Oct. 31, 1944. R. B. MAC ALISTER ET AL 2,361,698

SHEET CONTAINING AND COLLATING DEVICE

Filed Dec. 2, 1943

Fig. 1

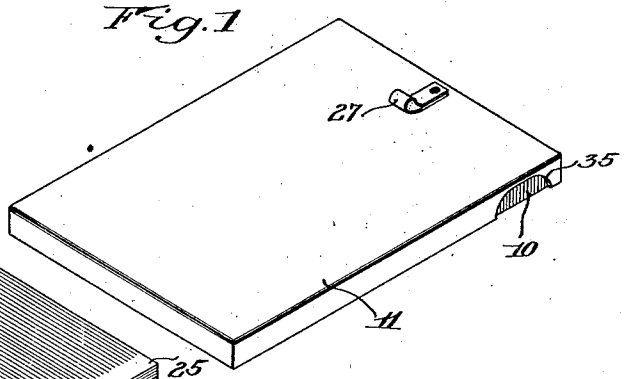


Fig. 4

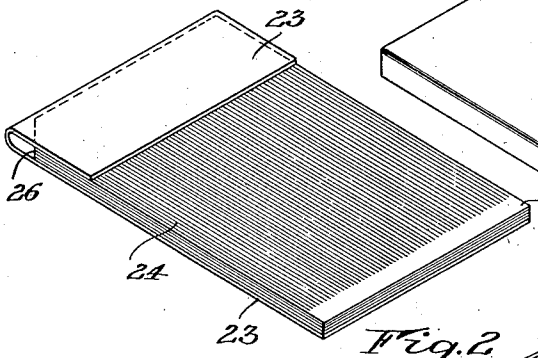


Fig. 2

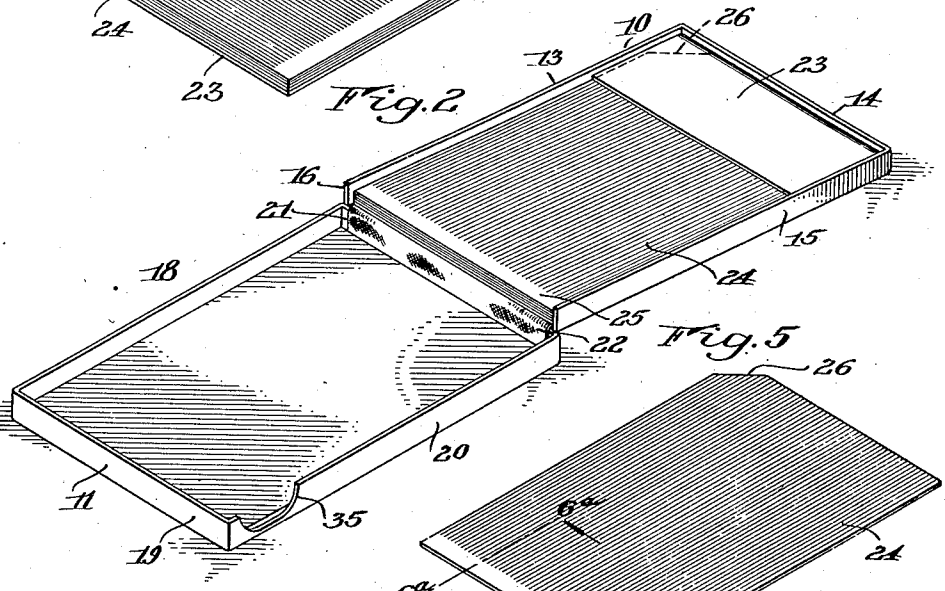


Fig. 5

Fig. 3

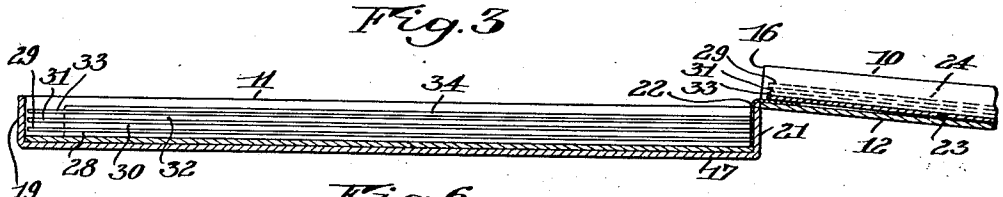
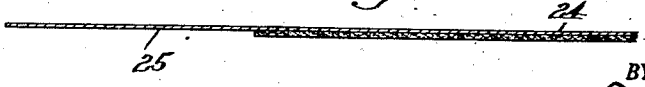


Fig. 6



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SHEET CONTAINING AND COLLATING DEVICE

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3 Claims. (Cl. 282—29)

This invention relates to sheet containing and collating devices, such; for example, as devices for containing and collating manifolding sheets including carbon sheets and first writing and copy sheets, one object of the invention being to provide a simple, efficient and convenient device having the combined structure and functions of a container for a working supply of carbon sheets and of a collating and alining means for interleaving carbon and first writing and copy sheets, in an accurately alined stack, ready for insertion in a typing machine.

