

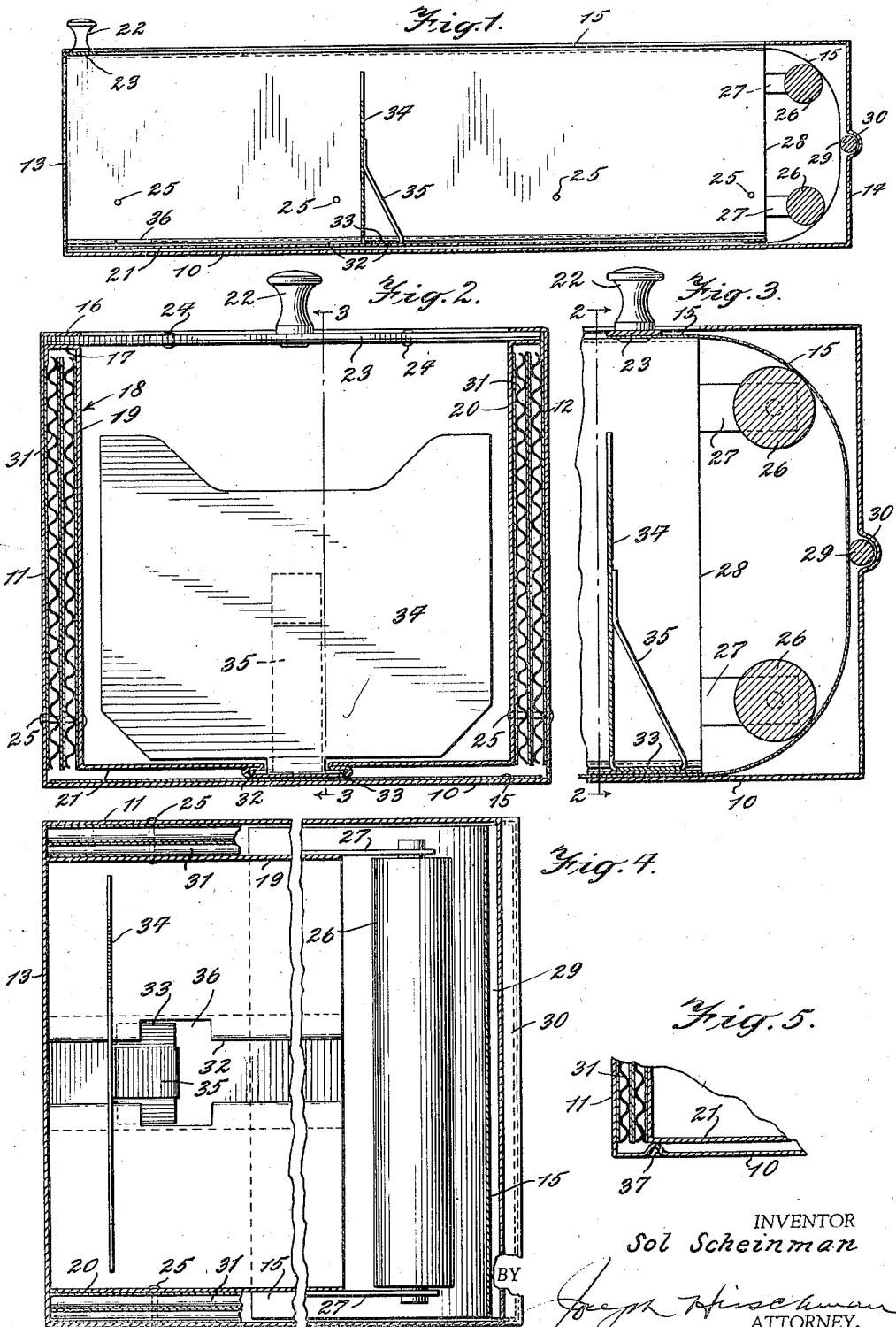
Dec. 21, 1937.

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2,102,820

FILE

Filed May 23, 1936



UNITED STATES PATENT OFFICE

2,102,820

FILE

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Application May 23, 1936, Serial No. 81,382

5 Claims. (Cl. 220—41)

The present invention relates to files and similar receptacles which are adapted to receive cards and other records for ready and convenient reference.

5 It is the general object of the invention to provide an improved file construction characterized by a novel type of closure whereby a simplified and compact structure is obtained.

10 It is a further object of the invention to provide a file construction in which the cover or closure is in the form of a flexible strip or sheet which can be slid longitudinally of the file to expose the contents thereof from above, the rear portion of the cover being cause to bend around the rear portion of the file and being received within a false or double bottom.

15 It is also an object of the invention to provide a file construction having a flexible sliding cover and wherein anti-friction means are provided at the rear of the file to enable the cover to make a downward bend or turn at the rear of the file without binding.

20 It is a still further object of the invention to provide a file construction wherein only part of the contents of the file may be exposed at any one time as desired and wherein danger of tipping or rearward tilting of the file due to the weight of the cover is eliminated.

