

Aug. 30, 1932.

S. BOWER

1,874,871

CLOTHESPIN

Original Filed March 20, 1931

Fig. 1.

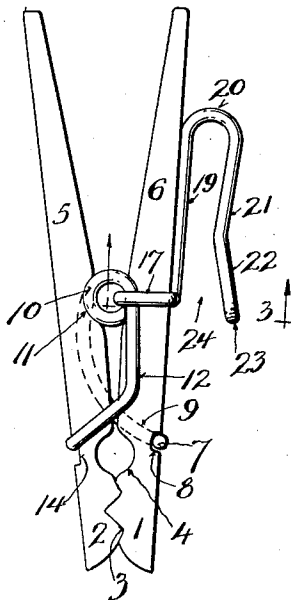


Fig. 2.

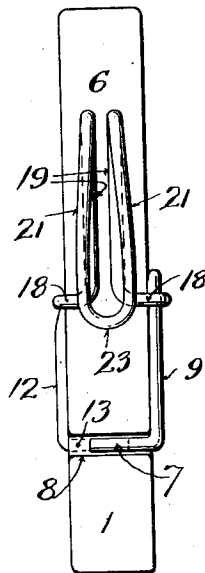


Fig. 3.

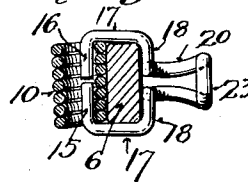


Fig. 4.

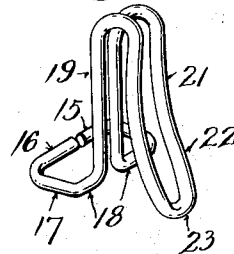


Fig. 5.

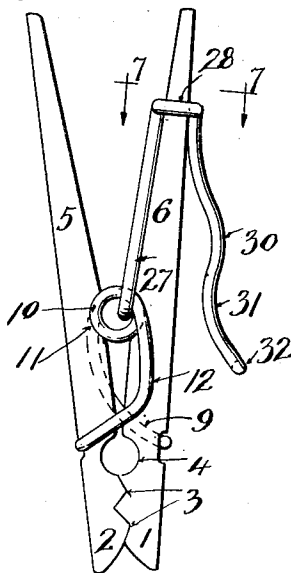


Fig. 6.

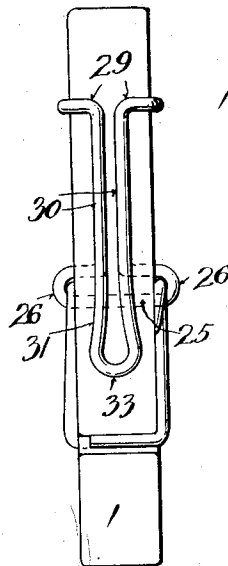


Fig. 7.

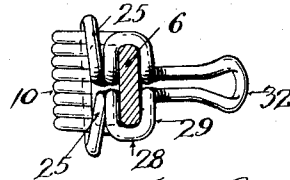
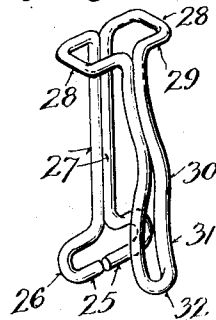


Fig. 8.



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CLOTHESPIN

Application filed March 20, 1931, Serial No. 524,015. Renewed June 23, 1932.

My invention relates to clothespins and more particularly to clothespins of the pincher type, wherein co-operating jaws clamp upon the garment or article to be hung upon a line, and where the jaws are operated by arms or fingers which are pinched toward each other to open the jaws. In this type of clothespin the jaws are held in closed position by means of a wire spring which also serves to hold the jaw members in operative and pivotal relation. In clothespins of this type it is common practice to fold a piece of garment or member which is to be hung on a line across the line and then to apply the jaws of the pin so that they press against the material and the line, holding the article on the latter. Where clothes lines are allowed to remain out and exposed to the weather continually, the line becomes soiled and where the articles come into contact with the line they are very often soiled.

The object of my invention is to provide a clothespin of the pincher type having a hook or supporting member for hanging the pin upon the line, leaving the pincher device to grip the garment or other member so that it will be supported from a point below the line. In this manner the garment or other article may be hung so that it is below the clothes line and cannot come into direct contact therewith and therefore cannot be soiled by contact with the line regardless of whether the latter is soiled or not.

I am aware that it has been proposed to provide a supporting hook for clothespins of this type but the object of my invention is to provide a very simple and inexpensive clothespin having a supporting hook which may be conveniently applied to the clothespin and without interfering with or detracting from the operation of the spring which operates the jaws of the pin. Furthermore, the hook is so made and applied that it will not interfere with the movement of the finger pieces which operate the jaws. Other objects

and advantages will be set forth in the following description of my invention.

