

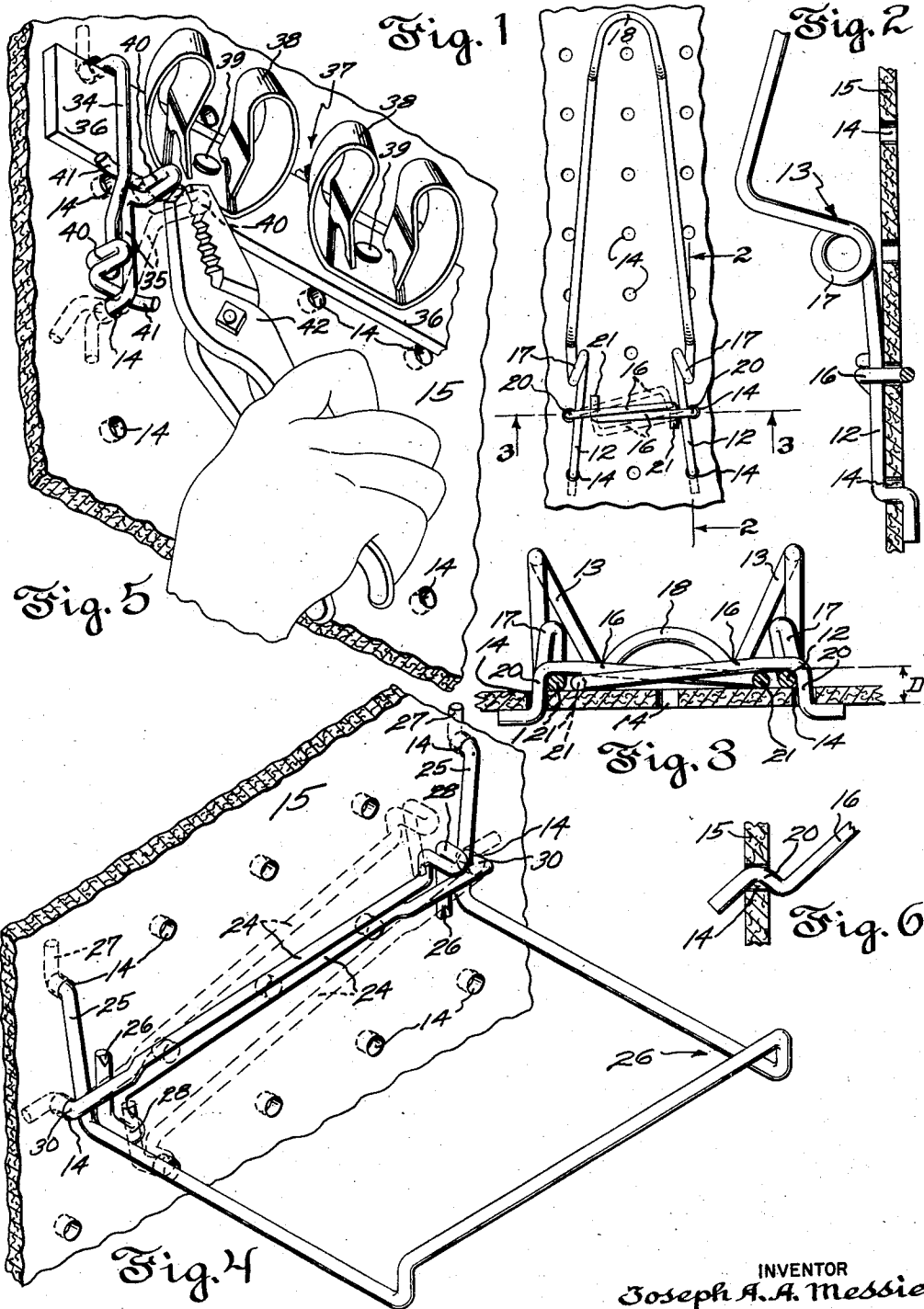
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J. A. A. MESSIER

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STAY FASTENING FOR PEG BOARD MOUNTED ARTICLES

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INVENTOR
Joseph A. A. Messier
BY *R. Smith*
ATTORNEY

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STAY FASTENING FOR PEG BOARD MOUNTED ARTICLES

Joseph A. A. Messier, East Montpelier, Vt.

