Feb. 11, 1936. J. H. COYLE 2,030,148

WRENCH CLIP

Filed July 5, 1932

Fig. 1.

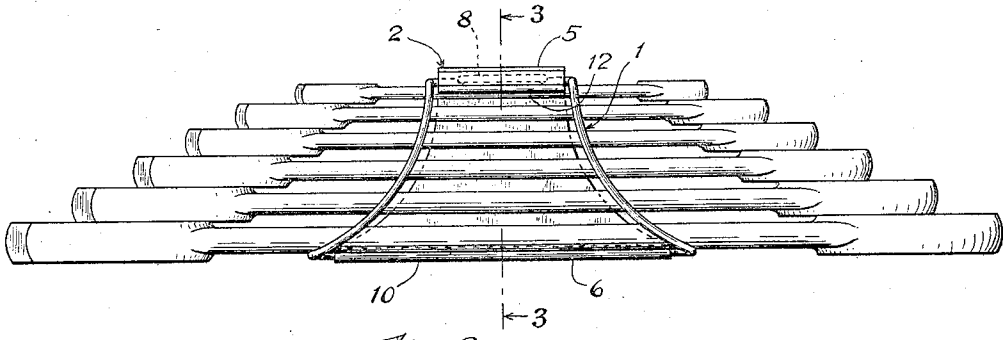


Fig. 2.

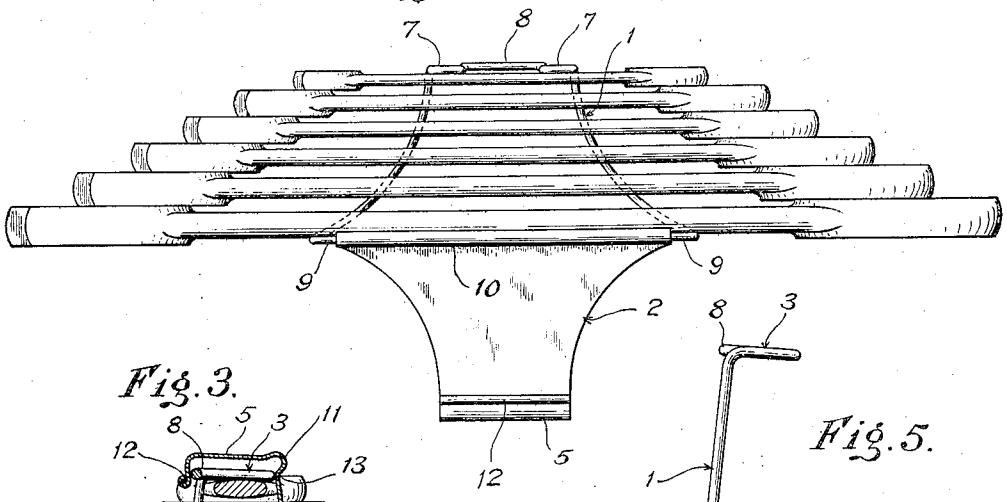


Fig. 3.

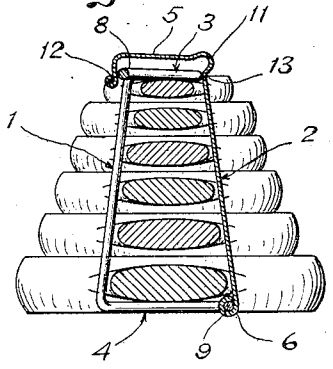


Fig. 4.

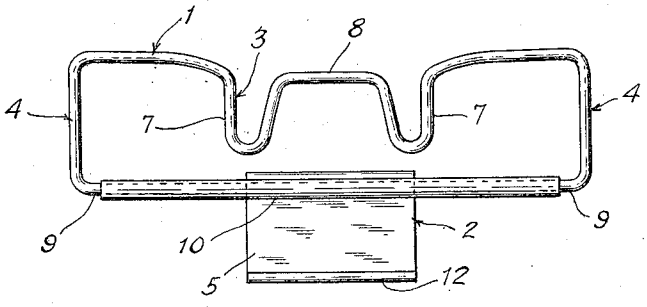
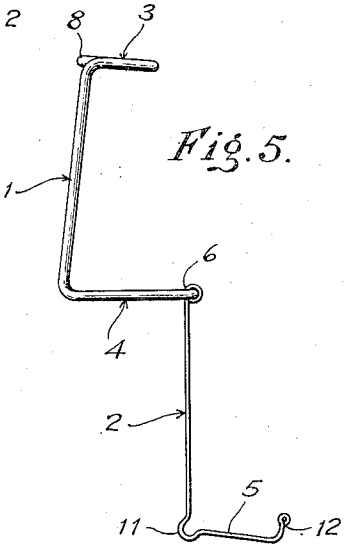


Fig. 5.



INVENTOR
JOHN H. COYLE
BY
ATTORNEY.

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WRENCH CLIP

John H. Coyle, Hartford, Conn., assignor to The Billings & Spencer Company, a corporation of Connecticut

Application July 5, 1932, Serial No. 620,793

14 Claims. (Cl. 206—16)

My invention relates to wrench clips.

