

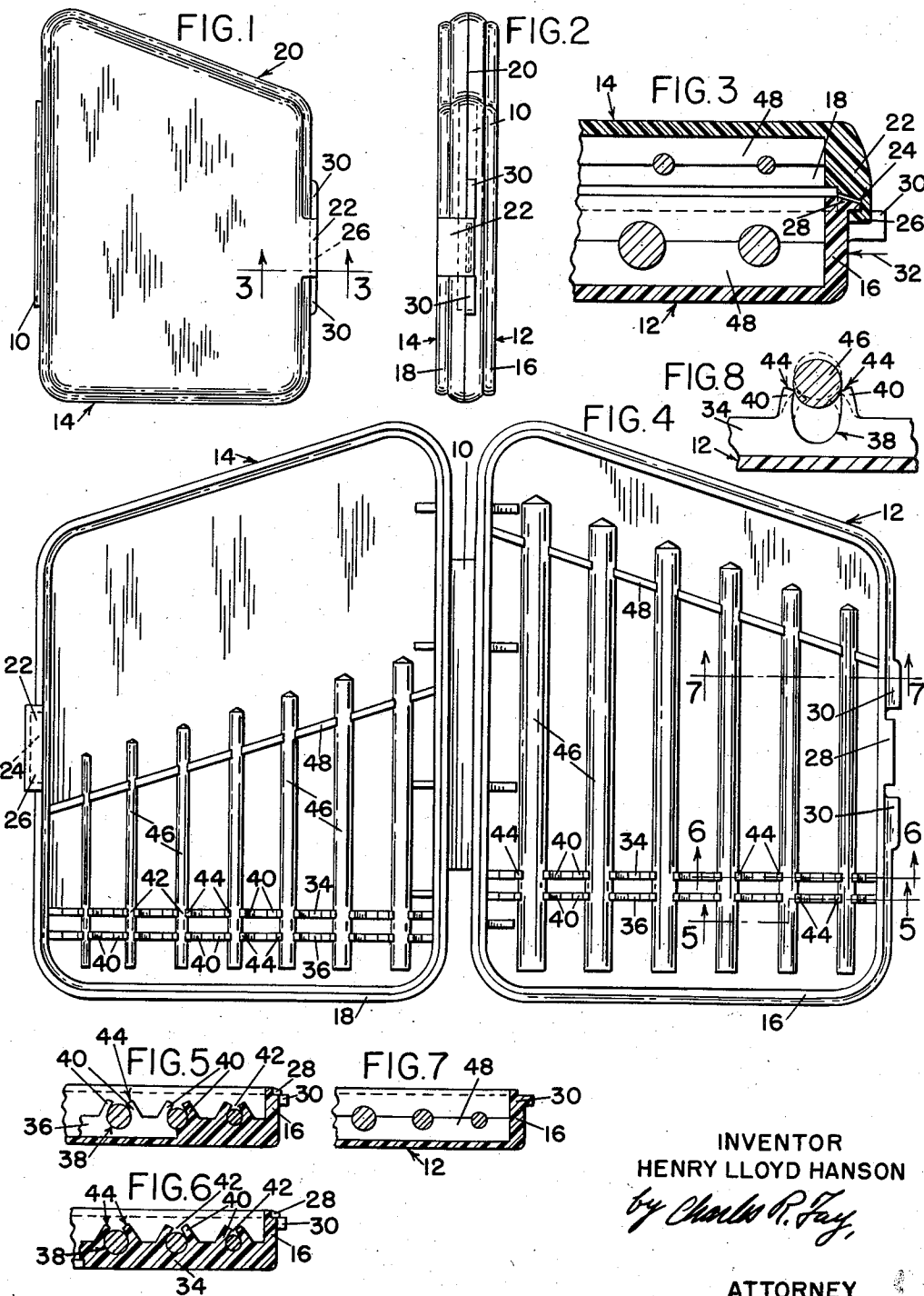
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MOLDED PLASTIC CONTAINER FOR DRILLS AND THE LIKE

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1

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MOLDED PLASTIC CONTAINER FOR DRILLS AND THE LIKE

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1 Claim. (Cl. 206—17)

This invention relates to a novel one-piece molded plastic container for protecting and holding drills or the like relatively small sized articles, and the principal objects of the invention reside in the provision of a plastic case which is much lighter than a comparable prior art metal case and which is extremely durable and long-lasting and will not become bent, sprung or dented; the provision of a plastic case as described having a pair of hinged container parts provided with a novel positive quick-closing and easy-opening clasp holding the parts of the case firmly closed; the provision of a plastic case as above described containing no sharp edges and which may be dropped upon the floor without loss of the drills or other contents and including gripping means in the case firmly securing the drills in position, so that even though the case may be opened and turned upside down, the drills or other contents in the gripping means cannot fall out.

Further objects of the invention include the provision of a one-piece molded plastic case which is more convenient and easier to carry in the pocket of the user, the material of the case being such as to fail to injure the contents in any way but actually cushions and protects the same, said case being provided with means for firmly holding the drills or like articles in parallel aligned condition and in consecutive order according to size and length.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which

Fig. 1 is a view in front elevation showing the case closed;

Fig. 2 is an edge view thereof;

Fig. 3 is an enlarged sectional view on line 3—3 of Fig. 1;

Fig. 4 is an enlarged view illustrating the case open and showing the contents held therein;

Figs. 5, 6 and 7 are sectional views on the respective lines in Fig. 4; and

Fig. 8 is a view illustrating the application of the drills to the holders.

