Sept. 25, 1923. 1,468,884

W. E. SCHNEIDER

CLOTHESPIN

Filed Dec. 27, 1920

Fig. 1.

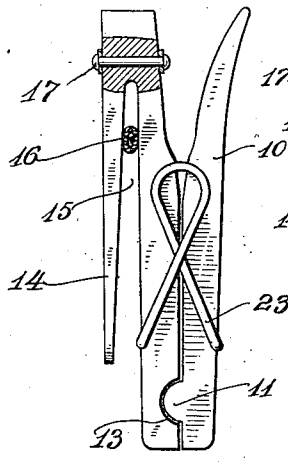


Fig. 2.

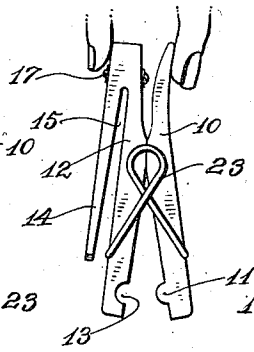


Fig. 3

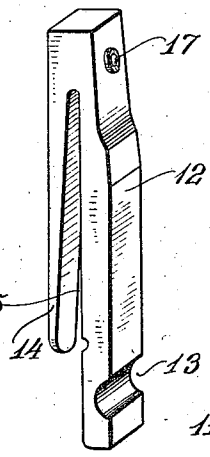


Fig. 4.

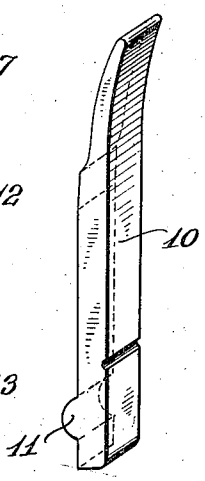


Fig. 5.

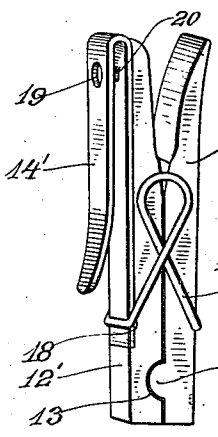


Fig. 6

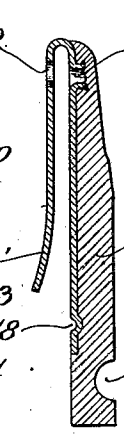


Fig. 7.

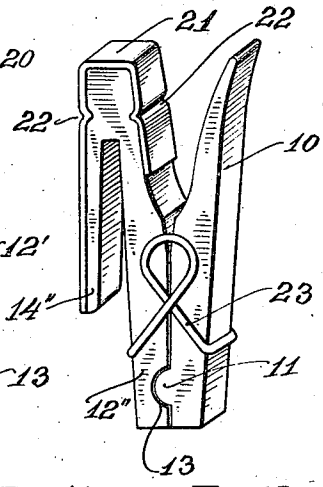


Fig. 8.

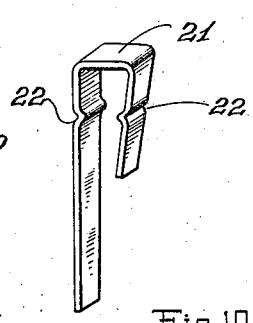


Fig. 10.

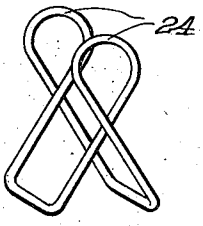


Fig. 9.

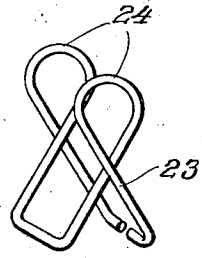


Fig. 11.

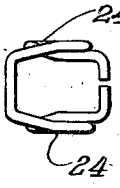
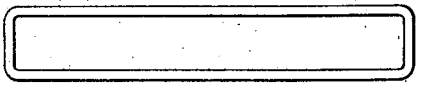


Fig. 12.



Inventor

William E. Schneider

By his Attorney

Paul M. Klein

Patented Sept. 25, 1923. 1,468,884

UNITED STATES PATENT OFFICE.

WILLIAM E. SCHNEIDER, OF JERSEY CITY, NEW JERSEY.

CLOTHESPIN.

Application filed December 27, 1920. Serial No. 433,344.

To all whom it may concern:

Be it known that I, WILLIAM E. SCHNEIDER, a citizen of the United States, and resident of 97 Zabriskie Street, Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Clothespins, of which the following is a specification.

This invention relates in general to spring clamps and in particular to the kind which may be used for suspending clothes on a clothes line.

Its primary objects are to provide a simple, inexpensive device of this kind by means of which clothes or any other article may not only be securely fastened within the clamping parts thereof, but also prevented from voluntarily leaving the clamp or slipping therefrom when the article clamped is subjected to pulling or togging, caused for instance by wind.

Another object of this invention is to provide means whereby the clamp may be suspended on a clothes line without effecting the clamping qualities of the article.

Another important object of my device is to provide reinforcing means whereby the part providing for attaching the clamp to the clothes-line is prevented from splitting or otherwise disassociating itself from the clamp proper.

A further object of my invention is to provide spring means normally holding the lower portions of the clamp tightly together while at the same time guiding these portions at their faces to the end that they remain permanently in proper relation to each other, whether in closed or open position.

The foregoing and other objects will be more fully apparent from the following description and the accompanying drawings, forming part of this specification, and in which:

Fig. 1 represents a side elevation of my clamp in closed position.

