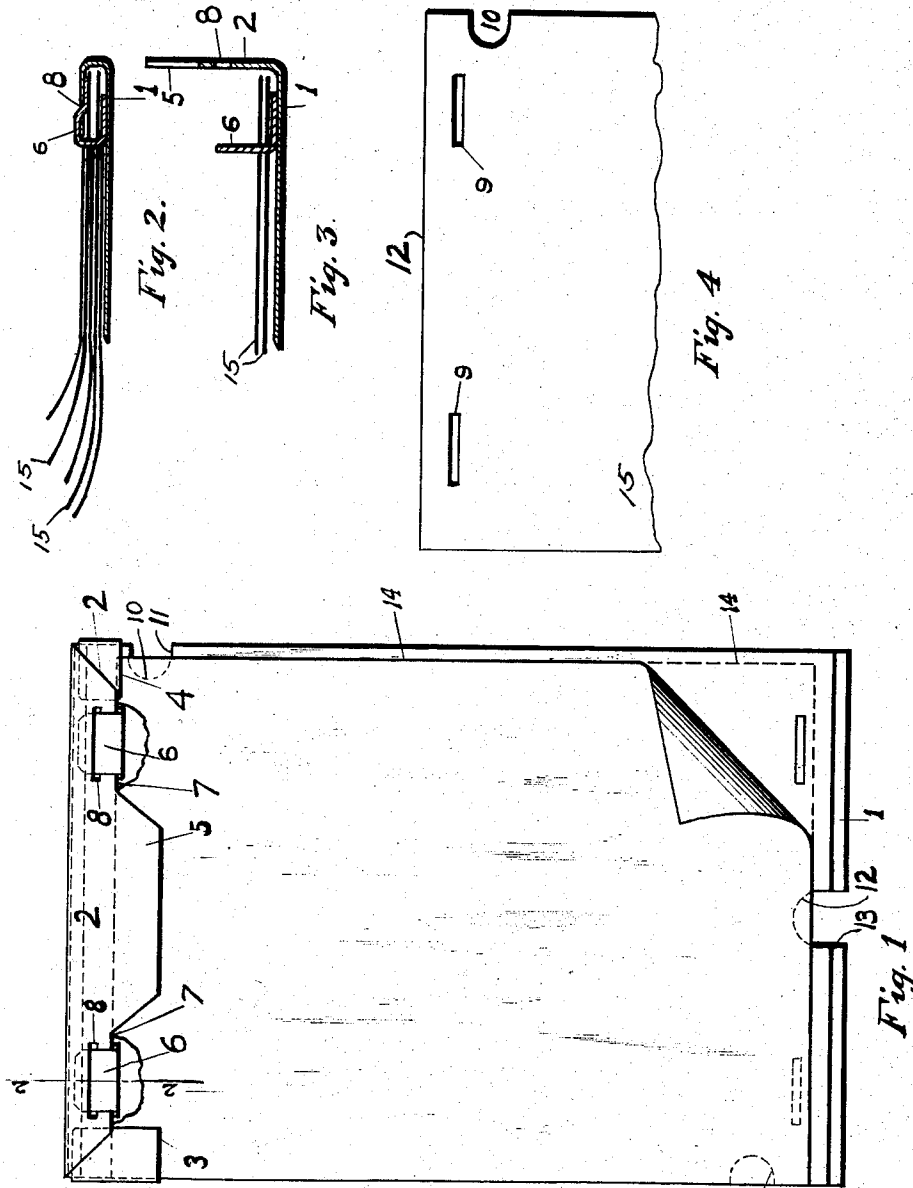


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CARBON BINDER AND FILLER.
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1,049,602.

Patented Jan. 7, 1913.



Witnesses
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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JESSE S. RODENHI, a citizen of the United States of America, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Carbon Binders and Fillers, of which the following is a specification.

