H. G. HANSON.

WIRE CLOTHES PIN.

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1,250,308. Patented Dec. 18, 1917.

Fig. 1.

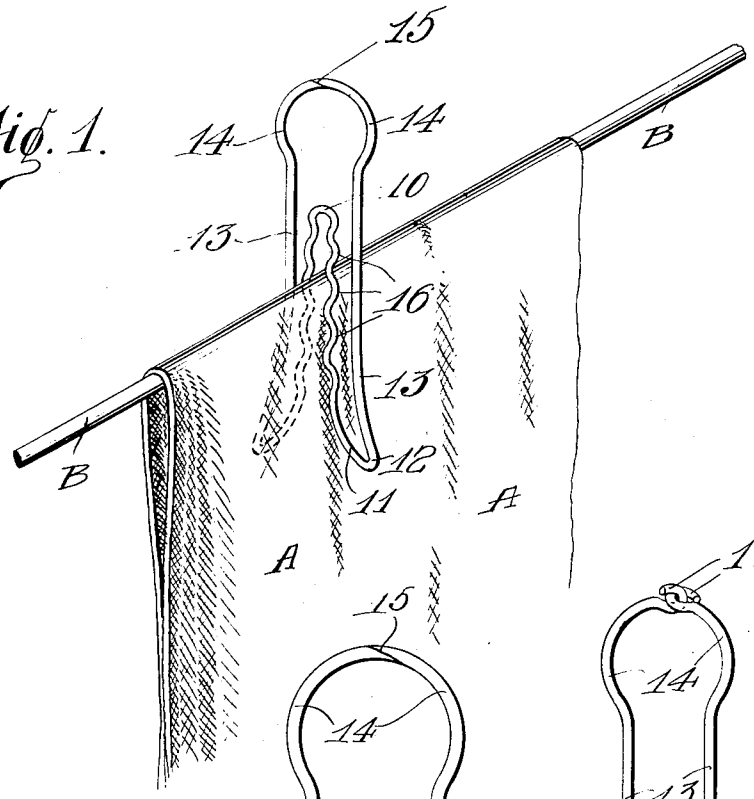


Fig. 2.

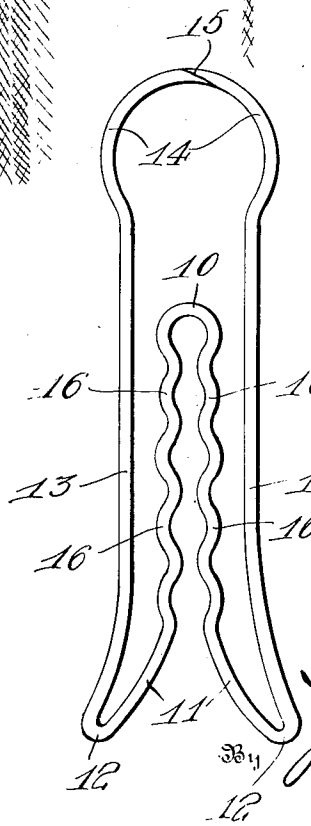


Fig. 3.

Witnesses

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WIRE CLOTHES-PIN.

1,250,308. Specification of Letters Patent. Patented Dec. 18, 1917.

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To all whom it may concern:

Be it known that I, HANS G. HANSON, a citizen of the United States, residing at Spring Valley, in the county of Pierce and State of Wisconsin, have invented certain new and useful Improvements in Wire Clothes-Pins, of which the following is a specification.

My invention relates to an improved wire clothes pin.

The primary object thereof is to provide a device of this character wherein the gripping jaws are arranged in spaced relation, crimped at opposite points, and flare toward their lower ends, to prevent a series of vertically positioned openings which vary sequentially in diameter so that structures of various sizes may be accommodated and efficiently engaged.