Fig. 2 illustrates same in open position.

Fig. 3 is a perspective view of one clamp member associated with an auxiliary leg.

Fig. 4 is a perspective view of the other clamp member.

Fig. 5 is a perspective view of a modified form of my clamp.

Fig. 6 is a cross sectional view thru one clamp member in modified form.

Fig. 7 is a perspective view of another modified form of my clamp.

Fig. 8 represents a modified form of a reinforced member.

Figs. 9 and 10 represent perspective views of the spring member.

Fig. 11 is a top view of the spring member.

Fig. 12 represents a top view of a blank wherefrom a spring member is formed.

Referring to the drawings 10 indicates one clamp which is provided near its lower end with a half round rib 11. 12 represents the other clamp member provided with a half round groove 13 at its lower portion which corresponds and registers with the rib 11. Made integral with, or made separately and attached to clamping member 12, is auxiliary leg 14, between which and the clamping member a space 15 is formed whereinto the clothes-line, indicated at 16, is forced when the clamp is being hung up.

At the joining part of the clamping member and the auxiliary leg, I preferably provide reinforcing means which may take the form of a rivet 17, passing near the upper portion of space 15 thru both the clamping member 12 and the auxiliary leg 14. This rivet may be equipped with broad washers or heads resting against a comparatively large area of the clamp material, as may be seen in Figs. 1, 2, and 3.

In the modified form of my clamp, as shown in Figs. 5 and 6, a resilient strip 14′ takes the place of the auxiliary leg 14. This strip receives preferably the form of a narrow V and is provided with an indenture 18 at its attached end while near its bent portion a perforation 19 is made thru which a punch may be inserted by means of which the leg material adjacent to clamping member 12′, may be pierced and thus anchored in the material of this clamping member, as indicated at 20.

The indentation 18 serves as rest for the spring member and at the same time prevents the auxiliary leg 14 from shifting alongside the clamping member 12′.

In Figs. 7 and 8 another modification of my clamp is shown where instead of the rivet 17, a heavy reinforcing member 21 is applied over the joining part between the auxiliary leg 14″ and clamping member 12″. This reinforcing member or reinforcing clamp 21 is provided with two indentations indicated at 22 which register with indentations made in the material of clamping member 12″ and auxiliary leg 14″.

In this latter modification the lower por-

tion of the reinforcing clamp 21 is shaped in a similar manner as is auxiliary leg 14'' to which it is forced to closely adhere, due to its spring action.

Spring member 23 which is shown in detail in Figs. 9, 10, 11 and 12, normally holds together in closed position both clamping members in the manner shown in Figs. 1, 5, and 7.

The spring member 23 is designed in such a way as to not only force the lower portions of the clamping members together, but also hold the same in proper relation to each other. It is preferably made from wire which is given a substantially rectangular form, the long sides of which are looped as indicated at 24, while the shorter sides remain straight and engage the outer sides of the clamping members.

The U-shaped legs extending from the looped portions of the spring member embrace the respective clamping members, thus keeping the latter steadily in contact and their faces flush.

The operation of my device is obvious. When clothes or other articles are to be clamped between the clamping members, the upper ends thereof are pressed together as indicated in Fig. 2 and the clothes are slipped between the now lower open ends of the clamp. When the upper portion is again released the clothes will adapt itself to the form of the half round bar 11 and the corresponding groove or recess 13. In this manner the clothes is, so as to speak, locked between the clamping members and cannot be pulled out even by force unless the clamp is again opened.

For the reason that ordinary clothes pins usually split because they are employed to clamp the clothes directly to the cord or clothes-line, I have provided the auxiliary leg between which and the clamp proper the clothesline is inserted.

I am aware of the existence of similar devices, lacking, however, the most important features necessary to make this clamp practical for general use. These features first, are the reinforcement of the portion where the auxiliary leg and the clamping member are joined. Secondly, the interlocking clamping jaws formed by rib 11 and recess 13, and the novel spring member which not only holds the clamping members against each other, but also in proper relation to each other.

The spring member may be made from an endless piece of wire or from a rectangularly shaped wire as indicated in Fig. 12.

While the drawings show specific forms of my clothespin and particularly of the reinforcing member, the spring member and the jaw portion of the clamping members, be it understood that modifications, changes or improvements may be made without parting from the broad scope of this invention. I therefore reserve for myself the right to make such changes and modifications within the purview of my invention, for which I claim:

1. In combination with a clamp, composed of two coacting clamping members, interlocking at their lower ends, unitary constraining means of substantially rectangular shape and looped at substantially its center portion, its ends engaging said clamping members at the latters' outer sides, the looped portions of said restraining means engaging the faces of said clamping members.

2. In a clothes pin composed of two coacting clamping members, one of which having an auxiliary reinforced suspension leg, a unitary constraining member adapted to completely embrace the lower ends of said clamping members and composed of a substantially rectangular wire frame, looped at substantially its center portion, said looped portion embracing the sides of said clamping members, and the ends of said spring engaging the outer faces of the legs of said clamping members.

3. In combination with a clamp, composed of two clamping members, a spring member made of a substantially rectangular-shaped wire frame looped at its longer sides and forming U-shaped legs, said legs engaging the said clamping members at their outer sides, the looped longer sides of the spring member engaging the faces of said clamping members.

Signed at New York, in the county of New York, and State of New York, this 23 day of December A. D. 1920.

WILLIAM E. SCHNEIDER