

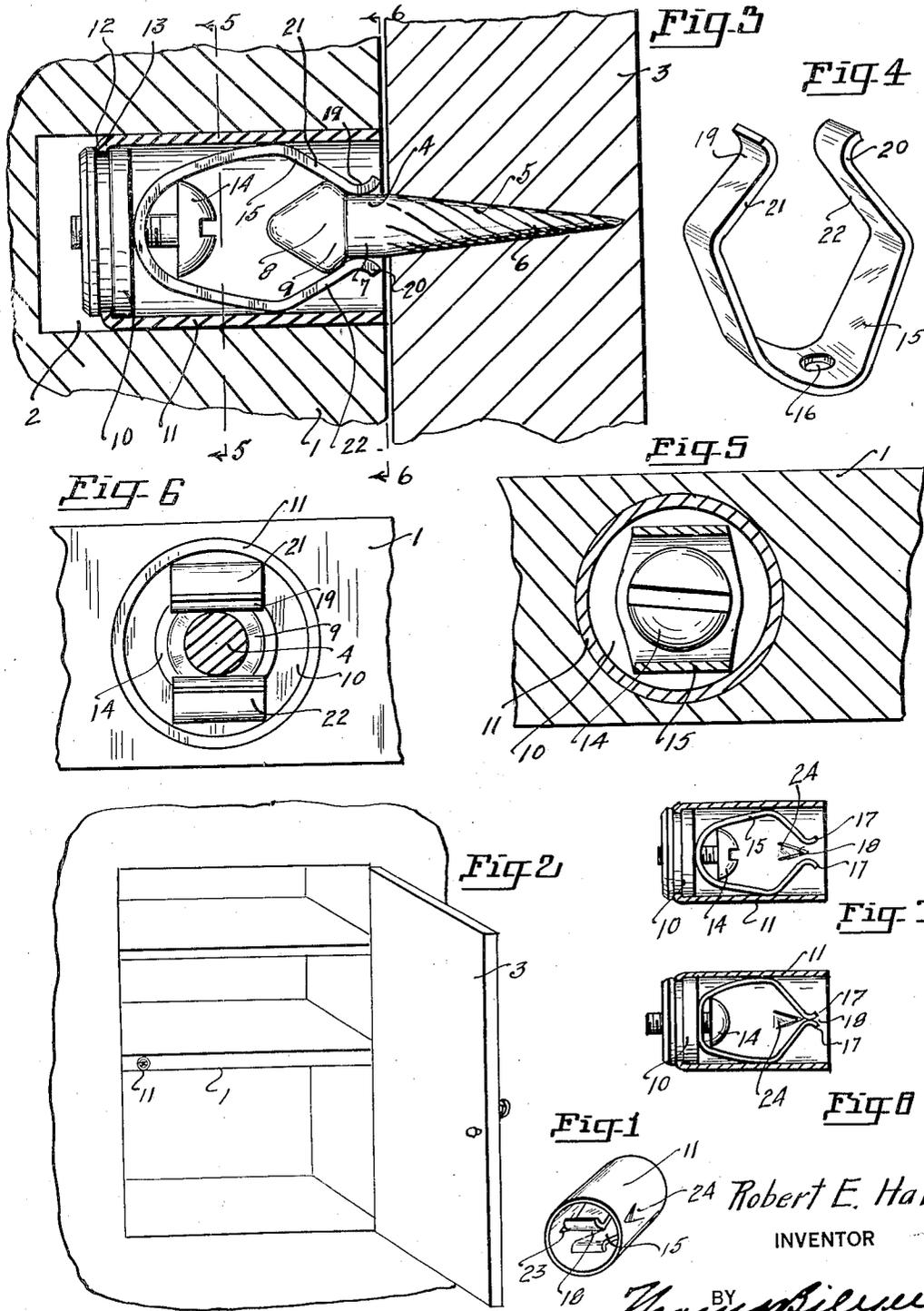
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CABINET LATCH

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CABINET LATCH

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1 Claim. (Cl. 292—17)

My invention consists primarily of a short cylinder having a base attached, or formed integral therewith. An adjustable catch or snap is secured to the base and is disposed within the cylinder and is adapted for being secured to the base by an adjustable threaded fastener, through the use of which a suitable fastening may be made with a headed stem that is secured to the door and which may be made to engage the snap fastener when the door is closed.

The device being cylindrical, facilitates the ease with which the same may be secured to the supporting structure. The headed member being threaded on the driving end facilitates its being secured in place by being driven home.

I have found most satisfactory results may be obtained wherein the headed member is first secured to the door of the movable member and which will permit the workman to spot the location for the boring of the hole into which the cylindrical member may be later attached.

To facilitate the assembly of the base to the cylinder the same has a threaded hole disposed in its center and an annular recess disposed in its outer periphery, into which the base end of the cylinder wall may be crimped to secure the two together.

One, or more locking points may be formed within the wall of the cylinder. The locking points may be forced outward by a nail set, or other instrument, for fixedly positioning the assembly within the wall of the shelf, or other support to which the same is to be attached.

A clamping clip is placeable within the cylinder and is adapted for being secured to the base by a screw. The head of the screw engages the side walls of the clip within the cylinder. The degree of tension developed between the clip and the screw and the base, determines the amount of opening of the clip that is to receive the headed stem therein and to secure and to lock the same together; the spring clip developing the tension between the clip and the headed stem.