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This invention relates to fastening means for binding supported articles of hardware firmly against a panel surface such as the face of a "peg board," so called because it contains numerous anchorage holes engageable in a choice of locations by articles of hardware mountable on the board particularly when of bent wire construction such as tool holding clamps or merchandise display brackets.

It is common practice to support from peg board anchorage holes articles formed from a run of wire bent to provide mounted free end portions that are formed with a jog or offset terminal adapted to hook into the anchorage hole and reach into retaining engagement with the rear surface of the peg board. This manner of supporting articles against the front surface of a peg board enables ready attachment and detachment of the article but gives negligible stability and firmness against swaying from side to side or canting away from the front surface of the board due to freedom of the jog at the anchored end of the wire to swivel in the hole of the peg board. Such condition of instability is aggravated because peg board holes must be somewhat oversize in relation to the jogged wire ends that are anchored therein in order to permit insertion through the hole of the offsetting bends at the jog in the wire.

An object of the present improvements is to fasten an article so that it can be held at the front surface of a peg board in a manner to stay the article firmly against looseness and swaying.

Another object is to accomplish this without resort to fasteners more complicated than two simple self interlocking wire clips each anchored in a peg board hole that is proximate, but not occupied by, wire of the supported article that is to be secured.

A related object is to provide two such clips so cooperatively shaped and related that by the simple act of interlocking with each other they serve to bind not only the supported article but also themselves firmly against the front surface of the peg board.

A further object is so to form two such cooperative fastening clips that they may be of identical shape and thus avoid having to be stocked in pairs of "rights" and "lefts."

A further object is to equip such self interlocking fastening clips with projecting spurs shaped to provide better grasp for finger manipulation or application of pliers or other tool when such is needed to effect extra strong interlocking engagement of clips embodying the present improvements when specially shaped to make accidental loosening impossible.

A still further object of the invention is to provide a pair of fastening clips operating on the principles referred to that are suitable for firmly and removably clamping against the surface of the peg board a solid bar of appreciable width held under a portion of the length of one of the clips that is in excess of the length of the other clip.

These and other objects of the invention will become apparent in greater detail from the following description of illustrative embodiments of the improvements that have been discovered to be successfully operative, such description having reference to the appended drawings wherein:

Fig. 1 shows a front view of the mounting legs of a

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bent wire spring clamp which mounting legs are held fixedly pressed against the front upright surface of a peg board by a pair of self interlocking clips according to the present improvements.

Fig. 2 is a fragmentary side elevation of the lower portion of the spring clamp of Fig. 1 drawn on an enlarged scale showing the supporting peg board in section.

Fig. 3 is a bottom plan view drawn on the same scale as Fig. 2 taken in section on the plane 3—3 in Fig. 1 looking in the direction of the arrows.

Fig. 4 is an isometric view of a bent wire bracket whose mounting legs are firmly stayed against the front upright surface of a peg board by my improved self interlocking clips having a modified construction.

Fig. 5 shows a pair of still further modified self interlocking fastening clips in which one clip is substantially longer than the other to provide space receptive to a peg board mounted bar of substantial width and which itself is not anchored in any hole or holes of the peg board.

Fig. 6 is a detail view showing the jog at the offset end of one of the fastening clips passing out of or into its anchored position in a peg board hole.

In Figs. 1, 2 and 3 a simplified embodiment of the invention is shown wherein anchorage ends of the mounting legs 12 of a spring clamp 13 form the mounting portion of an article to be mounted that is suitable for retaining tool handles when hung thereon. Legs 12 are hooked respectively into anchorage openings 14 in a support panel such as peg board 15. Clamp 13 comprises a continuous run of resilient wire which is looped at spaced points 17 to function as a pinless hinge. The wire of clamp 13 forms a return bend 18 and is so inclined that this bend is in contact with the front surface of the peg board and yieldingly maintained there by spring bias in the loops 17.

