Jan. 1, 1929. 1,697,359

S. C. HUFFMAN

STORAGE FILE

Filed Dec. 18, 1926

Fig. 1

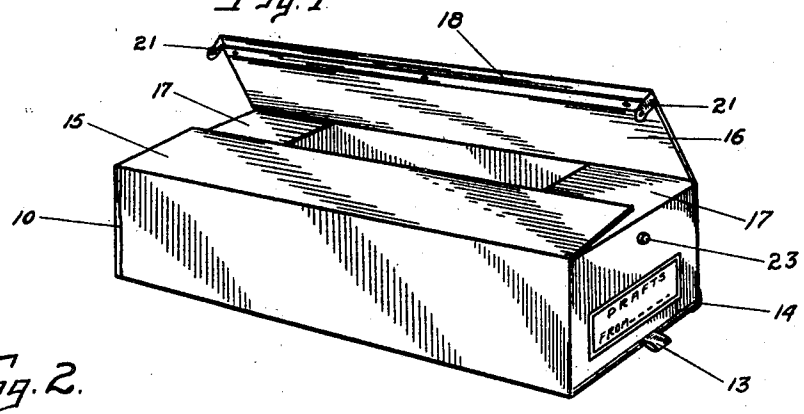


Fig. 2.

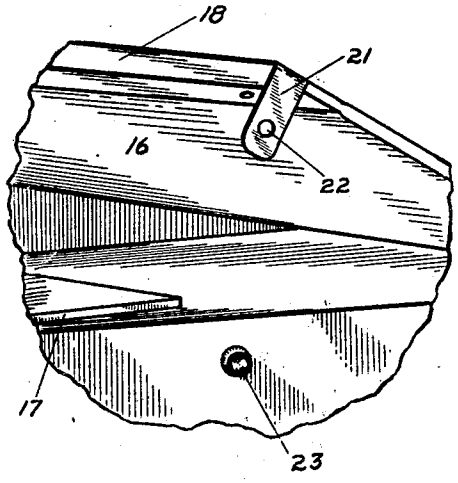


Fig. 3.

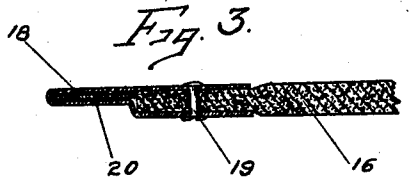


Fig. 4.

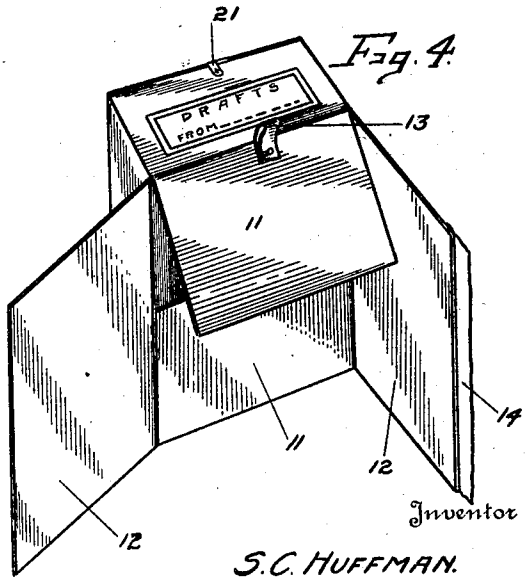
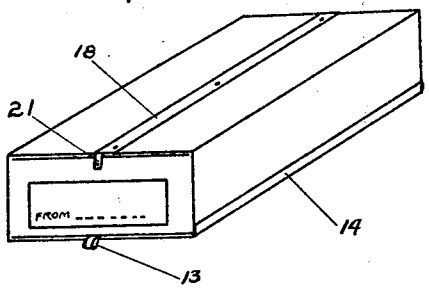


Fig. 5.



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UNITED STATES PATENT OFFICE.

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STORAGE FILE.

Application filed December 18, 1926. Serial No. 155,666.

My invention relates to storage and filing cases, its object being the provision of a reinforced case which is dust proof and vermin proof, which may be easily opened or closed, which is so designed that it may be constructed at a low cost, which occupies very little space either when it is in use or knocked down, and which is easily set up from its knockdown position. Especially is it my object to provide a latch which is automatic in operation when closing the case, which is easily unlatched without danger of accidental unlatching, which is entirely out of the way when several cases are stored in stacked relation, and which serves also as a reinforcement for the case and as a closure for the slit between the two parts of the cover or lid of the case.

Having in view these objects and others which will be pointed out in the following description, I will now refer to the drawings, in which

Figure 1 is a view in perspective of the storage file, the covers being shown in partly open position to disclose the latching strip.

Figure 2 is a view in perspective of a portion of the storage file showing particularly the latching strip and the button.

Figure 3 is a view in transverse section of the latching strip and of a portion of the cover.

Figure 4 is a view in perspective of the storage file, the bottom being in partly open position to show the construction of the storage file and particularly to show the relation of the pull strap to the bottom.

Figure 5 is a perspective view in outline of the closed file.

