Sept. 4, 1934. G. W. KOHLMETZ 1,972,742

DRILL SET DISPLAY

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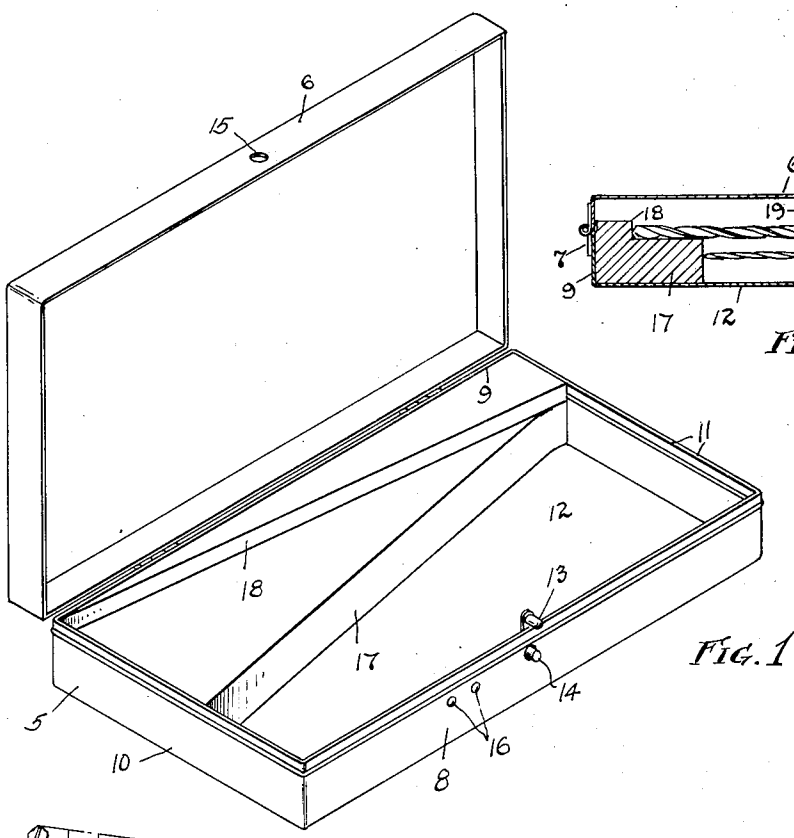

FIG. 1

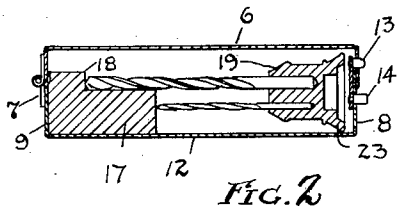

FIG. 2

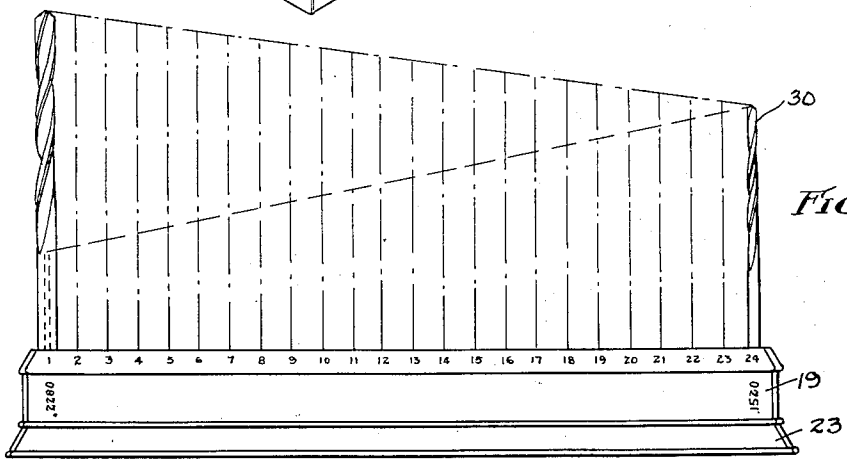

FIG. 3.

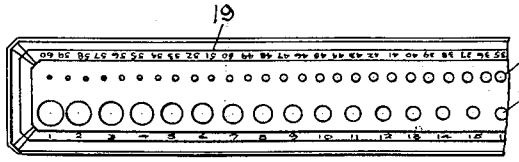

FIG. 4.

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DRILL SET DISPLAY

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1 Claim. (Cl. 206—17)

This invention relates to drill set packages of the type in which a complete set or sets of drills of graduated size may be carried and, more particularly, to an improved drill set package permitting the drills to be displayed as well as carried.

In drill set cases or containers it is customary to mount the drills in holes adapted to receive them, the drills being so arranged as to graduate in size from one end to the other of the stand in which they are mounted. The drills are enclosed in a box or case which holds them more or less securely in place and permits transportation from one place to another. Such drill cases are usually constructed, however, so that the stand and case are inseparable and it is not possible therewith to remove the stand with the drills set therein from the casing. It is also necessary in such drill cases to provide means which will retain the drills of varying sizes and lengths in their sockets without dropping out regardless of the manner in which the case is handled.