One of the objects of my device is to provide a cupboard latch assembly that may be easily secured in place and that may be adjusted as to locking tension easily and speedily and through the use of simple tools.

A still further object of my invention consists in providing a cupboard locking latch that may be easily and speedily attached and that will remain in usable condition over relatively long periods of use and that will support the door, to thereby prevent its sagging upon its hinges.

A still further object of my invention consists

in providing a cupboard latch, the locking tension of which may be easily adjusted and predetermined.

With these and incidental objects in view, the invention consists in certain novel features of construction and combination of parts, the essential elements, of which are set forth in the appended claims, and a preferred form of embodiment of which is hereinafter shown with reference to the drawing which accompanies and forms a part of this specification.

In the drawing:

Fig. 1 is a perspective, end view of the barrel end of the device shown from placement.

Fig. 2 is a perspective, front view of a cupboard illustrating the door open and illustrating the cylinder in place within the shelf and illustrating the headed stem outwardly projecting from the inside of the door and in registry with the cylinder when the door is closed.

Fig. 3 is a sectional, side view of the assembly in place and in locked engagement.

Fig. 4 is a perspective, side view of the spring locking latch member shown removed from the cylinder.

Fig. 5 is a sectional, end view of the assembly taken on line 5—5 of Fig. 3, looking in the direction indicated.

Fig. 6 is a sectional, end view of the assembly taken on line 6—6 of Fig. 3, looking in the direction indicated.

Fig. 7 is a sectional, side view of the cylinder shown removed from the cupboard shelf and illustrating the locking latch under a limited amount of tension for locking the latch assembly together.

Fig. 8 is a sectional, side view of the cylinder assembly illustrating the locking latch in position for exerting an undue amount of locking tension upon the headed stem when the same is made to engage the locking latch.

Like reference characters refer to like parts throughout the several views.

1 is the shelf having a cylindrical hole 2 bored, or otherwise formed therein. 3 is the door to which the stem 4 is attached. A headed stem 4 is adapted for placement within the door, the same preferably having a long tapered end 5 having threaded corrugations 6 disposed upon its outer surface to permit the same by being driven home into the door assembly and for being locked thereto when driven home.

A cylindrical stem 7 is disposed upon the headed end of the stem and a head 8 terminates the outer end of the stem. The outer end of the head

is conical and is formed with a uniformly sloping surface 9.

A base 10 is adapted for being secured to the cylinder 11. The base 10 has a recess 12 formed in its outer periphery into which the base end 13, of the cylinder may be crimped for securing the cylinder to the base.

Where precise instruments are provided the base 10 may be smooth upon its outer peripheral surface to adapt the same for being positioned by a pressed fit to the cylinder 11. A threaded hole is formed central of the base into which a locking adjusting screw 14 may be threadably attached. A locking clip 15 is adapted for placement within the cylinder and a hole 16 is formed central of the free ends of the locking clip to receive the screw 14. The inner walls of the locking clip are so shaped that the head of the fastening screw may be made to engage the same and to force the locking clip outward against the inner surface of the cylinder.

The application of pressure to the screw 14 predetermines the spaced relationship of the end 17 of the spring clip and therefore predetermines the tension that will develop between the locking clip and the headed stem 4.

The application of additional pressure to the adjusting screw 14 will entirely close the gap 18 between the end 17, as illustrated in Fig. 8. Reverse curves 19 and 20 are disposed within the free ends of the locking clip to facilitate the engagement of the head 8 of the stem therebetween. The inner surfaces 21 and 22 of the locking clip are shaped as to precisely engage the sloping surface 9 of the headed stem.

In the manufacture of the cylindrical member 11, the oppositely disposed side walls of the cylindrical member are slitted at 23 and 24 sufficiently to form locking points and when the hole 2 has been bored and the cylinder is forced thereinto, a nail set, or other instrument may be made to engage the slitted points 23 and 24 and to force

the same into the walls of the supporting media into which the cylinder is placed, which locks the same therein.

I have found best results are to be obtained when the headed member 4, is placed first into the door, or lid 3 and the closing of the door, or lid upon the supporting media, into which the cylinder assembly is to be placed causes the headed member to engage the surface of the same and to precisely spot the location of the head, at which time the hole may be precisely bored for the cylinder assembly and when the cylinder assembly is placed within the hole, the precise registry of alignment may be formed between the cylinder, the latch member, the head, and the stem.

While the form of mechanism herein shown and described, is admirably adapted to fulfill the objects primarily stated, it is to be understood that it is not intended to confine the invention to the one form of embodiment herein shown and described, as it is susceptible of embodiment in various forms, all coming within the scope of the claim which follows.

What I claim is:

In a device of the class described, the combination of a cylinder open at one of its ends and closed at its opposite end, a clip having outwardly extending spring catch arms adjustably mounted within the cylinder, said clip being mounted by a screw midway of its length to the interior of the closed end of said cylinder, the outer surfaces of said arms bearing at all times against the inner periphery of said cylinder, said screw having a head of sufficient diameter to bear at all times against the inner surfaces of said spring catch arms to increase or decrease outward pressure against said arms to cause inward or outward movement of the ends of said spring catch arms to afford adjustability for their engagement with a keeper.

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