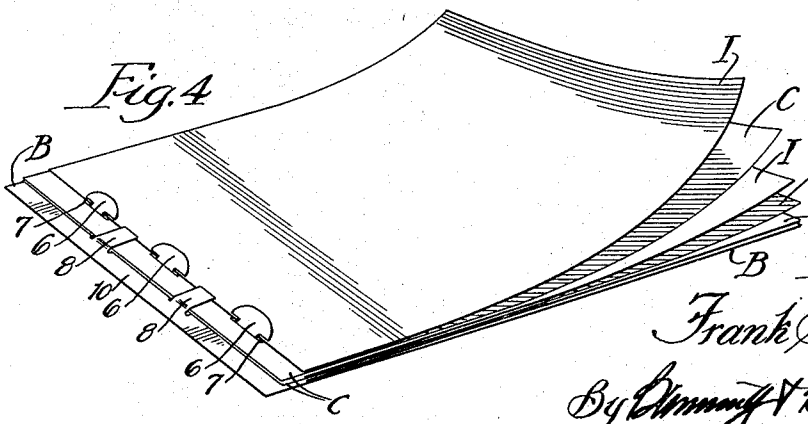


Fig. 4



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BACKING SHEET ASSEMBLY FOR PREPARING MANIFOLD COPIES

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Application August 3, 1936, Serial No. 93,959

4 Claims. (Cl. 282—29)

This invention relates to a backing sheet having near one end certain elements which may be in the form of integral tongues staggered to lie in double rows, one set of elements serving to confine and align the edges of carbon sheets, and the other set to lock the carbon sheets in place, and also to align other impression sheets whereon inked or carbon characters are to be transferred. In this assembly of backing, carbon and impression sheets, the latter alone are regularly inserted and removed; the backing and carbon sheets continue in bound relation until such time as fresh carbon sheets are required.

A backing sheet assembly of this character is advantageous in that it facilitates the proper alignment of a number of sheets which include intermediate carbon sheets. It also improves the appearance of the work which is performed on the impression sheets.

It is with the end in view of providing an improved backing sheet assembly of simple yet effective construction for the purposes indicated that my invention is concerned.

In the accompanying drawing,—

Figure 1 is a view in perspective of the backing sheet to which two carbon sheets are bound;

Fig. 2 is a view in elevation with a corner of each carbon sheet broken away to exhibit details of construction of the locking and stop tongues which are formed integrally with the backing sheet;

Fig. 3 is an enlarged vertical section, taken on line 3 of Fig. 2; and

Fig. 4 is a perspective view of the complete assembly of backing, carbon and impression sheets ready to be placed operatively in a typewriter or other printing machine.

The present backing sheet B is of a size for cooperation with carbon and impression sheets which are to be operated upon by a printing or recording machine, such, for example, as a typewriter. As illustrated in Figs. 1 and 2, the backing sheet is provided near one end with certain elements which are staggered and arranged in two rows. One set of such elements comprises a series of incisions 5 each shown as curved and then inturned to define a tongue 6 having shoulders 7 which form locking hooks. The other set of elements comprises a plurality of tongues 8 formed by incisions 9 which are rectangular or otherwise shaped, and located closer to the binding end 10 of the backing sheet than are the tongues 6. The material of which the present backing sheet is made should be appropriate for the purpose. Celluloid or heavy "Cellophane" is suggested as suitable. For the purposes of my invention it is desirable that such a sheet be both flexible and resilient, the former so that it may bend as required in use, and the latter so that its tongues will tend normally to remain in a plane which is coincident with that of the sheet.

In use, one or more carbon sheets C are assembled with the backing sheet in a manner which is normally fixed and irremovable. To accomplish this, each carbon sheet is provided with a slot 11 in line with the inturned ends of the incisions 5. As shown in the drawing, there are three of such slots, arranged in line, each adapted to be engaged by the shoulders 7 of a hook-tongue. In fitting the carbon sheets to position, the tongues may be bent as necessary to fit within the carbon sheet slots which should be desirably of a minimum length for the intended interlock. When fitting the carbon sheets in place, their ends adjacent the slots are placed under the tongues 8 of the backing sheet, whereby to maintain the ends of the carbon sheets closely against the backing sheet.

With an assembly of one or more carbon sheets upon a backing sheet in the manner described, it will be found convenient to interfit other impression sheets I, as many as required. Each such sheet will be aligned with the others when one of its ends is engaged with the hook tongues, which serve both as friction locks and as stops therefor. With the impression sheets fitted in place, the entire assembly may be rolled about the platen of a typewriter or other printing machine to receive impressions in the usual way. When removed from the machine, the several impression sheets may be withdrawn from the assembly of carbon sheets upon the backing sheet without disassembly thereof. A new set of impression sheets may thereupon be interfitted with the carbon and backing sheets and the operation repeated.

The improvements of this invention are such as to assure an irremovable assembly of carbon sheets with a backing sheet. The addition or removal of impression sheets does not in any way disturb the permanent relationship between the carbon sheets and the backing sheet. For this reason the handling of the papers is greatly facilitated.

I claim:

1. In combination, a backing sheet of the kind described having near one edge thereof incisions which provide a plurality of aligned tongues having hooked ends, and a carbon sheet

arranged upon the backing sheet having slots of less length than the width of the hooked end portions of the tongues with which the hook-tongues positively interlock to maintain the carbon sheet in assembled relation with the backing sheet.

2. In combination, a backing sheet of the kind described having near one edge thereof incisions which provide a plurality of spaced aligning tongues, carbon sheets assembled with the backing sheet engageable with the aligning tongues, and hooked-end means integral with the backing sheet interlocked positively with each carbon sheet.

3. In combination, a backing sheet of the kind described having near one edge thereof alternate series of hooked-end elements and carbon sheet aligning elements integral with the sheet, and a carbon sheet assembled with the backing sheet engageable with the aligning elements and having slots engaged with and interlocked by the hook elements whereby the carbon sheet becomes assembled in a normally irremovable and fixed relation with the backing sheet.

4. In combination, a backing sheet of the kind described having near one edge thereof a series of hooked-end elements integral with the sheet, a carbon sheet having slots engaged with and interlocked by the hook elements whereby the carbon sheet becomes assembled in a normally irremovable and fixed relation with the backing sheet, and means wholly independent of the hooked-end elements and integral with the backing sheet engaging the carbon sheet edge proximate to the slots thereof for maintaining the carbon sheet edge close to the backing sheet.

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