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Hanson

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[54] **LOCKING DEVICE FOR HANGERS FOR PERFORATED BOARDS**

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[52] **U.S. Cl.** **248/223,** 248/DIG. 3

[51] **Int. Cl.** **F16m 13/00**

[58] **Field of Search** ..... 248/220.5, DIG. 3

[56] **References Cited**

UNITED STATES PATENTS

2,996,192	8/1961	Dell et al.	248/DIG. 3
3,477,677	11/1969	Hindley	248/DIG. 3

FOREIGN PATENTS OR APPLICATIONS

983,392	2/1965	Great Britain	248/DIG. 3

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[57] **ABSTRACT**

In combination with a peg or hanger pin used as an article hanger with a perforated board, a locking device comprising a key having a compound bend with an opening in one portion receiving the peg, the key being slidable along the peg to a point where another portion of the key contacts the perforated board, locking the peg thereto in the manner of a cockable washer.

5 Claims, 3 Drawing Figures

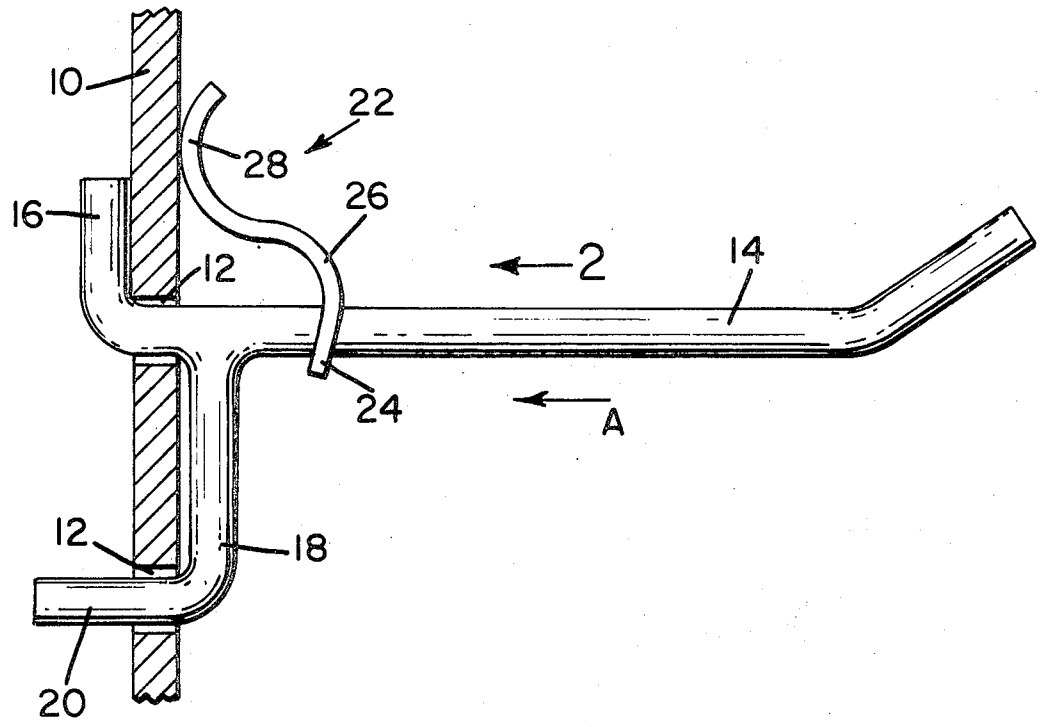


FIG. 1

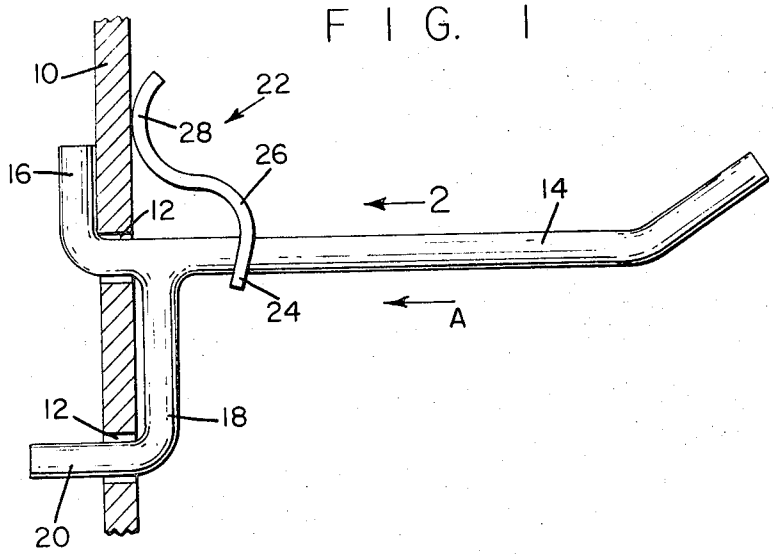


FIG. 2

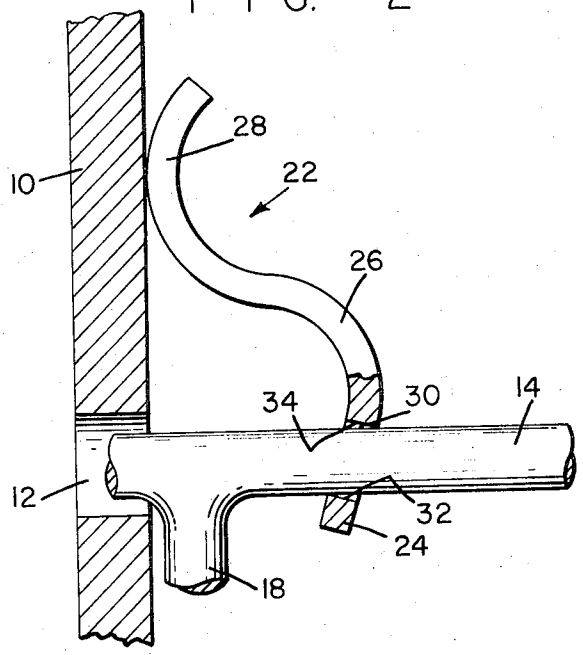
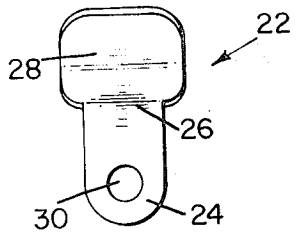


