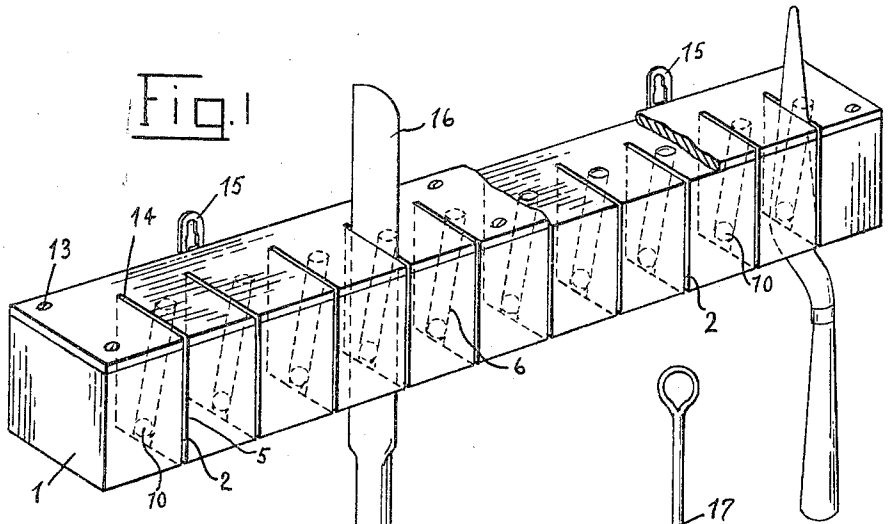
Jan. 1, 1963 W. HANSCHAR 3,071,252

HOLDER FOR BLADED IMPLEMENTS

Filed July 15, 1957

Fig. 1



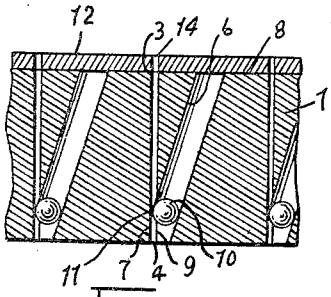


Fig. 2

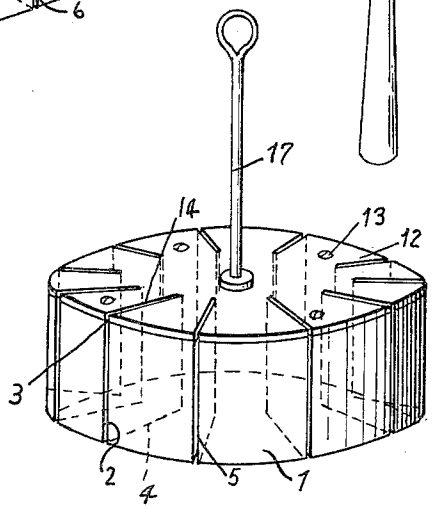


Fig. 3

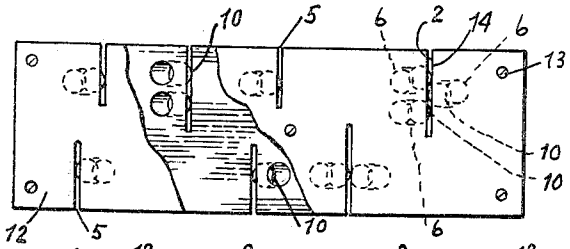


Fig. 4

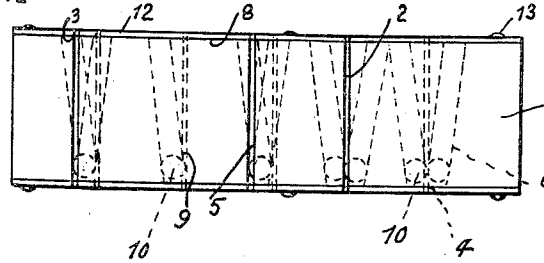


Fig. 5

Inventor
Walter Hanschar

By Fetherstonhaugh & Co.

His Patent Attorneys

United States Patent Office

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HOLDER FOR BLADED IMPLEMENTS

Walter Hanschar, 302 13th St. SE., Medicine Hat, Alberta, Canada

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My invention relates to new and useful improvements in holders for devices such as knives, tools, files or anything with a relatively slender blade, the principal object and essence of my invention being to provide a device of the character herewithin described in which the devices are readily inserted and held within the device and yet which are readily detachable therefrom.

Previous attempts have been made to provide an efficient rack for such implements or tools, but the majority of these do not contain positive holding means which grasp the blade anywhere along the length thereof as soon as the implement is released and yet which at the same time permits the implement to be removed easily and rapidly from the device.

I have overcome these disadvantages by providing a slotted block open on three sides within which slots the blade of the implements may be placed. Diagonal drillings communicate with the base of the slot and a ball bearing or the like is adapted to run freely within the drilling.

A further object of my invention is, therefore, to provide a device of the character herewithin described which is adaptable to receive various types of bladed implements or tools and which provides a positive lock for these implements as soon as they are placed therein.

Another object of my invention is to provide a device of the character herewithin described which is adaptable for use either in a longitudinal rack or, alternatively, a circular rack.

With the foregoing objects in view, and such other objects and advantages as will become apparent to those skilled in the art to which this invention relates as this specification proceeds, my invention consists essentially in the arrangement and construction of parts all as hereinafter more particularly described, reference being had to the accompanying drawings in which:

FIGURE 1 is a perspective view of my device per se.