Another object is the provision of a device of the above character adapted, by the mere opening of the container, to present the carbon sheets in a position in which the individual sheets may be quickly and conveniently grasped and slid directly into interleaved relation with the first writing and copy sheets of the stack to be formed.

Another object is to provide such a device in which the container lid or cover itself, and its side walls, serve to receive and guide all of the collated sheets into an accurately alined stack ready for insertion in the typing machine.

Another object is the provision of a device of the character described which tends to reduce to a minimum the handling and injury of the carbon sheets and the soiling thereby of the hands of the typist.

A further purpose of the invention is to produce a sheet collating and alining device adapted to normally hold the supply of carbon sheets in alined and flat condition and to protect and preserve them in such condition, ready for instant use.

Still a further purpose is to produce a carbon sheet containing and handling device of a character adapted to promote variation in the order in which a given carbon sheet is assembled in successive stacks, so as to distribute the wear more uniformly among the several sheets of a working supply thereof.

To these and other ends the invention resides in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawing:

Fig. 1 is a perspective view of a device embodying the present invention in closed, sheet containing position;

Fig. 2 is a similar view showing the sections of the device in open position ready for assembling and collating a stack of sheets;

Fig. 3 is an enlarged, sectional elevation through the sections of the device as shown in Fig. 2, with a stack of sheets assembled therein;

Fig. 4 is a perspective view of a supply of carbon sheets in a folder ready for insertion in the sheet containing section of the device;

Fig. 5 is a perspective view of one of the carbon sheets, detached, and

Fig. 6 is an enlarged, sectional view substantially on the line 6*a*—6*a* in Fig. 5.

The invention is embodied in the present instance, by way of illustration in a container or box, of cardboard or any other known or suitable material, adapted for holding a supply of carbon manifolding sheets and to be kept, in according with a common practice, in the drawer of a typewriter desk, conveniently ready for use. The container preferably comprises two sections, one serving as a sheet container or supply section, indicated generally at 10 in the drawing, and the other section, shown generally at 11, serving as a combined sheet alining section and cover for the container, into which the first writing and copy letter sheets and carbon sheets are assembled and collated in accurate alinement, ready for insertion in the typewriting machine.

The sheet supply or body section 10 preferably comprises a one-piece, rectangular base portion 12, having rigidly upstanding and connected walls 13, 14 and 15 on three sides thereof, the fourth side 16 being left unwalled and open to provide a way or passage for sliding sheets out of the supply section 10 into the connected sheet alining section 11.

The sheet alining or cover section 11 preferably comprises a rectangular base portion 17, having four rigidly upstanding and connected walls 18, 19, 20 and 21. The top of side wall 21 is taped or otherwise hinged, by any known or suitable means, as at 22, to the edge of the body portion 12 of the supply section at its open side 16, as shown, thus forming a hinge on which the section 11 may be swung from the closed position shown in Fig. 1, in which it forms a cover for the sheet holding section, to the open position shown in Fig. 2, in which it serves as a sheet assembling and alining section, as hereafter described. While section 11 is shown in the present instance as composed of two adhesively connected plies of cardboard, to afford stiffness, it may obviously be made in one-piece form, the hingedly connected sections 10 and 11 having a construction capable of being readily and economically manufactured.

The present embodiment of the invention is particularly convenient for assembling and col-

lating first writing, copy and carbon sheets, in an accurately alined stack, ready for transfer to and insertion in a type-writing machine. For this purpose, one or more folders, as 23, containing a multiplicity of carbon sheets, 24, are placed in the supply section 10, these sheets being exposed, ready for use, by the opening of the cover portion, as shown in Fig. 2. The individual carbon sheets preferably have the advantageous construction best shown in Fig. 5, being somewhat longer than the first writing and copy sheets and having along one end an uncoated, marginal strip, 25, with one opposite corner cut away, as at 26, to facilitate the handling of the carbon sheets, as hereafter described, without injuring the coating, or soiling the fingers of the typist, and the stripping of the carbon sheets from the stack for return in desired order to the folder in the supply section.

In the use of the device, the container or box may be placed on the typewriter stand, and the cover or sheet alining section 11 swung, as by means of a suitable handle 27, to the open position shown in Fig. 2, in which the adjacent open end 16 of the supply section is slightly elevated so as to retain the sheets against any tendency to slide out of the supply section. From a stack of copy sheets, conveniently accessible, for example, to the left hand of the typist, a copy sheet 28 is placed in the section 11, in which it is guided and located in position by the three upstanding walls 18, 20 and 21, the section 11 being somewhat longer than the copy sheets, as shown in Fig. 3. The topmost sheet, 29, from the supply section 10 is then grasped by its uncoated margin 25 and slid through the open side 16 of the supply section into the alining section 11, in which it is guided and alined with the copy sheet 28, by the four upstanding walls 20 to 21, inclusive, of the section. A second copy sheet 30 is similarly placed on and alined with carbon 29 and the next carbon sheet 31 is pulled from the supply section and similarly alined above copy sheet 30. Another copy sheet 32 is similarly placed on the stack and the next carbon sheet 33 is drawn forwardly and placed on and alined with the copy sheet 32, after which the first writing or letter head sheet 34 is placed on the stack, all of the collated sheets of which are precisely alined at the sides and tops of the sheets by the side walls of the alining section 11. The stack is then ready to be lifted bodily and inserted in the typing machine, at least one of the side walls, as 20, of the alining section being preferably cut away, as at 35, to facilitate the grasping and lifting of the stack as described.

