Nov. 11, 1924. 1,514,797

G. S. SHAW

CLOTHESPIN

Filed May 15, 1923

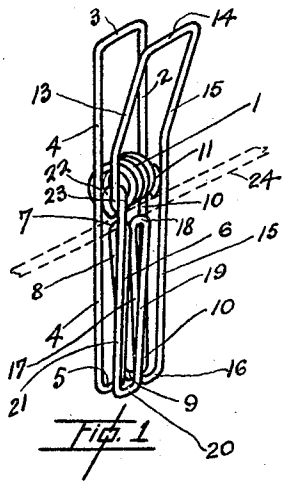


Fig. 1

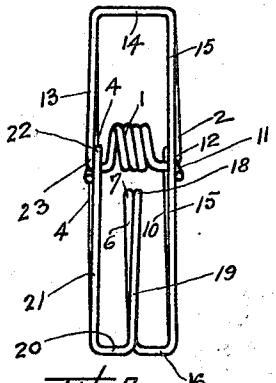


Fig. 2

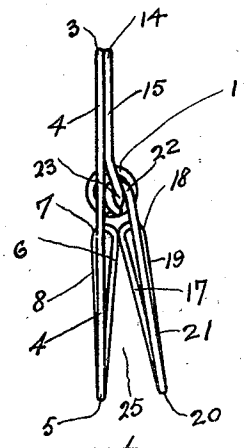


Fig. 3

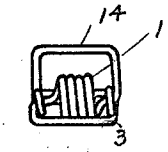


Fig. 4

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Patented Nov. 11, 1924. 1,514,797

UNITED STATES PATENT OFFICE.

GEORGE STANLEY SHAW, OF VANCOUVER, BRITISH COLUMBIA, CANADA.

CLOTHESPIN.

Application filed May 15, 1923. Serial No. 639,114.

To all whom it may concern:

Be it known that I, GEORGE STANLEY SHAW, a subject of the King of Great Britain, and a resident of the city of Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Clothespins, of which the following is a specification.

My invention relates to improvements in clothes pins, and the object of my invention is to provide a clothes pin formed of wire and the construction of which is such that it may be manufactured in large quantities quickly and cheaply and sold at a very low cost while at the same time it is highly practical and efficient, an automatic locking feature with which it is provided enabling it to maintain a firm and secure grip on the line and the clothes thereon when in place without danger of tearing or damaging the finest garments.

I attain this object by the construction illustrated in the accompanying drawings in which—

Fig. 1 is a perspective view of my clothes pin closed.

Fig. 2 is a front view of Fig. 1.

Fig. 3 is a side view of the clothes pin opened.

Fig. 4 is a plan view.

Similar figures of reference indicate similar parts throughout the several views.

The clothes pin is formed out of a single piece of suitable wire constructed to provide a coil 1 intermediate its length. One end of this coil is turned upwardly at right angles to the coil and carried for a predetermined length as at 2 and is then bent upon itself at right angles and parallel to the coil as at 3 to extend a predetermined width after which it is bent upon itself to extend downwardly as at 4 at right angles to the portion 3 and parallel to the portion 2. The part 4 is continued downwardly a suitable distance beyond the coil and is then turned laterally inwardly at right angles as at 5, extending to about midwidth of the pin, after which it is turned upwardly at right angles to the portion 5, as indicated by the numeral 6, extending to within a short distance from the lower periphery of the coil so that it is spaced from the coil a predetermined amount, which will be referred to later. The portion 6 is then doubled over outwardly and sharply on itself as at 7 and is continued downwardly as at 8 to extend the full depth of the clothes pin after which it turns again laterally as at 9 to form a portion similar to and in the same plane as the portion 5, this portion 9 being then turned at right angles on itself to extend upwardly to form the portion 10 substantially parallel to the portion 4, the extremity of which portion 10 is hooked as at 11 and securely engaged to the coil where it turns upwardly to provide the part 2, as indicated by the numeral 12.