The mounting legs 12 or mounting portion of clamp 13 are bound firmly and fixedly against the surface of the peg board panel in accordance with the present improvements by a pair of simple, mutually interlocked, fastening clips 16 that are easy of application and removal without the need of tools or extraneous fastening devices to secure them. In Figs. 1, 2 and 3 the fastening clips 16 are alike and of stiffly resilient clamp wire each jogged at 20 to provide an offset or anchorage end which, before the clips 16 are mutually interlocked, is freely insertable in one of the peg board anchorage holes 14. The opposite or locking end 21 of each clip 16 is bent in a direction to lie parallel with the surface of the peg board and forms a tuck spur at 21, this lying in a plane approximately perpendicular to a plane containing the jog at the board anchored end 20 of the clip. The locking end 21 is thereby suited to being tucked under the other fastening clip 16 of the self interlocking pair of clips in the close neighborhood of that retaining leg 12 of spring clamp 13 that is most remote from the peg board hole in which the offset end of the clip 16 is anchored.

When the fastening clips 16 are to be unlocked and removed, one or both of them is swung about the hole in the peg board in which it is individually anchored to broken line positions shown in Fig. 1. After this they can be canted forward away from the surface of the board and withdrawn entirely from their anchorage holes in the peg board. For restoring clips 16 to fastening position they are merely manipulated in the reverse order of procedure from that described above.

Fig. 3 illustrates the strong mechanical binding action of the clips 16 against the legs 12 of the mounted article 13 as well as the mutual criss cross interlocking action of the clips which holds them in an article fastening position. For this purpose it is preferable that the dimension of the offset in each clip indicated "D" in Fig. 3 be a little less than the combined thickness of the peg board 15 and the article 12 that is to be fastened by the

clips in order that the article be made to serve as a fulcrum against which the clip will forceably be pressed when the locking end 21 of each clip is forced backward into contact with the surface of the peg board to enable such end to be swung from its broken line position to its full line position in Fig. 1 whereby it becomes firmly tucked under the other fastening clip of the interlocking pair. The force needed to so depress the locking end of the clip is opposed by resilience in the length of the clip 16 which enables it to bow slightly over the clamp leg 12 if necessary between its anchored end 20 and its locking end 21. The residual tendency of the locking end of the clip to spring away from the peg board causes constant pressure between the locking end of each clip and the other clip from which pressure friction arises that opposes accidental unlocking of the clips.

In Fig. 4 the same principle of interlocking action of the clips is made use of in a relatively longer form of clip 24 serving to bind firmly against the front surface of the peg board 15 the mounting legs 25 of a wire shelf bracket 26 whose offset ends 27 are anchored in conventional manner in two widely spaced apart openings 14 in the peg board. The modified construction of clips 24 provides a handle loop 28 of the clamp wire of each clip near its tuck spur 26 which as before is adapted to be tucked forcibly under the other clamp wire 24 in the close neighborhood of the bracket mounting legs 25. Clips 24 in Fig. 4 have their offset ends 30 swingably anchored in suitable peg board holes 14 so that the clips can be mutually engaged and disengaged by relative movement between their full line and broken line positions in Fig. 4. The handle loops 28 afford convenient means for finger grasp or manipulation of the clips by tools.