The carbon binder which is the subject of this invention consists of a flexible back having an end and a side flap adapted to be folded over to form a pocket to receive the ends of the carbon sheets, the end flap having a central tongue on each side of which are tabs secured to the back, the end flap being slotted to receive the tabs. In the preferred form of the device the flap at one side, shown as the left, is of a length greater than the depth of the pocket, *i. e.*, the width of the end flap at this point, so that it extends along the lateral edge of the back beyond the end flap and serves not only to hold the edges of the carbons, but holds and positions the lateral edge of the paper near the end. At the other side I have shown a flap made of a length about equal to the width of the end flap or the depth of the pocket, so that this side flap does not project beyond the pocket and merely engages the carbon. Thus the paper is held on two sides only and may be easily removed. This flap is not entirely essential to the operation of my device and may be omitted. The point of attachment of the tabs to the back is substantially opposite the edge of the end flap, and these tabs are passed over the edge of that flap and inserted into the pocket through the slot provided therefor. The carbon sheets used are of a width but slightly less than that of the binder and incidentally of the pocket.

In assembling the device for operation, the carbon sheets, which are slotted to receive the tabs, are first laid upon the back, the tabs being passed through the slots in the carbon sheets. The side flaps are then folded over the edges of the carbons, and the end flap is folded down upon the carbons and upon the side flaps. The tabs are then folded over the edge of the end flap and inserted in the slots therein. The paper upon which the carbon copies are to be made is then inserted beneath the sheets of carbon, the side flap which I have described as projecting beyond the pocket, serving to posi-

tion the paper at that side and the tabs serving to position it at the end. The tongue on the end flap overlies the carbon and paper, serving to hold them in position. The sheet upon which the original writing is done is laid on top of the top carbon and inserted beneath the side flap and the tongue, resting with its end edge against the tabs, being positioned laterally by the fold of the side flap and at its end by the edges of the end flap adjacent the base of the tongue. The carbon sheet of my filler is made with slots to receive the tongues as described. These slots are provided at both ends of the sheet so that when it becomes worn in one position, the sheet may be reversed and used from the other end.

At the sides of the carbon sheets adjacent the ends, or on the end edges if preferred, I provide thumb notches, the back being correspondingly notched. I am thus able to remove the copy paper without handling the carbon sheets.

In operation, the binder with the filler, assembled as described, is inserted in the machine in the manner in which the single sheets or a number of sheets accompanied by the carbons are ordinarily inserted.

It will be apparent that the binder, which is the subject of my invention, except for the thickness of the back sheet, is no more bulky than would be the same number of free carbon sheets with the necessary sheets of paper. At the same time, the carbons are held in registration so that they are ready to receive the copy paper which can be quickly and uniformly adjusted. Any number of copies may be made and withdrawn from the binder without touching or disturbing the carbon sheets. Thereby there is a great resulting economy of time, because with the free carbons, such as are now used, the copy cannot be withdrawn from between the carbon sheets, but each piece of carbon and copy must be handled separately or copy shaken out from between the carbons to the resulting deterioration of the latter.

In the accompanying drawing I have shown a carbon binder with the filler made in accordance with my invention in its preferred form.

Figure 1 is a plan of the device. Fig. 2 is a fragmentary longitudinal section on the line 2, 2 of Fig. 1. Fig. 3 is a similar sec-

tion showing the device partly assembled. Fig. 4 is a fragmentary plan of a carbon sheet made in accordance with my invention.

The binder consists of a flexible back sheet
 5 1, having an end flap 2, a side flap 3 of a length greater than the width of the adjacent portion of the end flap, and in the preferred form of my invention there is another side flap 4 of a length substantially equal to
 10 the width of the adjacent portion of the end flap. The side and end flaps, as shown, are folded over on one side of the back sheet to form an end pocket, the side flaps being first folded in and the end flap being folded
 15 down upon the side flaps. Formed centrally of the end flap is a tongue 5, and secured to the back near each side of the tongue is a tab 6. These tabs, in operative position, are folded over the edge 7 of the end flap and
 20 their ends are inserted into the pocket through slots 8 in the flap.

The carbon paper or filler 15 to cooperate with my binder, a sheet of which is fragmentarily illustrated in Fig. 4, is provided
 25 with slots 9 to receive the tabs 6 and is notched at 10 so that the copy paper may be inserted and removed without interfering with the bound carbon sheets. The back is correspondingly notched at 11. Preferably
 30 the carbon sheets are formed at both ends, as shown at Fig. 4, so that the sheets may be reversed and uniformly exhausted. The carbons may also be notched at the ends as at 12 with the back correspondingly notched
 35 at 13.