FIG. 3



LOCKING DEVICE FOR HANGERS FOR PERFORATED BOARDS

BACKGROUND OF THE INVENTION

Perforated boards with hangers, etc., are very convenient devices for hanging all kinds of articles, even including shelving. They have the defect that it is very difficult to lock them in position so they are easily accidentally detached from the perforated board, particularly when removing an article which is hung on a peg by means of a cord or loop. Various devices such as small springs or spring clips have been used to attempt to lock the hangers in place but these are very small and difficult to apply. It is the principal object of the present invention to provide a very simple and inexpensive locking device easily but firmly locking the peg or hanger pin in position on the peg board.

SUMMARY OF THE INVENTION

Assuming that a more or less conventional peg or hanger pin has been applied in the usual way to a perforated board, this peg or pin will in general have a forwardly extending shank normal to the perforated board and a tail or terminal portion which has been thrust through the opening in the perforated board contacting the latter above the opening at the rear.

The present invention includes the provision of a key-like member bent into a compound curve providing e.g., two key portions, there being an aperture in one position. With the peg in position on the perforated board, the key-like member is slid onto the peg, until the non-apertured portion of the key-like member contacts the board above the opening through which the peg extends. Then a slight push downward on the peg and a slight push inwardly on the apertured portion of the key causes the key to grip the peg firmly at an angle with respect to the peg, the edges of the aperture tending to grip the top and bottom portions of the peg, thereby holding the latter in position against accidental extraction. The key is also easily removed by a pull on the apertured portion thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a view in elevation illustrating the key-like member assembled with respect to the peg and the board;

FIG. 2 is a similar view with parts of the key-like member in section to illustrate the action on a larger scale, and

FIG. 3 is a front view in elevation of the key-like member looking in the direction of arrow 2 in FIG. 1 with the peg omitted.

PREFERRED EMBODIMENT OF THE INVENTION

The reference numeral 10 indicates a perforated board having openings 12 therein for the reception of the peg or hanger pin 14, the latter having an elongated shank as shown with an upturned terminal portion 16 extending through the pegboard. The usual peg also has a downturned front member 18 having a tail indicated at 20 that goes through an opening 12 below the peg. As is well known, such hangers are loose and have to be because the opening 12 must be of larger diameter than the shank 14 in order to enable insertion of the terminal bent portion 16 to a position to the rear of the perforated board 10.

In order to hold the peg locked in position with respect to the perforated board 10, a key generally indicated at 22 is provided. This key has a relatively straight portion 24 merging into a curve 26 in turn merging into a reentrant curve at 28. The curved portion at 28 is located e.g., in a wider part of the key than is the flat portion at 24. The flat portion at 24 is perforated providing an opening 30 just slightly larger than the shank of the peg 14. The material of the key is of appreciable thickness so that it may be made out of pressed metal and retain its rigidity. The hole 30 is provided with square cut interior edges as at 32 and 34, see FIG. 2.

With the peg in position as in FIG. 1, the key is entered upon the shank 14 through the opening 30 and the key is then slid on until the convex portion of the reentrant curved wider part 28 contacts the front surface of the perforated board above the opening 12. A slight inward press in the direction of arrow A in FIG. 1 locks the part 24 on the shank at a slight angle so that the edges at 32 and 34 engage and tend to dig into the surface of the peg 14, thereby firmly holding the same in position until the key is deliberately released. This may be done by manually engaging the key behind area 24 and giving it a slight pull. With this action the key is released and the peg 14 may be removed from the pegboard.

For best results, the opening is but slightly larger than the size of the peg, and two sizes of openings are preferable, e.g., a one-eighth inch or just larger for a one-eighth inch diameter peg, and a one-quarter inch or just larger opening for a one-quarter inch diameter peg.

I claim:

1. The combination of a peg and a perforated board, the peg having a shank with a terminal portion entered through an opening in the perforated board to lie at a surface thereof opposite the shank, said shank extending out from the board at a right angle thereto, with a key, said key including a substantially flat rigid portion having an unobstructed opening of slightly larger diameter than the diameter of said shank and having sharp edges surrounding said opening on opposite sides of said flat portion, and another portion, the latter being offset from the portion having the opening, the key receiving the shank of the peg through the opening and being slidable on the shank of the peg to contact the perforated board by said other portion, the apertured portion of the key lying at an angle with respect to the plane of the perforated board and canted within limits set by said sharp edges to an inclined position relative to the shank of the peg when the other portion of the key is in position above the shank of the peg and against the perforated board, said sharp edges thereby gripping the shank, and said flat portion terminating beneath and adjacent said shank and spaced substantially outwardly from said perforated board.

2. The combination of claim 1 wherein the angle of the portion of the key having the opening with respect to the shank of the peg is in a direction downwardly and inwardly relative to the perforated board when the key is in locking condition relative to the peg.

3. The combination of claim 1 wherein the said other portion of the key is provided with a reverse curve.

4. The combination of claim 1 wherein the flat portion merges into the other portion which is curved to present a convex side to the perforated board.

5. The combination of claim 3 wherein the curved portion is wider than the flat portion having the opening therein.

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