25 These and further objects and the manner in which they are attained will appear from the following description of an embodiment of the invention which is illustrated by way of example on the accompanying drawing, in which

30 Fig. 1 is a central section through the file;
Fig. 2 shows an enlarged transverse section taken along the line 2—2 of Fig. 3;

35 Fig. 3 represents a partial longitudinal section along the line 3—3 of Fig. 2, the cover being in retracted or open position;

40 Fig. 4 is a horizontal section through the file; and

Fig. 5 shows a detail of a slightly modified construction.

Referring to the drawing, the file includes, 45 as is common with devices of this type, an outer shell composed of a bottom wall 10, side walls 11 and 12, a front wall 13 and a rear wall 14. These parts may be made of any suitable material such as wood, paper board, etc., but sheet metal is preferred. In accordance with the invention, the top or closure for the file is composed of a sheet 15 of flexible material, preferably of sheet steel of the type known as blue steel or spring steel, although any other flexible 50 material having the necessary degree of durability may be utilized. The flexible cover 15 is retained within and is guided along its sides by a trackway or guide-way composed of inwardly directed flanges 16 attached to or forming part of the side walls and the outwardly directed flanges 17 forming part of or attached to an insert or filler member 18 having side walls 19 and 20 and a bottom wall 21. The side walls 19 and 20 are preferably in vertical alignment with the free edges of the respective flanges 16 and together with the bottom wall 21 serve as the receptacle or support for the cards or other contents of the file.

5 The bottom wall 21 is spaced from the wall 10 thereby forming a double or false bottom within which is received the rear end portion of the cover 15 as the latter is moved rearwardly in its guides. The opening movement of the cover is accomplished by pushing rearwardly on a finger piece 22 attached to a bar 23 which is fixed to the forward end of the cover, as by means of rivets 24, or by welding or in any other suitable manner. If desired, the bar may be made by winding the forward portion of the cover upon itself one or more times. The spacing between the flanges 16 and 17 is preferably such that the bar and the cover are received snugly therein.

15 The insert 18 may be suspended within the casing 10—14 in any suitable fashion in a manner to provide an unobstructed path for the reversely bent rear portion of the cover as the latter is pushed rearwardly to open the file. Thus the insert may be supported by means of studs or rivets 25 or the flanges 17 may be welded, brazed, soldered or otherwise secured to the side walls 11 and 12.

20 To facilitate the bending of the rear portion of the cover toward and into the false bottom and prevent binding of such cover at the bend, I prefer to provide rollers at the rear portion of the file which are engaged by the cover and direct the latter into the space between the bottom 10 and 21. As many rollers as desired may, of course, be employed, but we have found that three rollers are sufficient. Two of these rollers, shown at 26, may be journaled in brackets 27 extending rearwardly from the side walls of the insert 18, or they may be mounted in suitable openings or trunnions in the side walls 11 and 12 beyond the rear edge 28 of the insert 18. A third roller 29, preferably of smaller size than the roller 26, is provided on the rear portion of the side walls 11 and 12, as shown in Figs. 1 and 3. The rear wall 14 may be provided with 55

an approximately semi-circular depression, as shown at 30, to receive the roller, which is located approximately midway between the rollers 26. The roller 29 is not provided with any trunnions but is held within its recess by the cover member itself. It is, however, within the scope of my invention to shape the rear walls 14 of the casing and the rear portion of the insert in suitable fashion and provide them with a smooth or polished surface so as to guide the rear portion of the cover into the false bottom without binding.

In order to impart greater rigidity to the file I prefer to fill the space between the walls 11 and 12 on the one hand and the walls 19 and 20 on the other hand with one or more layers of cardboard, preferably corrugated paper board, which is held in place by the rivets 25 or in any other suitable manner, as by means of glue.

From the above it will be seen that I have provided a file which, because of the fact that the cover is not lifted or raised, can be kept within a vertically confined space. In addition, the cover does not, as in certain known constructions, exert a moment in its raised condition tending to tilt the file, nor is the over-all length of the file increased when it is opened, as is the case in the drawer type of file. Moreover, a neat and dust-proof cover is provided while at the same time the cover can be kept as close to the upper edge of the cards or other contents as desired, so that the vertical height of the file is kept at a minimum. It will be noted that the cards are at all times below the upper edges of the side walls 11 and 12 and are thereby protected against injury.

I prefer to make the cover member 15 of such length that when it is in the closed position, as shown in Fig. 1, its rearward portion is within the double bottom for a short distance. In this way the travel of the rearward portion of the cover member within the double bottom is assured and danger of turning up of the rear edge and jamming of the cover member within the space occupied by the rollers 26 is avoided.

