July 9, 1946. M. D. NISSENBAUM 2,403,825

DRILL CASE

Filed May 28, 1945

Fig. 1.

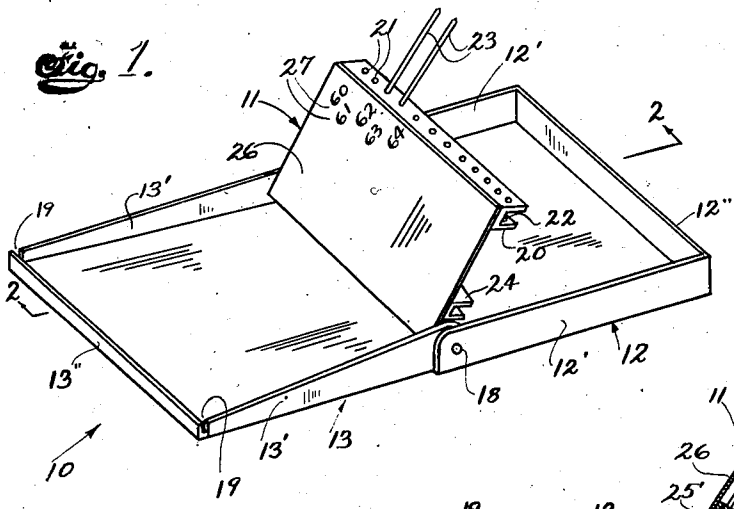


Fig. 2.

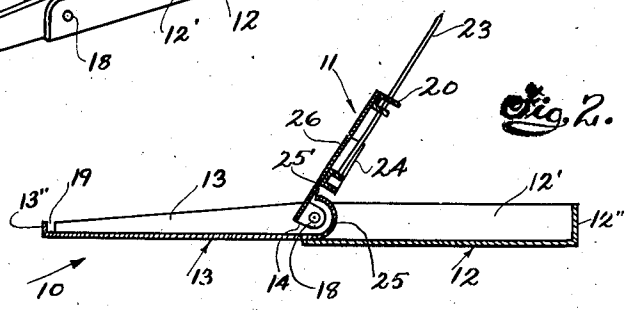


Fig. 3.

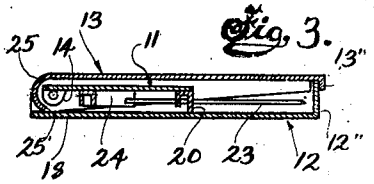


Fig. 4.

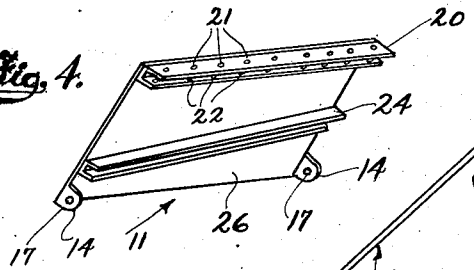


Fig. 7.

Fig. 5.

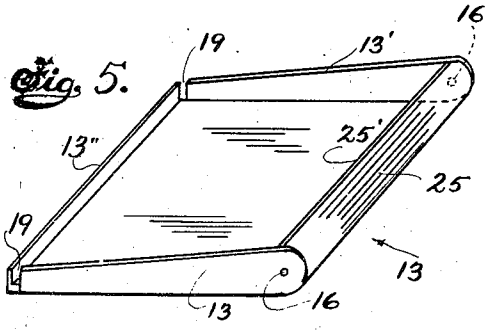
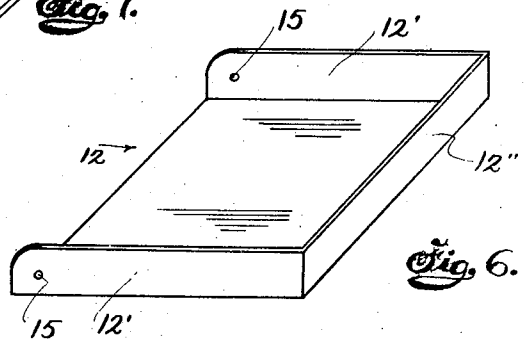


Fig. 6.



INVENTOR,

M. Daniel Nissenbaum

Patented July 9, 1946

2,403,825

UNITED STATES PATENT OFFICE

2,403,825

DRILL CASE

Moses Daniel Nissenbaum, Brooklyn, N. Y., assignor, by mesne assignments, to General Hardware Mfg. Co., Inc., New York, N. Y., a corporation of New York

Application May 28, 1945, Serial No. 596,342

1 Claim. (Cl. 206—17)

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The present invention relates to drill cases and more particularly to the portable type.

The principal object of this invention is to provide a drill case of novel and improved construction, which is compact when closed, and upon merely opening the case, a drill tray housed therein and carrying a plurality of drills, is automatically shifted to such position that the drills become readily displayed and easily accessible, and upon closing the case, said tray and the drills it carries are automatically housed within said case.