In Fig. 5 a still further modified construction is shown in which one fastening clip 34 is longer than other fastening clips 35 so that a portion of the length of the longer clip 34, that is in excess of the length of clip 35, bridges a space of sufficient extent to receive the relatively wide bar 36 or mounting portion of a tool holding rack 37 adapted to carry a plurality of tool holding supports made of resilient metallic strip 38 individually fastened to the bar 36 as by rivets 39. Each of clips 34 and 35 is shaped to provide a handle loop 40 much like the handle loops 28 in the clip of Fig. 4 affording an accessible projection which may be forcibly manipulated by finger action or tools to engage and disengage the clips. It will be noted here that the mounted bar 36 need have no supporting engagement with any hole in the peg board if two or more pairs of the fastening clips such as 34 and 35 are employed at locations spaced lengthwise of the bar.

Also in Fig. 5 each of the clips 34, 35 further is shown to have its tuck spur 41 inclined in a direction away from the peg board for positive security against accidental disengagement of the clips. This shape of clip will require the exertion of more force to tuck its locking end 41 under the other clip because of requiring a small amount of twisting action in addition to depressing and swinging action of the clip about its anchorage hole in the peg board. The broken line position of the handle loop 40 is shown in the grasp of pliers 42 for exerting such more forceful twisting action in moving the clips between interlocking and unlocking positions.

To insure that the fastening clips shall bind primarily against the supported article which they secure it is preferable that the thickness of the supported article be at least a little greater than the corresponding thickness of the locking ends of the clips.

Since fastening clips may be fashioned in various shapes and possess various shapes in cross section, the appended claims are directed to and intended to cover all variations from the specific shapes and arrangements herein disclosed that fall within the novel principles of the invention as defined in the claims.

I claim:

1. A stay fastening for binding to a support panel an article to be mounted removably thereon and flat thereagainst, comprising the combination with an article having an elongate mounting portion, a support panel having a uniplanar surface containing at least two anchorage holes spaced apart crosswise of said mounting portion of the article a distance at least as great as the width of said mounting portion, a first article securing clip comprising a stiffly resilient first clamp wire having a jogged end in swivel permitting anchored engagement with a first one of said anchorage holes proximate said mounting portion of said article and extending from its said jogged end overlappingly crosswise and past said mounting portion and having a locking end bent to form a tuck spur paralleling said panel surface, and a second article securing clip comprising a second stiffly resilient clamp wire also having a jogged end in swivel permitting anchored engagement with a different one of said anchorage holes at the opposite side of said article mounting portion from said first hole, said second clamp wire extending from its own said jogged end overlappingly crosswise and past said mounting portion of said article alongside said first clamp wire and also having a locking end bent to form a tuck spur paralleling said panel surface, so that by swinging with respect to said panel hole in which it is anchored at least one of said clamp wires can attain a position to retainingly lodge its said tuck spur between the other said clamp wire and said panel surface proximate said mounting portion of the article.

2. A stay fastening as defined in claim 1, in which each of the said clamp wires is of length to be swung in a direction to lodge its said tuck spur retainingly under the other said clamp wire proximate to the said mounting portion of the said article.

3. A stay fastening as defined in claim 1, in which at least the said second article securing clip comprises a bent run of a single resilient round wire.

4. A stay fastening as defined in claim 1, in which one of the said clamp wires is sufficiently longer than the other of said clamp wires to receive a bar-like article mounting portion of substantial width between the said hole engaging jogged end of the said first clamp wire and the said tuck spur of the said second clamp wire.

5. A stay fastening as defined in claim 1, in which the said article mounting portion is at least thicker than the said tuck spur of the said second clamp wire, wherefore said article portion serves as a fulcrum against which said second clamp wire may bind in a manner urging the same to bow when its said tuck spur is forced toward the said panel surface for being lodged retainingly under the said first clamp wire.

6. A stay fastening as defined in claim 1, together with a reentrant bend in one of the said clamp wires outstanding from the said panel surface near the said locking end of the former whereby to afford an accessible projection by means of which said second clip can forcefully be grasped and maneuvered.

7. A stay fastening as defined in claim 1, in which the terminal of the said locking end of the said second clamp wire is bowed in a direction away from the said panel surface for preventing accidental retraction of the said tuck spur from its retainingly lodged position between the other clamp wire and said panel surface.

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