My improved construction also provides simple and inexpensive means for mounting and guiding a follower or guide block. As is shown most clearly in Figs. 2 and 4 the bottom 21 of the insert 18 is recessed by being bent upon itself at its underside to provide a longitudinal groove 32, the walls of the groove being thus integral with the bottom 21. The groove receives the flanged foot 33 of a follower block 34 which may be provided with a reinforcing member 35. The block is shown in the form of a plate which preferably is made from sheet metal, and while it is shown as extending in the vertical direction, it will be understood that it can be formed so as to be inclined to the vertical.

The bottom wall of the groove 32 is spaced a sufficient distance above the wall 10 to provide adequate clearance for the cover 15 as the latter slides between the two bottoms 10 and 21. It will be understood that the supporting means 25 or equivalent means for the insert 18 will be so positioned as to provide the necessary clearance for the cover 15.

The upper walls of the guide-way 32 are cut away at the forward portion of the wall 21, as shown at 36 in Figs. 1 and 4 to enable the follower 34 to be inserted into or removed from the guide-way.

In Fig. 5 is shown one form of means for properly orienting the insert within the outer casing to insure adequate clearance both for the bar

23 attached to the front edge of the cover, and for the rear portion of the cover sliding under the guide-way 32. These orienting means are shown as comprising ridges or bosses 37 struck up from the bottom wall 10 for sufficient distance to hold the bottom wall of the guide-way 32 with sufficient clearance above the bottom 10. The ridges 37 need extend only for a short distance rearwardly from approximately the front edge of the bottom 10 and are provided at both sides of the file. They should not, of course, extend so far back as to interfere with the movement of the cover 15 within the double bottom. The ridges 37 may be replaced by any other suitable spacing means located either upon the bottom 10 or upon the bottom 21.

While I have shown the outer casing of the file as of rectangular form at the rear thereof, such rear portion may be made of more or less rounded shape to conform to the curvature of the cover 15.

In the construction shown in the drawing the double bottom is formed with the aid of a U-shaped insert, but it will be obvious that such insert may be replaced by a simple, flat plate, which is secured to the casing a suitable distance above its bottom so as to provide adequate space for receiving the cover member as it is moved to open position. In fact, there may be employed two or more rods or bars extending longitudinally of the casing a suitable distance above its bottom. In such case the lower flanges for the guide-ways of the cover member may be provided by angle members secured to the side walls of the casing a suitable distance below the flanges 16. I prefer, however, especially when the file is to be used for storing cards or the like, to provide a wall in vertical alignment with the inner edges of the flanges 16, so that the cards will not be caught under the flanges when it is desired to remove them from the file.

If desired, other means than a false bottom may be provided for receiving the rear portion of the cover 15 as it is moved to open condition. Thus, a spring roller may be provided, for example, in place of either of the rollers 26, upon which the cover is wound as it is opened. The cover 15 can be made of any suitable flexible material, in addition to metal, such as cellulosic material, including celluloid, rubberized fabric, and in general any material having the necessary flexibility and stiffness toward a force applied in the direction of its own plane. These and various other modifications of my invention may be resorted to within the scope of the appended claims without departing from the spirit of my invention.

I claim:

1. A file comprising a casing consisting of two metal stampings of which one forms the outer shell and has side, bottom and end walls, the upper end portions of the side walls being bent inwardly in a horizontal plane, the other stamping being a substantially U-shaped insert supported within the shell and being provided with horizontal flanges at the top thereof spaced from the first-mentioned flanges and forming longitudinal guideways with the latter, the bottom of said insert being spaced from the bottom of the shell; a flexible cover member received within said guideways and adapted to be moved rearwardly to expose the contents of the file; and antifriction means at the rear of the file and engaged by the cover member as it is moved rearwardly to open the file, said cover member then

moving into the space between the bottom of the insert and the bottom of the casing.

2. A file as set forth in claim 1 wherein the side-walls of the U-shaped insert are in vertical alignment with the inner edges of the flanges at the top of the shell, the horizontal flanges of the insert extending outwardly into contact with the side walls of the shell, the space between the side walls of the insert and those of the shell being filled with paper board.

3. A file as set forth in claim 1 wherein the anti-friction means include two vertically spaced rollers supported upon the rear of the insert, and a third roller between said rollers and supported upon the rear of the shell, said rollers engaging the opposite surfaces of the cover member.

4. A file comprising a rectangular outer shell having side, bottom and end walls, guideways at the top of the side walls of said shell, a flexible cover member positioned in said guideways and adapted to be moved rearwardly to expose the

contents of the file, a U-shaped insert within the shell, orienting members at the bottom of the shell for supporting the insert above the bottom of the shell to provide adequate clearance for the cover between the bottom of the shell and casing, said members being out of the path of movement of the cover, and means at the rear of the casing for directing the cover member into the space within the double bottom.

5. A file comprising a casing having a double bottom, a flexible cover member at the top of the casing adapted to be moved rearwardly to expose the contents of the file, and anti-friction means at the rear of the casing for directing the cover member into the double bottom during such movement, said anti-friction means including a roller mounted in an approximately semi-circular horizontally extending depression in the rear wall of the casing, said roller being held within such depression by the cover member.

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