The manner of assembling my binder will be apparent from the description and preamble. The back sheet is first laid flat, as shown in Fig. 3. The carbon sheets are
 40 placed in registration and laid on the back sheet, the tabs 6 being passed through the corresponding slots. Next the side flaps 3, 4 are folded over upon the sheets and the end flap 2 is folded over the side flaps, inclosing
 45 the ends of the carbon sheets. The tabs 6 are then turned over the edges of the end flap and inserted in the slots 8. The copy paper 14 is inserted one sheet beneath each carbon sheet, its ends being positioned by
 50 bearing against the tabs 6, and its side edge near the end taking a bearing in the fold of the flap 3. The original sheet, which is placed on top of the top carbon, also takes a bearing at its side edge in the folds of the
 55 flap 3, and at its end against the edge of the end flap adjacent the tongue 7. The latter rests on the top face of the top sheet, holding it in position. It will be apparent that when thus assembled, the binder and filler
 60 may be put through the machine as easily as a single sheet, and that the copy sheets may be quickly and conveniently removed and replaced without disturbing the carbons. This is done with a great resulting economy
 65 of time and materials.

I have thus described in detail the preferred embodiment of my invention in order that its nature and operation may be clearly understood. However, the specific terms herein are used in their descriptive rather than in their limiting sense and the scope of the invention is defined in the claims.

I claim—

1. A carbon binder consisting of a back having an end flap and a side flap, and a tab secured to the back, both flaps adapted to be folded over to form a pocket, the end flap having a tongue and being slotted to receive the tab.

2. A carbon binder consisting of a back having an end flap, a side flap at each end of the end flap, all the flaps being adapted to be folded over to form a pocket, the end flap having a tongue, and tabs secured to the back, the end flap being slotted to receive the tabs.

3. A carbon binder consisting of a back having an end flap, a side flap of a length greater than the width of the adjacent portion of the end flap, the flaps being folded over to form a pocket, a tab secured to the back, the end flap being slotted to receive the tab.

4. A carbon binder consisting of a back having an end flap, a side flap adjacent one end of the end flap and of a length greater than the width of the side flap, a side flap at the other end of the end flap of a length no greater than the width of the end flap, the flaps being folded to form a pocket, tabs secured to the back, the end flap being provided with slots to receive the tabs.

5. A carbon binder consisting of a back having an end flap, a side flap adjacent one end of the end flap and of a length greater than the width of the side flap, a side flap at the other end of the end flap of a length no greater than the width of the end flap, the flaps being folded to form a pocket, tabs secured to the back, the end flap being provided with slots to receive the tabs, and a tongue between the tabs.

6. A carbon binder and filler consisting of a back having an end flap and a side flap of a length greater than the width of the end flap, the flaps being adapted to fold over and form a pocket, tabs secured to the back, the end flap being slotted to receive the tabs, carbon sheets also slotted to receive the tabs, the tabs being passed through the slots in the carbon sheets, the flaps folded over the end and the adjacent edges of the carbon sheets, and the tabs passed over the edge of the end flap and inserted in the slots in the end flap.

7. A carbon binder and filler consisting of a back having an end flap, tabs secured to the back, the end flap being slotted to receive the tabs, a carbon sheet also slotted to receive the tabs, the tabs being passed

through the slots in the carbon sheets, the flap being folded over the ends of the carbon sheets and the tabs being passed over the edge of the flap and inserted in the slots
5 therein.

8. A carbon binder consisting of a back having a flap at one end to receive the ends of the carbon sheets and means for temporarily binding the sheets beneath the flap so
10 they can be easily removed, consisting of a

tongue to hold and position the paper, and tabs secured to the back opposite the edge of the flap, the flap being slotted to receive the tabs.

Signed by me at New York this 28th day 15
of March 1912.

JESSE S. RODENHI.

Witnesses:

J. E. McCORMICK,
W. P. HEYER.