It is an object of the present invention to provide a drill set package which may be used not only to transport drills but also to display these for sale in a neat and attractive manner. Another object of the invention is to provide a drill set package in which drills may be securely transported and stored so as to present the drills at all times for use in neat and exact order while, at the same time, permitting the drill stand to be used as a display device for the drills or for the drill set unit. To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claim.

The annexed drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:

Fig. 1 is a perspective of a drill set casing with the cover open and showing the retaining means for the drills; Fig. 2 is an end view in section showing a drill stand carrying drills in place in the drill set casing; Fig. 3 is an elevation of the drill stand showing the manner of mounting the drills and also the manner of applying indicia to indicate the number and size of each drill; Fig. 4 is a top plan view of the drill stand shown in Fig. 3.

Referring to Fig. 1 of the drawing, a casing 5 of metal, wood, or other suitable material, but preferably of metal, is equipped with a hinged lid 6 attached to the casing by means of hinges 7. The casing has side walls 8 and 9 and end walls 10 and 11, together with a bottom 12. The cover is held closed by a latch 13 provided with a push button 14, the latch engaging a hole 15 in the cover. The latch is mounted on a spring (not shown) which is attached to the casing by means of rivets 16. Inclined blocks 17 and 18 are attached to the inside of the casing for a purpose hereinafter to be described.

As shown in Fig. 2, a drill stand 19 composed of metal and having a pleasing and artistic appearance is prepared of a size exactly to fit the width of the casing from front to back when the lid 6 is closed. This stand, as seen more clearly in Figs. 3 and 4, is supplied with sets 21 and 22 of holes of graduated sizes, two such sets being shown in the drawing, but of which more may be supplied in drill set cases of larger sizes. The stand is widened at its base 23 and thus constitutes a firm, stable support for the drills.

It will be noted in Fig. 3 that the drills 30 descend in size from the large number 1 drill down to the small intermediate number 24 drill and the series is then taken up in the next set or row and carried down in the reverse direction to the smallest size drill shown, number 60. The sets of holes 21 and 22 are formed in the metal of the exact size to receive readily the end of the drill intended to be placed therein and will not receive a drill of larger size, while a drill of smaller size will indicate its misplacement by its loose fit. This insures that each drill will be properly replaced after use and, consequently, that a drill of the desired size can be immediately selected from its relative position in the stand.

In order to retain the drills in the stand during transportion, regardless of the position in which the case may be at any time, the inclined blocks 17 and 18, which are also preferably made of metal but which may be made of other suitable materials, are provided which are so sloped, that of 17 being in the reverse direction to the slope of 18, that the inclined surfaces of these blocks abut the points of the drills and thus prevent their accidental removal from the holes in the stand 19.

In order to make selection of the proper drill easy, two series of indicia are supplied on the stand 19, one indicating the number of the drill and the other indicating the corresponding decimal size thereof. This feature renders it convenient to select a drill either according to its number where this is referred to, or according to the size hole which it is desired to drill.

A highly valuable feature of the new drill set package and display case is the completely removable character of the stand 19 which, while it is held securely in the case after the lid 6 has been closed, permits the stand, together with the sets of drills which it carries, to be completely withdrawn from the case and placed in full view of a customer or of a user who desires to select a given drill without the necessity of peering into the case which partly obscures the view and without the necessity of elaborate means for permitting the drills to be partly withdrawn from the interior of the case. The arrangement of the inclined blocks 17 and 18 is such that they do not interfere with the withdrawal of the stand and drills, while these blocks, the casing, and the hinged lid cooperate to hold the drills firmly in place during transportation. Forming the stand 19 of metal also aids in securely holding the drills since the holes in the metal do not tend to become enlarged as quickly as would be the case with a wooden stand.

The casing may be japanned or otherwise finished to give a pleasing appearance to the display as a unit. Of course, the casing may be formed of wood or other material besides metal but a metal casing is more durable and is preferred. Also, a sliding cover may be provided in place of the hinged cover shown.

The drill stand may be die cast and is prepared in one piece and no complicated structure is necessary in order to bring the drills into a position where they may be inspected since, as stated above, the stand is completely removable from the case. Complete removal of the stand permits close inspection of the indicia identifying the drills, makes it easy to inspect the condition of the drills, and also reveals plainly when a drill is missing as indicated by an empty hole, the indicia also indicating the size of the missing drill.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by the following claim or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:

A drill set display package including a box having a bottom, side walls and end walls, an abutment fixed within the box along one side wall thereof, said abutment having an inclined face adapted to engage the points of one row of the drills of a graduated set, a smaller fixed abutment overlying said first abutment with an oppositely inclined face adapted to engage the points of the remaining drills of the set, said box containing a one-piece removable stand of a size adapting same to fit in the space between the fixed abutments and the remaining side walls of the box, with the drills carried thereby in two rows, the lower row consisting of the smaller drills and the upper row consisting of the larger drills, the points of the drills engaging said abutments whereby the stand and drills are held against shifting in the box.

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