FIGURE 2 is an enlarged fragmentary sectional view of my device.

FIGURE 3 is a perspective view of an alternative construction of my device.

FIGURE 4 is a top plan view sectioned in part showing various modifications of my device.

FIGURE 5 is a side elevation of FIGURE 4.

In the drawings like characters of reference indicate corresponding parts in the different figures.

Proceeding now to describe my invention in detail, reference should first be made to FIGURES 1 and 2 in which I have shown an elongated substantial rectangular block 1 provided with a plurality of slots 2 along the length thereof, said slots being vertically situated and open upon the upper side 3, the lower side 4 and the front side 5. Gravity operated friction means are provided and take the form of oblique or diagonal drillings or cylindrical bores 6 extending upwardly from adjacent the bases 7 of the slots through to the upper side 8 of the block. It will be noted that the lower ends 9 of these drillings open onto and communicate with the slot 5 adjacent the lower end thereof and that a steel ball 10 is adapted to ride within the diagonal slot 6. Gravity normally maintains the ball in the lowermost position under which circumstances the ball contacts the opposite side 11 of the slot to which the drilling opens.

A cover plate 12 is detachably secured by means of screws 13 to the upper side of the block covering the

upper ends of the drillings, but it will be noted that this cover plate is slotted as at 14 complementary to the upper side 3 of the slots 2.

In operation, the device may be suspended from a wall by means of brackets 15 whereupon bladed implements such as knife 16 is merely slipped upwardly through the slots thus displacing the ball 10 until the knife is released whereupon gravity lets the ball descend which jams the knife frictionally into position. In order to remove the knife, it is merely necessary to move the knife upwardly and outwardly which released the ball and enables the blade to be slipped out of the slot readily.

FIGURE 3 shows an alternative embodiment in which the block 1 is circular and in which the slots are radially formed therein so that the device may be suspended by means of central hanger 17 from a convenient location.

FIGURES 4 and 5 show various modifications in the use of the drillings 6 and the ball 10 to take implements of various sizes. Illustrated in phantom are single drillings together with steel balls therein and in the sectional part double drillings are provided to take an implement having a wider blade than normal. On the right hand end there are two drillings on one side and a single drilling upon the other in staggered array each drilling carrying a steel ball thus providing a very efficient lock for a relatively heavy implement.

It will, therefore, be appreciated that I have provided a device which is readily adaptable for use with a wide range of bladed implements such as knives, trowels, files and the like, which implements are readily placed and removed from the rack with a minimum of trouble.

Since various modifications can be made in my invention as hereinabove described, and many apparently widely different embodiments of same made within the spirit and scope of the claims without departing from such spirit and scope, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative only and not in a limiting sense.

What I claim as my invention is:

1. A tool holder device of the character shown and described for releasably positioning tool blades which comprises a longitudinally extending body having a series of horizontally-spaced apart and vertically-extending front slotted portions dividing its front face into segments, said slotted portions extending between and being open to top and bottom and front faces of said body and terminating backwardly in spaced relation with a back face thereof, a series of inclined cylindrical bore portions open to the top face of said body and projecting downwardly therewithin along the segments into a converging relationship with an associated one of said slotted portions, each of said bore portions having an open side wall at its converging end communicating with its associated slotted portion, each of said bore portions having an abutment means adjacent the open side wall, relatively hard spherical locking elements, one of said elements being positioned within each of said bore portions and being operatively retained in position by said abutment means for the insertion of a blade within an associated slotted portion.

2. The device as defined in claim 1 together with a slotted cover plate removably secured to the top of said body and closing the upper ends of said bore portions, the slots in said cover plate registering with the slotted portions of said body.

3. A tool holder device of the character shown and described for releasably positioning tool blades, said device comprising a body having a top face, a bottom face and an outer side face, said body being provided with a series of horizontally spaced apart and vertically extend-

ing slots dividing its outer side face into segments, said slots extending between and being open at said top and bottom and outer side faces of the body and terminating backwardly in spaced relation from said outer side face, the segment portions of said body between said slots being provided with inclined bores open to the top face of the body and extending downwardly therewithin into a converging relationship with the respective slots, said bores each having an open side wall at its converging end communicating with the associated slot and also having abutment means adjacent the open side wall, relatively hard spherical locking elements positioned within the respective bores and operatively retained in position by said abutment means for the insertion of blades within said slots.

4. The device as defined in claim 3 together with a slotted cover plate removably secured to the top face of said body and closing the upper ends of said bores, the slots in said cover plate being in register with said slots in said body.

5. The device as defined in claim 3 wherein said body is horizontally elongated and said slots therein are mutually parallel.

6. The device as defined in claim 3 wherein said body is of a circular configuration and said slots therein are radially inwardly convergent.

7. A tool holder device of the character shown and described for releasably positioning tool blades which

comprises a longitudinally-extending body having a series of horizontally-spaced apart and vertically-extending front slotted portions dividing its front face into segments, said slotted portions extending between and being open to top and bottom and front faces of said body and terminating backwardly in spaced relation with a back face thereof, a series of inclined opening portions open to the top face of said body and projecting downwardly therein along the segments and having lower end portions converging with an associated one of said slotted portions, each of said opening portions having an open side wall at its converging end communicating with its associated slotted portion, an abutment portion adjacent the open side wall, relatively hard spherical locking elements, one of said elements being positioned within each of said opening portions and being operatively retained in position by said abutment means for the insertion of a blade within an associated slotted portion.

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