A further object resides in the provision of outer and inner jaws arranged to coöperate adjacent their lower ends, the outer jaws tending to resist the spreading of the inner jaws, and exerting a positive tension thereon when they are in engagement with a supporting structure; for attaining that element of absolute security necessary to the successful adoption of the device.

The above and other objects which will become apparent are accomplished by such means as are shown in their preferred form in the accompanying drawings, described in the following specification, and more specifically pointed out in the appended claim.

In the drawings wherein like numerals designate like parts throughout the several views;

Figure 1 is a perspective view of my invention showing the same in an operative position.

Fig. 2 is a side elevation thereof.

Fig. 3 is a fragmentary view showing a modified form.

In the construction of my improved clothes pin, a strand of resilient wire is bent to form two hairpin shaped members arranged one within the other, said strand being first bent at a point 10 intermediate its ends, to form the inner member which comprises spaced apart gripping jaws. The lower terminals of the gripping jaws 11 flare as is clearly shown, to facilitate attachment and removal thereof.

At the lower terminals of the respective flared portions of the gripping jaws, the wire strand is bent as at 12 to provide the other jaws 13, extending substantially parallel with the jaws 11 yet projecting beyond the upper terminals thereof to provide a handle portion 14. The respective ends of the wire strand are cut at an angle similar to that designated by the numeral 15 and are adapted to be welded or otherwise secured together.

Attention is now called to the specific construction of the inner gripping jaws. The respective opposite jaws are provided with a series of curved portions 16 which are arranged as clearly shown in Fig. 2 to present a series of vertical openings. It is readily apparent that because of the gradual flare of the respective gripping jaws toward their lower ends, the openings formed by the curved portions 16 will be of varying diameters. The uppermost opening will have the smallest diameter, while the lower opening will be capable of receiving a structure of greater width.

As the pin is pushed downwardly over the structure A in Fig. 1, it will be recognized that the smaller openings will be brought over the rope portion B in succession until the opening of a desired diameter is found.

After the pin is arranged in an efficient position as shown in Fig. 1 the co-action of the outer and inner jaws will become apparent. The lower ends of the gripping jaws will be normally held in engagement with the structure A by the tension exerted by the corresponding portion of the outer jaws, this not only preventing the accidental dislodgment of the pin but assuring a more efficient and positive grip on the supporting structure.

In Figs. 1 and 2 I have illustrated the respective ends of the wire strand welded together to form a continuous handle 14 so that the pin may be easily and quickly manipulated and moved into or out of engagement with the supporting structure when desired. While this means of securing the terminals of wire strand together has proven very efficient and inexpensive, in Fig. 3 I have shown a modified form which may be used when occasion requires. In this case the respective terminals of the strand are curved to form engaging lips 17 the latter being shown in connected position. This form of connecting the ends of the strand is also very efficient and I desire it to be understood that either of the constructions may be employed without deviating from the scope

of my invention. The wire used in the formation of my device is preferably that which is constructed of a non-corrosive material or which is coated with a non-corrosive material in order to eliminate oxidation and consequent rusting, which would in time soil the clothes and clothes line in connection with which the same is used.

In reducing my invention to practice I find that the form referred to herein as the most practical and preferred embodiment, is the most efficient; but realizing that certain conditions will necessarily vary in concurrence with the adoption of my device, I desire to emphasize the fact that various minor changes in details of construction and proportion of parts may be resorted to when required without sacrificing any of the advantages of my invention as defined in the appended claim.

Having thus described my invention, what I claim is new and desire to secure by Letters Patent is:

A clothes pin in the form of a unitary structure composed of a piece of heavy spring wire bent to form two hairpin shaped members arranged one within the other with the legs of the members spaced apart from each other and from those of the other member, said members being disposed in the same plane, the inner member having its legs crimped throughout and the outer member extended at its apex or closed end beyond the closed end of the inner member to form a handle, the ends of the wire being united.

In testimony whereof I affix my signature in presence of two witnesses.

HANS G. HANSON.

Witnesses:
R. G. CONDIT,
J. A. NYEGGEN.