It has for its object to provide an improved wrench clip, and, more particularly, an improved clip of the type wherein a narrow band grasps the set of wrenches between their ends and remote from the heads thereof. A further object of my invention is to provide an improved clip of this type which is adapted to hold the wrenches very securely in position, and which also has an improved and simplified body construction, and one which enables the latter to be made of wire and to be very inexpensively manufactured. These and other objects and advantages of my improved construction will, however, hereinafter more fully appear.

In the accompanying drawing, I have shown for purposes of illustration, one embodiment which my invention may assume in practice.

In the drawing,—

Figure 1 is a side elevation of a wrench set equipped with my improved clip;

Fig. 2 is a similar view, but of the opposite side and with the clip open;

Fig. 3 is a vertical sectional view on line 3—3 of Figure 1;

Fig. 4 is a plan view of the clip with the wrenches removed and the clip in the open position illustrated in Figure 2, and

Fig. 5 is an end elevation of the clip with the wrenches removed and the clip in the position illustrated in Figures 2 and 4.

In this illustrative construction, I have shown a clip of a well known Moore type of narrow spring band including a spring body or holding member, generally indicated at 1, and a co-operating pivoted cover member, generally indicated at 2.

Referring more particularly to the body member 1, it will be noted that, as distinguished from being formed from sheet metal, the same is of wire and formed of a single piece of wire. As shown in Figure 1, the member 1 has spaced, depending, outwardly curved wire arms or portions which herein also slope upwardly toward the right, as shown in Figure 5. On the opposite ends of these portions 1 are laterally extending top and base portions 3 and 4 adapted to hold a series of wrenches therebetween and which are of improved construction and respectively adapted to co-operate with the clip portion 5 of the cover 2 and the base 6 of the latter. Referring more particularly to the portion 3, it will be noted that this comprises a pair of spaced, laterally projecting, substantially U-shaped portions 7 on opposite sides of a reversely disposed and substantially wider U portion 8. As shown in Figure 5, these portions 7 and 8 are disposed in substantially the same plane and slightly inclined downwardly at the front, while the portion 8 projects laterally at the left slightly beyond the portions 7. The portion 4, on the other hand, comprises spaced transverse members extending from the opposite lower ends of the depending arms, or portions, of member 1 and in the same direction as the portion 7, but beyond the latter. As shown herein, these portions 4 are also each provided with inturned right angled extensions 9 receivable in the opposite ends of a single turned or beaded edge 10 on the cover 2. Thus it will be noted that the portions 3 and 4 permit the free insertion of a set of wrenches between the same, while the wrenches will be securely held in position between the spring members 3 and 4 thus formed.

It will also be evident that when the member 1 has been filled with wrenches and the cover 2 has been closed, the latter will co-operate effectively with the member 1 in securely holding the wrenches in position. As shown, the clip portion 5 of the member 2 has its usual spring groove 11 and depending rolled rim portion 12. Further, this portion 12 herein engages with the projecting portion 8 on the member 1 (see Figure 3), and co-operates with the latter and the portions 7 in a very effective manner, being snapped over the portion 8, and, in the closed position of the parts, forcing the extremities of the U-shaped portions 7 into engagement with the adjacent surface of the member 2 below the groove 11 therein in such manner as to reinforce and stiffen the structure while also minimizing the chance of accidental release.

In the use of my improved construction, it will be evident that the member 2 may be readily snapped over the portion 8 whenever the member 1 is filled with wrenches. Further, it will be evident that the wrenches will be firmly held in position. The member 2 may also be readily released whenever desired by simply forcing up its edge 12 to release the same from the portion 8, its edge 12 being readily accessible due to the lateral spacing of the arms or portions 1. Attention is also particularly directed to the fact that, due to my improved construction of the member 1 and the improved co-operation of the same with the member 2 made possible as a result of this improved construction, very strong and effective spring retaining portions 3 and 4 are provided. Increased strength and rigidity are also obtainable by the special construction of the U-shaped mem-

bers 7 and 8 on the portion 3, and the interengagement of the ends of the members 7 with the member 2 below the spring groove 11 while the portion 12 on the member 2 is below the portion 3 on the member 1. It will also be noted that at the same time that these advantages are obtained, it is made possible to make the member 1 of a single piece of wire and to eliminate the necessity of any additional spring means on the member 1, while at the same time increasing the strength and rigidity of the member 2 by providing a single beaded edge 10 thereon adapted to receive the extremities of the portions 9 therein during assembly.

It will be evident that when the wrenches are held in the spring member 1, the shanks of the same are always clearly visible through the member 1 from one side. Also, if desired, the member 2 may be opened in such manner as to permit them also to be visible from the other side, while the group of wrenches will still be maintained in position by the portions 3 and 4 on the member 1. Further, it will be observed that as a result of providing the U-shaped portions 7 and the intermediate portion 8 of greater width than the portions 7, a construction of such ruggedness is produced as to be adapted to withstand rough usage. It will further, of course, be evident that the two spring members 1 and 2 co-operate to grasp the wrenches in such an effective manner as to make it unnecessary to provide spacing means extending between the wrench heads and engageable with the latter. These and other advantages of my improved construction will, however, be clearly apparent to those skilled in the art.