A further object hereof, is to provide a drill case of the character described, of novel and improved construction, which is reasonably cheap to manufacture, convenient to use, positive in its automatic actions and efficient in carrying out the purposes for which it is designed.

Other objects and advantages will become apparent as this disclosure proceeds.

In the accompanying drawing forming part of this application, similar characters of reference indicate corresponding parts in all the views.

Fig. 1 is a perspective view of a drill case embodying the teachings of the present invention. The device is here shown in open or use condition.

Fig. 2 is a section taken at line 2—2 in Fig. 1.

Fig. 3 is similar to Fig. 2, except that the device is shown in closed condition.

Fig. 4 is a perspective view of the drill tray member.

Fig. 5 is a perspective view of the cover member of the case.

Fig. 6 is a similar view of the box member of the case.

Fig. 7 shows the pin used for assembling all of said members into a unitary structure.

In the drawing, the drill case 10 comprises a drill tray member designated generally by the numeral 11, a box member 12 which has no rear wall, and a cover member designated generally by the numeral 13, which serves as the box cover.

The box members 12 and 13 are in telescopic relation, the cover member 13 fitting between the sides 12' of the box member 12, while the lugs 14 of the drill tray member 11, fit between the sides 13' of the box cover member 13. Holes 15 in the sides of the box member 12, holes 16 in the sides of the box cover member 13, and the holes 17 in the lugs 14 of the drill tray member 11, are provided in order to receive a pin 18 therethrough, whereby said members 11, 12 and

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13 are associated in hinged relation with each other at one of their respective ends. Upon such assembly, the ends of the pin 18 are formed with heads in exterior abutment with the sides 12' of the box member 12.

In the embodiment illustrated, the box cover member 13 is formed with a front flange 13'' and the slots or spaces 19, whereby upon closing the case formed by the box members 12 and 13, the front wall 12'' of the box member 12, will set within the slots 19, and flange 13'' will engage the exterior surface of the wall 12'', to maintain the case closed, with the box cover member 13 nested within the box member 12, and the drill tray 11 nested within the box cover member 13.

The drill tray 11 may be formed of a sheet metal body 26 having integral lugs 14 at its sides near its bottom edge; said lugs being each rearwardly bent perpendicular to its rear face. Extending from said rear face of the body 26, along its top edge, is a channel 20, having the series of aligned holes 21 and 22 for positioning a plurality of drills 23 therethrough; the bottoms of said drills resting on a channel member 24 which is also carried on the rear face of said body member 26. Members 20 and 24 may be mounted or secured to the body 26 in any suitable manner. The length of succeeding sizes of drills being progressively larger, and it being desirous that the upper points of the drills 23 shall lie in a line substantially parallel and near to wall 12'', the drill rest element is preferably slanted with respect to the member 20. On the front surface of body element 26, the drill sizes or other indicia 27, may be marked to indicate drill positions and data relating thereto.

The box cover member 13 carries a drill tray carrying element 25, which is preferably in the embodiment illustrated, of arcual cross section, and extends from said member terminating in an edge 25'. The lug 14 is free to move within said arcual member 25, about axis pin 18. When the drill case 10 is closed as in Fig. 3, edge 25' is spaced from drill tray body 26.

In operation, to open the drill case 10 from its closed position of Fig. 3 to its open condition as in Fig. 2, the box cover member 13 is manually swung counterclockwise. When said cover member had travelled angularly the obtuse angle shown to exist between said cover member and the drill tray 11 in Fig. 2, edge 25' of the tray carrying element 25 will contact the rear surface of tray body member 26, and upon further continued movement of said cover member 13, the

drill tray 11 will be swung upwardly and come to rest when cover member 13 comes to rest, for instance as in Fig. 2, where the drill tray 13 is positioned in acute angular relation with the box member 12.

The embodiment illustrated is adaptable for small sized drills and may be considered as shown full size.

To close, cover member 13 is manually swung in a clockwise direction. The angle between said cover member and the tray member will be maintained until the tray 11 comes to rest on the floor of the box member 12, whereupon further movement of the cover member 13 to the position shown in Fig. 3, edge 25' will move away from the drill tray member 26.

This invention is capable of numerous forms and various applications without departing from the essential features herein disclosed. It is therefore intended and desired that the embodiment herein be deemed illustrative and not restrictive and that the patent shall cover all patentable novelty herein set forth; reference being had to the following claim rather than to the specific description herein to indicate the scope of this invention.

I claim:

In a drill case, a box member having a wall opening, a box cover member hinged to the box member on an axis near said opening, a drill tray positioned between the box and cover members, pivotally mounted at its lower end about said axis and a drill tray shifting member extending from the box cover member in said wall opening and terminating at a position spaced from the drill tray; said drill tray shifting member being interiorly substantially concave and housing the lower end of the drill tray and having a path of movement between the drill tray and the box member, adapted upon opening of the case by movement of the box cover member, to engage the drill tray only after the box cover member has been moved an angular distance of an obtuse angle and upon further movement of the box cover member, to swing the tray member an angular distance of an acute angle.

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