The storage file is made from a single rectangular piece of any suitable material which in the present instance is corrugated fiber board. This rectangular piece of fiber board of suitable dimensions is simply provided with slits and creases so that it can be readily assembled from its knockdown position. One of the side walls is secured to one of the end walls by means of a gummed strip of tape 10. For storage and transportation, the entire device is kept in its knockdown position so that the separate units may be converted into boxes as they are needed.

The bottom of the file is best shown in Figure 4. The slits in the material are made of such length that the two flaps 11 are each equal to one-half the length of the file and so that the flaps 12 are each equal in size and dimensions to the bottom of the box. They are then folded by first folding a flap 12 to entirely cover the bottom of the file, then folding the end flaps 11 and finally folding the flap 12 having the strip of gummed tape 14. The pull strap 13 is secured to one of the flaps 11 at its hinged edge so that when the box is set up the pull strap will project from between the layers of the bottom as shown in 13, this position being the most convenient one for the user of the file while it at the same time does not subject the strap to wear when dragging the box from a shelf. The outer of the two flaps 12 is provided with a strip 14 of gummed tape which needs simply to be moistened and attached to the side wall when setting up the box. It is understood, of course, that the flap 12 to which the strip 14 is secured is the flap which forms the outer or bottom layer in the set-up file.

The top of the file is similar in some respects to the bottom but the various flaps are of somewhat different dimensions. The side flaps 15 and 16 each have a width which is equal to half the width of the file so that when they are in their closed position the edges of the two flaps will meet. The end flaps 17 may have any desired width but in my preferred construction each has a width equal to the width of the flaps 15 or 16. This construction permits the flaps 17 to be folded over portions of the contents of the file and it permits the folding over of the flaps 15 and 16 so as to entirely cover the contents of the file. The flaps 17 also provide a more rigid construction for the file. When the flaps 15 and 16 are in intimate contact with the flaps 17 the file is vermin and dust proof with the possible exception of the center seam. I have, however, provided means for making this center seam dust and vermin proof by means of a seam-closing strip 18 as shown in Figures 1 and 2.

The seam-closing strip 18 is preferably made from sheet-steel of very light gauge or from any other suitable material. It is bent into the form shown in Figure 3, its open portion having the two parts spaced slightly less than the width of the corrugated fiber board or other material of which the file is made. It is also provided with apertures whereby it may be secured to the material of the file at the edge of the flap 16 by means of rivets 19 or the like. A portion of the strip 18 thus

projects over the flap 15 at its edge so that the flap 15 cannot be lifted without first lifting the flap 16 and so as to cover the entire seam between the flaps 15 and 16. The projecting portion of the strip 18 is, of course, bent on itself with a thin space between. In this thin space is inserted another strip 20 of sheet steel or the like, this strip extending throughout the length of the strip 18 and projecting beyond the ends in the form of downturned resilient ears 21 having apertures 22. The ears are also very slightly incurved so that they will engage the buttons 23 which are secured in the front and rear end pieces of the file. These ears project outwardly only a very slight distance and they are positioned in the paths of the apertures 22 when closing the file. As a result, when the flap 16 is brought down in its closing position, the ears 21 engage the buttons 23 and thus latch the entire cover. The button is preferably the kind known to the trade as the stud and post type of button.

The great advantage of this construction resides in the fact that the latching is entirely automatic when closing the box, the latching device being so simple that it may be easily released when it is desired to open the file. The latch, moreover, does not add anything to the thickness of the cover so that it is not in the way when similar file boxes are stacked on shelves as is the usual custom. The only projections are at the front and rear where they are least objectionable and these projections are so slight that the space wasted by them is negligible. The pull strap 13 is in its most convenient position at the front of the file and it is of such construction that the bottom or an intermediate file may be easily withdrawn from a stack of files without injuring either the pull strap or the file. When the cover is thus latched the strip 18 is held tightly pressed against the flap 15 and it thus prevents the entrance of dust and vermin through the seam at the meeting edges of the flaps 15 and 16. The latch also materially adds to the strength of the box to withstand the crushing effect of the weight of the stack.

While I have described my invention in very explicit terms, it will be readily apparent that a number of modifications are possible without departing from the spirit of my invention. For example, the buttons could be secured to or formed integral with the resilient ears and the end walls of the file could be provided with reinforced sockets for receiving the ears.

Having thus described my invention in such full, clear, and exact terms that its construction and operation will be readily understood by others skilled in the art to which it pertains, what I claim as new and desire to secure by Letters Patent of the United States is:

A box having one of its sides open, a closure for the opening in said box, said closure comprising two members hingedly secured to said box at opposite edges of the opening thereof, said members having a combined width which is substantially equal to the width of the opening in said box whereby said members will meet at their free edges when they are in their closing positions, a strip secured to one of said members at the free edge thereof, said strip having a projecting portion which is bent upon itself, the said portion being in alignment with the outer surface of the member to which it is secured whereby it is adapted to cover the free edge portion of the other of said members when said members are in their closing position, a resilient strip within the projecting portion of said first-named strip, said resilient strip having bowed and downturned ears at its extremities, and buttons projecting from the sides of said box and in the paths of said ears, said ears being provided with apertures for engaging said buttons.

In testimony whereof I affix my signature.

SAMUEL C. HUFFMAN.