Feb. 20, 1923. 1,446,362.

F. W. VOGEL.

CLOTHESPIN.

FILED OCT. 31, 1922.

Fig. 1.

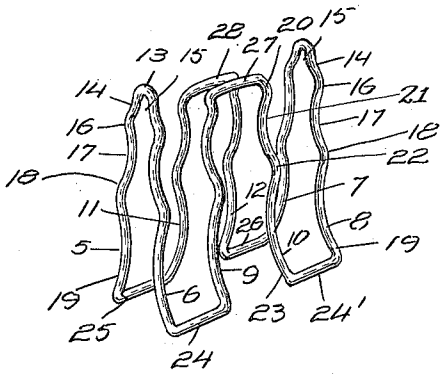


Fig. 3.

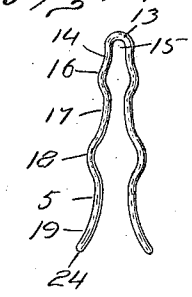


Fig. 4.

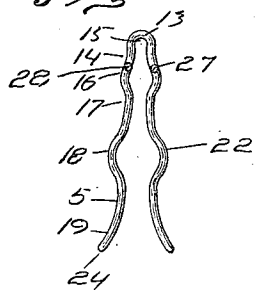
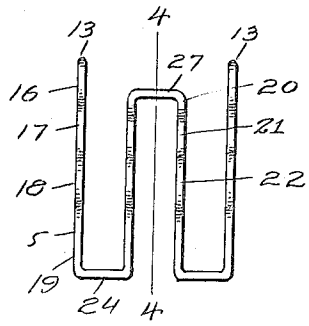


Fig. 2.



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UNITED STATES PATENT OFFICE.

FRANK W. VOGEL, OF DULCE, NEW MEXICO.

CLOTHESPIN.

Application filed October 31, 1922. Serial No. 598,139.

To all whom it may concern:

Be it known that I, FRANK W. VOGEL, a citizen of the United States, residing at Dulce, in the county of Rio Arriba and State of New Mexico, have invented certain new and useful Improvements in Clothespins, of which the following is a specification.

This invention relates to clothes pins, and has for its object to provide a pin of such class, in a manner as hereinafter set forth, with means for not only tightly securing the pin body on the line, but also for securely holding the clothes, irrespective of their weight, on the line, under normal atmospheric conditions or during a heavy wind.

A further object of the invention is to provide a pin of such class, in the manner as hereinafter set forth, formed of a resilient body having means for securing the pin to lines of different sizes and further for holding fast to the line, to which the pin is attached, light or heavy clothes, especially during a heavy wind.

Further objects of the invention are to provide a clothes pin which is simple in its construction and arrangement, strong, durable, compact, efficient and convenient in its use, readily set up, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists in the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to, which fall within the scope of the claims hereunto appended.

In the drawings, wherein like reference characters denote corresponding parts throughout the several views:—

Figure 1 is a perspective view of a clothes pin in accordance with this invention.

Fig. 2 is a side elevation.

Fig. 3 is an end view, and,

Fig. 4 is a section on the line 4—4 of Fig. 2.

A clothes pin in accordance with this invention is constructed from a resilient substantially rectangular continuous skeleton body portion formed of resilient wire of the desired diameter and the said body portion includes two pair of end clamping arms, with the arms of each pair cooperating with each other, and two pair of intermediate clamping arms, with the arms of one pair cooperating with the arms of the other pair.

The arms of one pair of end clamping arms are indicated at 5, 6, and the arms of the other pair of end clamping arms are indicated at 7, 8. The arms of one pair of intermediate clamping arms are indicated at 9, 10, and the arms of the other pair of intermediate clamping arms are indicated at 11, 12.

The arms 5, 6, terminate into each other at the top thereof as at 13, and the upper terminal portion of each of the arms 5, 6, is bent outwardly at inclinations, as at 14, thereby providing a wedge-shaped opening 15, which is adapted to receive a wire clothes line. Each of the arms 5, 6, in proximity to the inclined portion 14, is outwardly bowed, as at 16, thereby providing a curved clamp for rope lines. Each of the arms 5, 6, below the bowed portion 16, is inwardly curved, as at 17, and below said inwardly curved portion 17, is outwardly bowed as at 18, thereby providing a curved clamp for bedding or heavy clothes. Each of the arms 5, 6, at the lower portion thereof, is flared outwardly as at 19, to provide for the convenient mounting of the pin on the lines and the clothes.