In the drawing forming part of this application,

Figure 1 is an elevation of a clothespin embodying my invention in one form,

Figure 2 is a front elevation thereof,

Figure 3 is a sectional view taken on the line 3—3 of Figure 1,

Figure 4 is a perspective view of the hook member shown in Figures 1 to 3 inclusive,

Figure 5 is a side elevation of a clothespin embodying my invention in a modified form,

Figure 6 is a front elevation thereof,

Figure 7 is a sectional view taken on the line 7—7 of Figure 5, and

Figure 8 is a perspective view of the hook member shown in Figures 5 to 7 inclusive.

I will first describe the form of my invention shown in Figures 1 to 4 inclusive. The clothespin proper includes the co-operating jaw members 1, 2 which are adapted to be pressed toward each other to grip an article between them; and to prevent the article from slipping from the jaws I have formed the meeting edges thereof with projections or serrations 3 which will firmly grip a fabric and prevent it from drawing downwardly from the jaws.

Above the serrations I have formed cut-outs or grooves 4 in which a folded or bunched edge of the garment or other article may be placed, and which will be larger and thicker than the space between the serrated portions of the jaws to further decrease the tendency to pull downwardly out of the jaws.

The jaw members are continuous with the diverging finger pieces 5, 6 by means of which the jaws may be opened and closed. The spring member for holding the jaws in operative position and for pressing the jaws closed and which is not per se new in the present case, consists of a single piece of wire bent to form the following parts. One end 7 extends crosswise of the jaw 1 and is

adapted to seat in the recess 8 on the back of the jaw. From there the wire extends diagonally at 9 across the side edges of the jaw 1, thence upwardly along the edge of the jaw 2 and is thence formed into a coiled or helical spring section 10 of cylindrical shape, this spring portion seating in the curved grooves 11 on the opposed sides of the jaw members and forming a pivot for the jaw members to rock against. From the coiled portion the wire is again bent downwardly at 12 to extend along the outer face of the jaw member 1 and it then curves across the side of the jaw member 2 and the laterally extending end 13 is seated in a recess 14 of the jaw member 2 similar to the member 7 in the recess 8. The tension of this spring member is such that the two ends 7, 13 pressing against the outer sides of the jaw members tend to press the jaw members toward each other so that the serrated surfaces 3 will press a piece of fabric between them.

By pressing the finger pieces 5, 6 toward each other the jaws may be opened or spread apart to receive the fabric between them or to release the fabric; and during such movement the jaw members pivot upon the circular portion 10 of the spring. The spring also serves to hold the jaw members in assembled position.

The hook member shown in Figures 1 to 4 is composed of a piece of wire bent to form the following parts. The two aligned ends 15, 16 project into the bore of the cylindrical portion 10 of the spring, extending from points within the spring outwardly to the outer side of one of the jaw members and from there the wire extends at each side as shown at 17 across opposite sides of the jaw member 6 and the wire is then bent inwardly at each side, as shown at 18, to engage against the outer surface of the jaw member. From there the wire is bent upwardly at each side to form the upwardly extending arms 19 which extend upwardly along and against the outer face of one of the jaw members. At the upper end of the arms 19 the wire is curved or arched as shown at 20 and is then bent downwardly at 21 and preferably convergent in relation to the arms 19 and then the wire is bent slightly outwardly or away from the arms as shown at 22 meeting in a loop 23. The hook member is so formed and proportioned that it has a tendency to press laterally from opposite sides for the purpose of gripping the sides of the jaw member 6 to hold the hook in the position shown in Figures 1 and 2 or in other words, the hook member will remain pressed against the finger piece 6 as shown in these figures.

In using the clothespin just described, the jaws may be attached to the article to be supported on the line previous to the attachment of the clothespin to the line or after the clothespin has been mounted on the line. If

the former practice is followed, the finger pieces 5, 6, will be moved toward each other to open the jaws, whereupon the latter will be positioned to straddle a piece of fabric and the finger pieces will be released so that the jaws press the fabric between them. The clothespin will then be presented to the clothes line in such manner that the latter will pass into the space 24 between the hook 21 and the arms 19 and the pin will be suspended with the line engaging in the upper loop 20. The clothespin will then be suspended from the clothesline on the hook and as the loop 20 is above the center of gravity of the clothespin and as the jaws are some distance below the clothes line, the article supported will not come into direct contact with the clothes line. The article may be detached from the clothespin by simply pressing the finger pieces 5, 6 without removing the clothespin from the line or the clothespin may be unhooked from the clothes line and subsequently detached from the article.

In Figures 5 to 8 I have shown a modified form of the invention. In this construction the jaws, the finger pieces and the clamping spring are all made the same as in the first form. The hook member, however, is formed somewhat differently from that first described. The two aligning ends 25 extend inwardly from opposite ends of the cylindrical portion 10 of the spring.

The loop portions 26 extend around the edges of the cylindrical portion of the spring and the wire extends upwardly in the parallel and adjacent arms 27 lying close to or against the inner surface of one of the finger pieces 6. At some distance above the spring the wire of which the hook is formed is curved into two loop or U shape portions 28 which extend around opposite sides of the finger piece 6 and the portions of the wire approach or meet at the outer side of the finger piece as shown at 29. From here the double run of wire extends downwardly being curved outwardly at 30, thence inwardly at 31 and again outwardly at 32, where the sections of the wire meet in a loop 33. This device is used in the same manner as the first described form. The clothesline is passed first through the restricted space formed between the portions 31 of the hook and the outer face of the finger piece and comes to rest in the larger or flared portion 30.

