

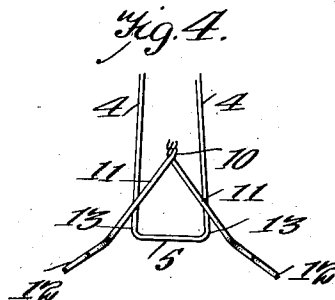
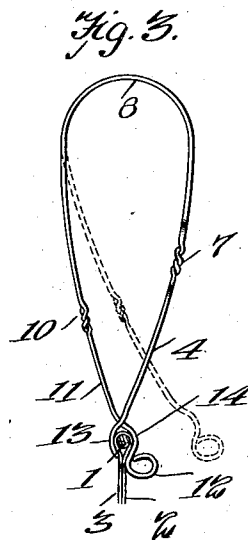
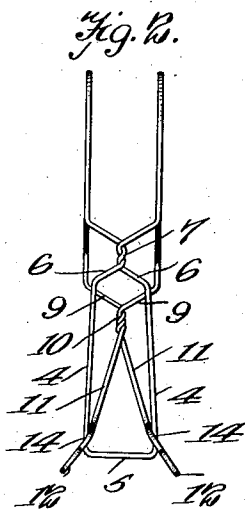
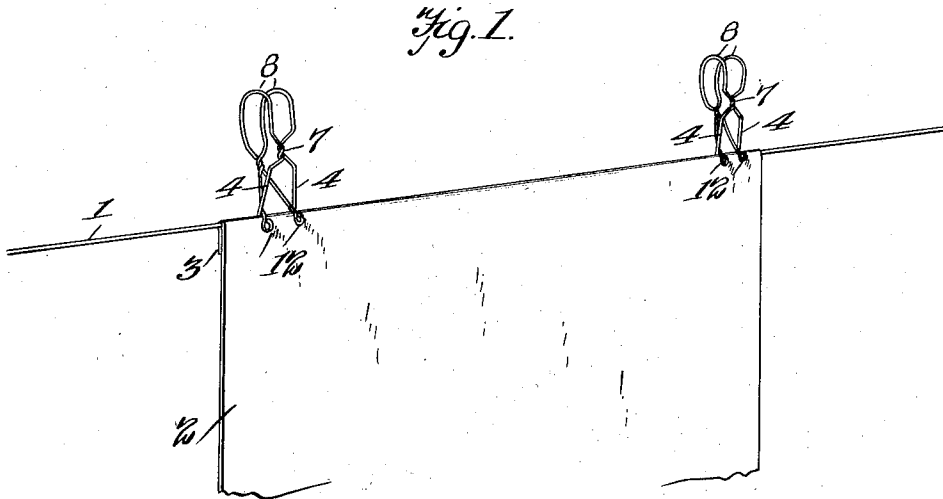
H. G. HANSEN & C. H. FROGNER.

CLOTHES PIN.

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CLOTHES-PIN.

1,057,238.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, HANS G. HANSEN and CHARLES H. FROGNER, citizens of the United States, and residents of Seattle, county of King, and State of Washington, have invented certain new and useful Improvements in Clothes-Pins, of which the following is a specification.

Our invention is an improvement in clothes pins and has for its object the provision of a pin of the character specified, which may be cheaply manufactured, is easily placed in position or removed from the line, without the necessity of using more than one hand, which will not tear the clothes either in placing or removing, which does not mar the garments, and which will hold them firmly on the line without any possibility of accidental displacement.

In the drawings, Figure 1 is a perspective view of the improvement in use, Fig. 2 is a front view of the same, Fig. 3 is a side view, and Fig. 4 is a front view with the arms separated.

The present embodiment of the invention is shown applied to a line 1 for holding a garment 2 in place on the line, the edge 3 of the garment being lapped over the line as clearly shown in Fig. 1.

The improvement is bent from a strand of wire, and comprises a loop and a pair of arms connected by a resilient member, which while permitting the loop and the arms to yield with respect to each other, normally presses them together to hold the garment on the line. The loop is approximately rectangular in shape and is formed by doubling the wire upon itself to form two side members 4 spaced apart from each other and connected at one end by a cross bar 5. At the other end the wires are brought together as shown at 6, and twisted upon themselves as shown at 7, two or three times after which they are again separated but in the opposite direction. The wires are then bent to form arches 8 spaced apart from each other, but with the planes of the arches parallel, as clearly shown in Fig. 2. At the opposite side of the arch the wires are brought together as shown at 9, and are again twisted as shown at 10, and are then separated from each other at an angle to form two arms 11, diverging gradually toward the free ends of the arms. The free

end of each arm is bent to form a ring 12, and at the junction of each ring with the arm, the arm is bent laterally outward at an angle to the body 11 of the arm to cross the loop at the connection of the side members 4 with the cross bar 5.