After the typing of the sheets, the first writing and copy sheets are gripped at the corner 26, at which the carbon sheets are cut away, the carbon sheets are gripped at their uncoated ends 25 which project beyond the first writing and copy sheets, and the carbon sheets are stripped from or pulled out of the stack, thus leaving the first writing and copy sheets for suitable disposition. The carbon sheets are then returned together to the folder 23 in the supply section, and it will be noted that they are returned in the reverse order from that in which they were originally withdrawn from the supply section, sheet 33 being uppermost, instead of sheet 29. This arrangement and the varying number of sheets employed in successive stacks, tend to produce variations in the order in which the carbon sheets are assembled in the stack and subjected to the maximum wear nearest the type, with the result that the wear on the carbons is distributed so as to increase their useful life.

It will thus be seen that the invention accomplishes its objects. The carbon container of usual size serves both as a holder for the carbons and as an assembling and alining means for interleaving the carbons with the writing sheets. The mere opening of the box presents the carbons in position to be quickly and conveniently slid directly into interleaved relation with the writing sheets. The collating of the sheets is accomplished without bending or pressing against the edges of the carbons, thus reducing to a minimum the handling and injury of the carbon sheets in use. Since the carbons need only be handled at their uncoated edges, there is no necessity for soiling the hands of the typist with the coating, and these advantages tend to encourage the storage and protection of the carbons in the container, in place of the common practice of keeping the used carbons loosely in a drawer, subject to creasing and frictional wear against other objects.

The arrangement is such as to bring about a shifting of the order of the carbons in the folder and when collated in a stack, so as to distribute the wear in typing, and in these various ways, the life of the carbons is materially prolonged. The carbons are always preserved ready to be instantly alined in a stack in the cover as soon as it is opened, which saves time and labor for the typist.

While the invention has been herein disclosed by specific reference to the details of a preferred embodiment, it is to be understood that such disclosure is intended merely by way of illustration, rather than by way of limitation, as it is contemplated that various modifications and changes in the construction and arrangement of the parts will occur to those skilled in the art within the spirit of the invention and the scope of the appended claims.

We claim:

1. A device for containing and collating letter and carbon sheets comprising a container body section, and a collating cover section normally overlying and enclosing said body section, said body section having a rectangular base portion with upstanding walls on three sides thereof and its fourth side open, and said cover section having a rectangular base portion with upstanding side walls on four sides thereof arranged to enclose the side walls of said body section when said cover section is in closed position, the open side of said body portion having its adjacent base edge hingedly connected to the outer edge of a side wall of said cover section whereby said cover section, when moved to open position, is adapted to rest on a support and to elevate the hinged end of said body section thereabove so that sheets may be unobstructedly slid from said body section into said cover section and alined by the four walls thereof with other interposed sheets, to form a collated sheet stack, one or more of the walls of said cover section having a portion thereof cut away for access to said stack for lifting the same bodily from said section.

2. A device for containing and collating letter and carbon sheets comprising a container body section, and a collating cover section normally overlying and enclosing said body section, said body section having a rectangular base portion with walls upstanding rigidly on three sides thereof to a substantially uniform height and its fourth side open, and said cover section having

a rectangular base portion with side walls upstanding rigidly on four sides thereof to a substantially uniform height and arranged to overlie and enclose the side walls and open side of said body section when said cover section is in closed position, the open side of said body portion having its adjacent base edge hingedly connected to the outer edge of a side wall of said cover section whereby said cover section, when moved to open position, is adapted to rest in level position on a support and to elevate the hinged end of said body section thereabove so that sheets may be unobstructedly slid from said body section into said cover section and alined by the four walls thereof with other interposed sheets, to form a collated sheet stack.

3. A device for containing and collating letter and carbon sheets comprising a container body, a collating cover adapted to overlie and enclose said body, said body having a rectangular base portion with rigid walls upstanding unobstructedly on three sides thereof to a substantially uniform height and its fourth side open, and adapted to loosely contact a multiplicity of carbon sheets conforming in size to said body, said cover having a rectangular base with rigid walls upstanding unobstructedly on four sides thereof to a substantially uniform height and arranged to overlie and enclose the side walls and open side of said body when said cover is in closed position, the open side of said body having its adjacent base edge hingedly connected to the outer edge of a side wall of said cover whereby said cover, when moved to open position, is adapted to rest in level position on a support and to elevate the hinged end of sad body section thereabove so that carbon sheets may be unobstructedly slid from the elevated end of said body down into said cover and accurately alined by the four walls thereof with other interposed sheets to form a collated sheet stack, one or more of the walls of said cover having a portion thereof cut away for access to said stack for lifting the same bodily from said section.

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