In both forms of the invention the hook member is separately formed from the spring member and it may be inexpensively made in an ordinary wire bending machine. Either form of hook may be attached to the clothespin by simply spreading the two side portions until the ends may be inserted into the opposite ends of the cylindrical portion 10 of the spring and then released. The natural tension of the hook member will cause it to be clamped against the clothespin in the manner

shown and described. The hook member will in no way interfere with the construction or operation of the spring. On the other hand, the hook member is positively engaged with the spring by reason of the ends extending into the cylindrical portion thereof.

The weight of the article supported acts downwardly on the jaw members and because of the grooves 8, 14 in which the ends 7, 13 of the spring member engage, the jaw members cannot pull away from the latter. The hook member engages in the cylindrical portion 10 of the spring and it cannot pull away from the spring. The weight of the article cannot, therefore, disassemble the clothespin from its hook.

The natural resiliency of the hook member causes it to press against the opposite side edges of the member 6 with the portions 18 pressed against the outer face of the member 6. Instead of the hook having a tendency to dislodge the spring, and especially to draw the cylindrical portion 10 out of the grooves 11, it has a tendency to press this portion of the spring more tightly in one of the grooves 11. The hook member, therefore, has a tendency to retain the spring assembled in relation to the jaw members. The hook member will not move around on the pin but will remain stationary in the position shown in the drawing so that the clothespin may be handled with one hand.

Having described my invention, what I claim is:

1. In a clothespin of the type described, the combination of co-operating clamping jaws having extensions forming finger pieces, a spring member for pressing the jaws toward each other and having a cylindrical portion forming a pivotal member on which said jaws may pivot, a hook member composed of a bent member having ends projecting inwardly into the cylindrical portion of said spring and extending around one of said jaw members to the front thereof and formed with a hook portion at the front of said jaw member adapted to engage a clothes line whereby the clothespin may be hung thereon.

2. In a clothespin of the type described, the combination of co-operating clamping jaws having extensions forming finger pieces, a spring member for pressing the jaws toward each other and having a cylindrical portion forming a pivotal member on which said jaws may pivot, a hook member composed of a bent member having ends projecting inwardly into the cylindrical portion of said spring at opposite sides thereof, said member extending around the sides of one of said jaw members to the front thereof, and formed with a hook portion at the front of said jaw member, adapted to engage a clothesline whereby the clothespin may be hung thereon, said hook member being adapted to resilient-

ly press against opposite side edges of the jaw member with which it co-operates.

3. In a clothespin of the type described, the combination of co-operating clamping jaws having extensions forming finger pieces, a spring member for pressing the jaws toward each other and having a cylindrical portion forming a pivotal member on which said jaws may pivot, and a hook member composed of a bent wire having ends projecting inwardly from opposite sides into the cylindrical portion of said spring and extending around opposite side edges of one of said jaw members and extending from the side edges of said jaw member toward each other at the outer surface of said jaw member and being thence formed into a hook portion at the front of said jaw member adapted to engage a clothes line whereby the clothespin may be hung thereon.

4. In a clothespin of the type described, the combination of co-operating clamping jaws having extensions forming finger pieces, a spring member for pressing the jaws toward each other and having a cylindrical portion forming a pivotal member on which said jaws may pivot, a hook member composed of a bent wire having ends projecting inwardly from opposite sides into the cylindrical portion of said spring and extending forwardly across opposite side edges of one of said jaw members to the front thereof in line with the cylindrical portion of the spring, thence extending in opposite directions toward each other at the front of said jaw member, thence upwardly along the outer face of said jaw member and thence curved outwardly and downwardly to form a hook portion on which the clothespin may be hung.

5. In a clothespin of the type described, the combination of co-operating jaws having extensions forming finger pieces, a spring member for pressing the jaws toward each other and having a cylindrical portion forming a pivotal member on which said jaws may pivot, a hook member composed of a bent member having ends projecting from opposite directions into the cylindrical portion of said spring, said hook member extending upwardly along the inner side of one of said jaw members, extending thence around opposite edges of said jaw member to the front thereof, thence in opposite directions toward each other at the front of the jaw member and extending thence downwardly in relation to the front of said jaw member to form a hook member on which the clothespin is adapted to be hung.

6. In a clothespin of the type described, the combination of co-operating jaws having extensions forming finger pieces, a spring member for pressing the jaws toward each other and having a cylindrical portion forming a pivotal member on which said jaws may pivot, a hook member composed of a

wire having ends projecting from opposite directions into the cylindrical portion of said spring, said member extending upwardly from said ends along one face of one of said finger pieces and bent in opposite directions to extend around the opposite side edges of said finger pieces and extending thence downwardly adjacent the outer surface of said finger piece and co-operating therewith to form a hook on which the clothespin is adapted to be supported, the lower portion of said hook member terminating in a loop.

Signed at the city, county and State of New York this 19th day of March, 1931.

SIGMUND BOWER.