The construction of the end clamping arms 7, 8, is the same as the end clamping arms 5, 6, and similar reference characters have been applied to indicate the inclined portion 14, the outwardly bowed portion 16, the inwardly curved portion 17, the outwardly bowed portion 18, and the flared portion 19, as well as the wedge-shaped opening or slot 15.

Each of the intermediate clamping arms comprises an outwardly bowed portion 20, an inwardly curved portion 21, an outwardly bowed portion 22, and a flaring portion 23. The bowed portions 20 of the arms 9, 10, aline with the bowed portions 16 of the arms 6 and 8, and the bowed portions 20 of the arms 11 and 12 aline with the bowed portions 16 of the arms 5 and 7. The bowed portions 22 of the arms 9 and 10 aline with the bowed portions 18 of the arms 6 and 8 and the bowed portions 22 of the arms 11 and 12 aline with the bowed portions 18 of the arms 5 and 7. The flaring portions 23

of the intermediate clamping arms aline with the flaring portions 19 of the end clamping arms.

The lower end of the arm 6, is connected to the lower end of the arms 9, by a coupling portion 24, the lower end of the arm 10, is connected to the lower end of the arm 8 by a coupling portion 24; the lower end of the arm 5 is connected to the lower end of the arm 11 by a coupling portion 25, and the lower end of the arm 12 is connected to the lower end of the arm 7 by a coupling portion 26. The several coupling portions are disposed at right angles with respect to the arms. The upper end of the arm 9 is connected to the upper end of the arm 10 by a coupling portion 27 and the upper end of the arm 11 is connected to the upper end of the arm 12 by a coupling portion 28. The coupling portions 27, 28 are disposed at right angles with respect to the intermediate clamping arms, and the said coupling portions 24, 24′, 25, 26, 27 and 28 space the arms from each other. The coupling portions 24 and 25 space the arms 5 and 6 from the arms 9 and 11, the portions 24′ and 26 space the arms 7 and 8 from the arms 10 and 12.

The coupling portion 27 spaces the arms 9 and 10, and the coupling portion 28 spaces the arms 11 and 12.

The inclined portions 14 permit of a small clothes line to pass therebetween, and when in this position, the arms spring together, and the line is forced into the slot 15. The several arms springing together will secure a clothes line between the bowed portions 16 and 20. The bowed portions 18 and 22 will secure bedding or heavy clothes to the line. The body portion always has a tendency to securely grip the clothes as well as the lines, or in other words as the body portion has a tendency to move together, the clothes are securely clamped on the lines when the pins are mounted in superposed relation with respect to the clothes.

From the foregoing description taken in connection with the accompanying drawings, a resilient clothes pin is set up, which will securely clamp the clothes to the line, and hold the clothes fast, irrespective of whether the climatic conditions are normal, or during a heavy wind, and although the preferred embodiment of the invention is as is illustrated, yet it is to be understood that changes in the details of construction can be had which will fall within the scope of the invention as claimed.

What I claim is:—

1. A clothes pin comprising a continuous substantially rectangular resilient skeleton body formed of two pairs of end clamping arms and two pairs of intermediate clamping arms, the arms of each end pair of arms cooperating to provide a clamping function, and the arms of one intermediate pair of arms cooperating with the arms of the other intermediate pair of arms to provide a clamping function, each pair of end clamping arms connected together at their upper ends and providing a wedge-shaped slot, the upper ends of the arms of one intermediate pair of clamping arms being disconnected from the upper ends of the arms of the other pair of intermediate clamping arms.

2. A clothes pin comprising a continuous substantially rectangular resilent skeleton body portion formed of two pairs of end clamping arms and two pairs of intermediate clamping arms, the arms of each end pair of clamping arms cooperating to provide a clamping function and provided with bowed portions, the arms of one intermediate pair of arms cooperating with the arms of the other intermediate pair of arms to provide a clamping function and provided with bowed portions, coupling portions for securing the lower ends of the end clamping arms to the lower ends of the intermediate clamping arms, a coupling portion for connecting the arms of one intermediate pair of arms together, and a coupling portion for connecting the arms of the other pair of intermediate arms together, the said pairs of intermediate clamping arms being disconnected from each other at their upper ends.

In testimony whereof, I affix my signature hereto.

FRANK W. VOGEL.