The opposite end of the coil 1 is also turned upwardly at right angles to the coil and carried as at 13 the same length as the part 2, being then bent at right angles on itself and carried as at 14 the same length as the portion 3, which portion 14 is then bent downwardly at right angles and extended as at 15 the same length as the portion 4, this portion 15 below the coil being substantially parallel to the portion 4 but above the coil being bent outwardly, as shown in Fig. 1, to be spaced from the part of portion 4 which is above the coil and the portion 13 is similarly bent, as shown, so that the transverse part 14 is spaced from the transverse part 3. The portion 15 is then turned laterally inwardly parallel to the portion 9 and of slightly less length than the same, as indicated by the numeral 16, after which it rises upwardly as at 17 to the same height as the portion 6 and is then doubled over outwardly and sharply on itself as at 18 and extended downwardly the full depth of the clothes pin, as at 19. It is then bent to extend laterally to form the portion 20 similar to and in the same plane as the portion 16 after which it is bent upwardly to extend substantially parallel to the lower parts of the portions 15 and 4, as at 21, the extremity of the portion 21 being hooked as at 22 and securely engaged to the coil where it turns upwardly to provide the portion 13, as indicated by the numeral 23.

The portions 4 and 15 bear respectively on the hooks 11 and 22 and fulcrum thereon, and the upstanding fingers formed by the portions 6—8 and 17—19 lie side by side, while the space between the points of the fingers, that is, between the bends 7 and 18 and the plane of the lower periphery of the coil and the points of the hooks 11 and 22 is such that when the pin is in place on a clothes line the line is gripped firm-

ly between the points of the fingers, the coil, and the hooks, as indicated in Fig. 1, the clothes line being shown by the dotted lines and indicated by the numeral 24.

It will thus be seen that the clothes pin consists of two handles formed respectively by the parts 2—3—4 and 13—14—15 one of which diverges from the other as shown in Fig. 1 so that they may both be brought together by inward finger pressure and thus open the normally closed jaws formed respectively by the parts 4—5—9—10 and 15—16—20—21, as shown in Fig. 3, thereby enabling the jaws to be passed over the clothes line and clothes thereon to grip the clothes firmly when the handles are released due to the tendency of the jaws to close through the spring action of the coil 1. It will be seen further that each jaw is provided with an upstanding finger formed respectively by the parts 6—7—8 and 17—18—19 and as these parts are doubled over on themselves at their upper ends as at 7 and 18 and are brought together into the same plane at their lower ends it will be evident that, the fingers lying normally side by side, a wedge shaped space is formed between them when the jaws are opened, as shown in Fig. 3 and indicated by the numeral 25, that is, the fingers touch each other at their upper ends and diverge at their lower ends but being of spring wire they are spread apart at their upper ends by the clothes line when placing the pin on the line but spring together again after the line passes between their upper ends, thus locking the pin on the line, which then lies between the coil, the hooks 11 and 22 and the points of the fingers, as indicated by the dotted lines in Fig. 1.

From the foregoing it will be seen that I have devised a clothes pin capable of being manufactured out of wire with great facility and cheapness and adapted to be automatically locked to the clothes line so that both the pin and the clothes are securely held to the line when placed thereon.

What I claim as my invention is:—

1. A clothes pin formed out of a single piece of wire twisted to provide a coil intermediate the length of the pin, the opposite ends of the coil being extended above and below the coil and bent on themselves to form handles and gripping jaws respectively and then returned to their respective initial starting points of extension and connected to the wire thereat, the wire being bent upwardly and then downwardly at midwidth of the jaws to provide abutting spring fingers capable of being spread apart when passing the pin over a clothes line.

2. A clothes pin formed out of a single piece of wire twisted to provide a coil intermediate the length of the pin, the opposite ends of the coil being extended above and below the coil and bent on themselves to form handles and gripping jaws respectively and then returned to their respective initial starting points of extension and connected to the wire thereat, the wire being bent upwardly and then downwardly at midwidth of the jaws to provide abutting spring fingers capable of being spread apart when passing the jaws over a clothes line and of such length that they may spring together on the underside of the line when passed thereover.

3. In a clothes pin, the combination with the gripping jaws thereof, of means for positively locking the said jaws to a clothes line, said means comprising a coil intermediate the length of the pin and members, the points of which converge and are spaced from the coil so that an automatic lock for the line is formed between the converging points and the periphery of the coil.

Dated at Vancouver, B. C., this 8th day of May, 1923.

GEORGE STANLEY SHAW.