While I have in this application specifically described one embodiment which my invention may assume in practice, it will be understood that the same is shown for purposes of illustration, and that the invention may be modified and embodied in various other forms without departing from its spirit or the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. In a clip for wrench sets, a holding member having overlying wire holding portions projecting laterally therefrom in the same direction on its top and bottom, and a co-operating connecting member pivoted at the front of said bottom portion and snapping over the back of said top portion.

2. A clip for wrench sets comprising a wire holding member having overlying laterally projecting resilient wrench shank holding portions at its top and bottom adapted yieldingly to receive the wrenches therebetween in compressed relationship, and a co-operating connecting member connecting said portions at diagonally opposite points.

3. In a clip for wrench sets, a wire holding member having laterally projecting bottom and top portions adapted to grip wrenches between said portions and also having on said top portion a reversely projecting portion, and a co-operating connecting member pivoted on the bottom holding portion and snapping over said projecting portion.

4. A clip for wrench sets comprising a resilient holding member having overlying wrench shank holding portions at its top and bottom between which the wrench shanks are receivable in compressed relationship, said member being in the form of a single length of wire, and a co-operating connecting member connecting said wire portions at diagonally opposite points and pivoted on said bottom portion and snapping over said top portion.

5. A wrench clip for wrench sets comprising a wire holding member having overlying laterally projecting wrench shank holding portions at its top and bottom and also having pivot and snap engaging portions on the diagonally opposite extremities of said bottom and top portions respectively, and a connecting member pivoted on said pivot portion and overlying said top portion and engaging said snap portion.

6. A clip for wrench sets comprising a skeleton type holding member having wire holding portions extending laterally therefrom in the same direction at its top and bottom adapted to receive wrenches between said portions, said lower portion having aligned pivot forming members extended from the extremity thereof longitudinally of wrenches held in said holding member, a co-operating connecting member pivoted on said pivot forming members, and cooperating latching means on said cooperating member and said top wire holding portion.

7. A clip for wrench sets comprising a resilient holding member having overlying wrench shank holding portions at its top and bottom between which the wrench shanks are receivable in compressed relationship, a co-operating member pivoted on the extremity of one portion and snapping over the back of the other portion at diagonally opposite points, and means on the top holding portion engageable with said co-operating member between said diagonally opposite points for limiting the lateral approach of said pivoted member to said holding member when said co-operating member is snapped into connecting position.

8. A clip for wrench sets comprising a skeleton type holding member having wire holding portions extending laterally therefrom in the same direction at its top and bottom adapted to receive wrenches therebetween, and a cooperating member connecting said top and bottom wire holding portions, said cooperating member being of sheet metal and having a beaded portion at the opposite ends of its lower edge and said bottom wire holding portion having oppositely extended pivot portions located in said beaded portions.

9. A clip for wrench sets comprising a holding member having overlying wrench shank holding portions at its top and bottom adapted to receive wrenches in compressed relationship therebetween, a co-operating member pivoted on said bottom portion having a spring clip portion, means on said top portion over which said clip portion is snapped in wrench holding position, and oppositely extending abutment means on said top portion underlying said spring clip portion and engaging said cooperating member when the latter is in holding position.

10. In a clip for wrench sets, a holding member having spaced wrench shank engaging portions on its top and bottom adapted to receive a series of wrenches therebetween including reversely extending portions on its top, and a spring connected cover member pivoted on the bottom of said holding member and snapping over one of said reversely extending portions and engaging the other between its pivot and said last mentioned portion.

11. In a clip for wrench sets, a wrench holding member having a laterally projecting wire portion overlying the wrench shanks including a snap portion projecting oppositely laterally at the rear

of said overlying portion and also having a laterally projecting wire portion underlying the wrench shanks, and a co-operating connecting member pivoted on said underlying portion and snapped over said snap portion.

12. In a clip for wrench sets, a wrench holding member having a wire portion overlying the wrench shanks and comprising spaced substantially U-shaped members and an oppositely extending U-shaped member therebetween, and a co-operating member pivoted on said holding member and having a clip portion adapted to be snapped over said oppositely extending U-shaped member.

13. A clip for wrench sets comprising a wire holding member having spaced wrench shank engaging portions adapted to receive a series of wrenches therebetween and a reversely extending cover engaging portion on its top edge, and a cover member pivoted on its lower edge having a portion snapping over said reversely extending portion, said holding member likewise having portions on opposite sides of said reversely extending portion engageable with said cover member when the latter is snapped over said reversely extending portion.

14. In a clip for wrench sets, a cover member of sheet metal having on one end a spring connected lateral clip portion provided with a depending beaded flange, and having on the other end a bead, a co-operating holding member formed of a single length of wire and having bottom portions forming spaced bottom wrench supports supported in said bead, top portions extending toward said cover member and engageable therewith beneath said clip portion, and an oppositely disposed extension between said top portions disposable beneath said clip portion and adapted to be snapped under and hold said beaded flange.

JOHN H. COYLE.