The side members of the loop adjacent to the cross bar 5 are bent outwardly as clearly shown at 13 in Fig. 3, and each arm is also bent outward away from the loop directly opposite the bend 13 as shown at 14, the bends 13 and 14 cooperating to form a recess for receiving the line and the garment when the pin is in place on the line.

When the pin is not in use, the arms bear against the loop at the junction of the side members with the cross bar 5, and the arms are separated from the loop by pressing the twisted portions 7-10 toward each other as shown in dotted lines in Fig. 3. The pin may be placed with one hand, engaging the fingers with one end of the arches 8, and the thumb with the other end of the arches, and pressing them together, in the dotted line position of Fig. 3 and the pin may be released in the same manner.

When in use, each pin engages the garment at two points on one side of the line and the full distance between the two points on the opposite side. The arms 11 tend to diverge from each other, when the ends of the arches are pressed together, and on account of the outward bend at the free ends of the arms a species of lock is formed between the arms and the loop.

The side members 4 of the loop press the arms together when the pressure on the ends of the arches is relaxed, and the said arms move away from each other laterally, when the ends of the arches are pressed together.

As is known, clothes-pins especially in use with starched clothing, tend to adhere to the clothing, so that there is some danger of tearing the garments when the pins are carelessly removed.

With the improved construction when the ends of the arches are pressed together to release the pins from the lines, the arms move away from each other and are thus detached from the garment by a lateral movement so that there is no danger of tearing the same.

The peculiar arrangement of the arms and

loop also acts to some extent to prevent accidental detachment of the pin. The loop in fact locks the arm in closed position.

As is known clothes pins are especially liable to become frozen to the garments. When removed hastily, there is great danger of tearing the garment, because in the frozen state the fibers are more easily torn. In the improved pin, the arms 11 are so arranged, with respect to the loop, that whenever the arms and the loop are pressed together with respect to each other, the arms move away from each other, thus detaching themselves from the garment, before the pin is removed. It is a fact, that the pin is more easily detached from the garment by a combination of lateral and direct movements than by direct movement alone. If for instance, the two rings 12 should become frozen to the garment when the pin is in the position of Fig. 1, when the loop and the arms are pressed together, as indicated in Fig. 3, the rings 12 not only move directly away from the garment, but also move laterally. A pin that is quickly detachable from the clothes, permits the clothes to be taken from the line in much less time, than where a combination of movements is necessary to release the pin. In addition, should the garments stick to both sides of the loop and both arms, the pressing together of the arms and the loop causes a species of shearing movement, the arms pushing the garments away from the side members of the loop, while at the same time the side members of the loop push the garment away from the arms. In addition, the peculiar arrangement of the arms and the loop provides for a locking movement to assist in holding the pin in position.

We claim:—

1. A clothes-pin composed of a piece of wire, bent upon itself to form a closed loop and a pair of diverging arms connected by a pair of spaced parallel arches, the wires being twisted together at the ends of the arches, between the arches and the loop and between the arches and the arms, the arms

passing through the loop and bearing against the sides thereof, and being pressed together by their engagement with the said loop, each arm having a ring at its free end, and the arms and the sides of the loop being bent away from each other to form a recess between the arms and the loop for receiving the line.

2. A clothes pin, comprising a closed loop, and a pair of arms connected at one end and diverging from each other toward their free ends, a resilient arch connecting the loop and the arms, the free ends of the arms passing through the loop, the width of the loop being less than the space between the arms when the said arms are in their normal position, so that the said arms will be pressed together by the sides of the loop when in normal position, and will move away from each other when the arms are pressed through the loop, the arms and the loop having cooperating gripping surfaces for engaging the clothes on the line on the opposite side of the point where the arms engage the loop from the arch.

3. A clothes pin comprising a loop and a pair of arms, the arms being connected at one end and diverging toward the other, a resilient connection between one end of the loop and the connected ends of the arms, the free ends of the arms passing through the loop, said arms being farther apart at their free ends than the width of the loop so that when the loop and the arms are pressed toward each other or are moved away from each other under the influence of the resilient connection, the arms will be moved laterally with respect to each other, for the purpose specified, said arms and loop having cooperating gripping surfaces on the opposite side of the point where the arms pass through the loop from the resilient connection.

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