The case which forms the subject matter of the present invention is made in a mold of plastic material preferably somewhat soft and flexible in nature such as polyethylene or the like. The case is conveniently molded with an integral strap or the like 10 permanently hingedly connecting two half portions generally indicated at 12 and 14. Each half portion is a container itself and is provided with an upstanding rim, see 16 and 18, and these rims and the case are formed at an angle at one edge as indicated at 20 in Fig. 1. This provides an attractive appearance and conforms to the increasing sizes of the drills or other contents of the case as illustrated in Fig. 4, thus saving material and providing for a case that is easy to handle and to slide in-and-out of the pocket of the user.

At the side edges of the rims of the two half portions

2

12 and 14, the same are provided with a novel clasp or latch construction which is best seen in Figs. 3 and 4. Integrally molded in the rim 18, there is provided a thickened portion or ledge 22 which extends laterally outwardly of the edge of the container as seen in Fig. 1. At its thickened portion, it is provided with an undercut recess or the like 24 formed by a reversely or inwardly turned lip or flange 26.

This lip or flange 26 is adapted to be distorted and moved outwardly by a cooperating outwardly extending lip or flange 28 integrally molded with the rim 16. As the case is closed, the rim or flange 28 snaps past the part at 26 and becomes firmly locked in the recess 24; the two rims of the flanges 26 and 28 bearing against each other.

A pair of outstanding projections 30 are also integrally molded in the rim 16, one at each side of projection 28 as shown in Fig. 4, and these provide stops and a guide means for the flange 26. To open the case, one presses inwardly on rim 16 as shown in Fig. 3 by the arrow 32 to release flange 28 from flange 26, whereupon the case part 14 is easily swung from the part 12; it being understood that the hinge strip 10 is thin and flexible and is made of the same material as the casing, being molded therewith.

It will be seen that each half portion of the case is in the form of a shallow rimmed dish and in each of these there is provided a series of article holders also integrally molded therewith of the same material.

Looking at Fig. 4, it will be seen that the portion 12 of the case is provided with a pair of spaced parallel upwardly extending ridges as indicated at 34 and 36 respectively. These ridges are located adjacent an edge opposite the slanted edge 20. Each ridge is provided with substantially circular upwardly opening recesses as for instance at 38, and these recesses are in turn formed by upwardly extending ears 40, rising above the ridges.

The ears 40 extend angularly in toward each other forming restricted openings therebetween at the free ends thereof, see 42 in Figs. 5 and 6. The ears 40 terminate in flat edges 44 located on a slant to form a V opening for each recess.

The drills or similar articles are indicated by the reference character 46 and as usual these form a set increasing in size, as for instance from a $\frac{1}{16}$ drill and going up for instance to a $\frac{1}{4}$ inch drill. These sizes of course may be varied, but it is to be understood that each of the holding means formed by the openings 38 also vary in size according to the drill sizes and that each different size of drill is held in its own particular holding means.

It will be understood that the upstanding ears 40 are arranged in pairs, that is, there are a pair of ears 40 for each drill to be held in the ridge 36, and a similar pair of ears aligned therewith for each drill or similar article in the ridge 34. The plastic material of the case being somewhat flexible, each drill is received and held by the ears 40 within the recesses 38 merely by snapping them downwardly past the free ends of the ears.

The drill in effect rests on the slanted or inclined edges 44, see the dotted line showing in Fig. 8, and this forms a sort of guiding trough or the like, so that when the drills or similar articles are pressed downwardly thereon, they easily spread apart to accommodate, receive and substantially latch the article in place, as in Figs. 5 and 6.

By reason of the fact that there are two aligned pairs of ears 40 for each drill, it will be seen that each drill is held in the positions shown in Fig. 4, i. e., they are always held parallel to each other and not in helter-skelter relation. Also, the ears fairly tightly fit the shanks of the drills and hold them firmly but without marring, so that the drills are held in position even though the

3

case should be opened up as in Fig. 4, turned upside down, and shaken. In fact, the material of the casing cushions the drills and holds them against marring, regardless of how hard the case may be shaken up or jostled and this is true even if the case should be dropped upon the floor.

Another upstanding ridge 43 is provided to receive and position the opposite ends of the drills, and this construction is perhaps best shown in Fig. 7 wherein the upstanding ridge 43 is provided with depressions approximately corresponding to the drill sizes as they are shown.

It will be seen that this invention provides a relatively simple protective casing of the class described which is especially easy to open and close and convenient to carry in the pocket; and which protects the drills or other contents against rattling or becoming nicked or marred in any way while held in the case even though the same should be dropped or accidentally opened.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claim, but what I claim is:

A molded plastic case for holding and displaying small drills of different sizes, said case comprising a rimmed drill-holding part including a generally flat central portion, means on said portion to hold the drills, and drills

4

held by said means, said means including a pair of narrow partitions, spaced pairs of distortable resilient spaced ears on said partitions extending outwardly therefrom and in the plane thereof and defining pairs of recesses of different sizes to receive the drills, said ears extending toward each other in pairs and defining restricted entrances to the recesses, there being a drill in each pair of recesses of like size, said partitions being integral with the said central portion and said recesses of each pair being aligned to hold its drill transversely to the partitions and in fixed position relative thereto and to the case, said drill-holding part, its central portion, and the ears all being of a semi-rigid self-sustaining but distortable resilient plastic.

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