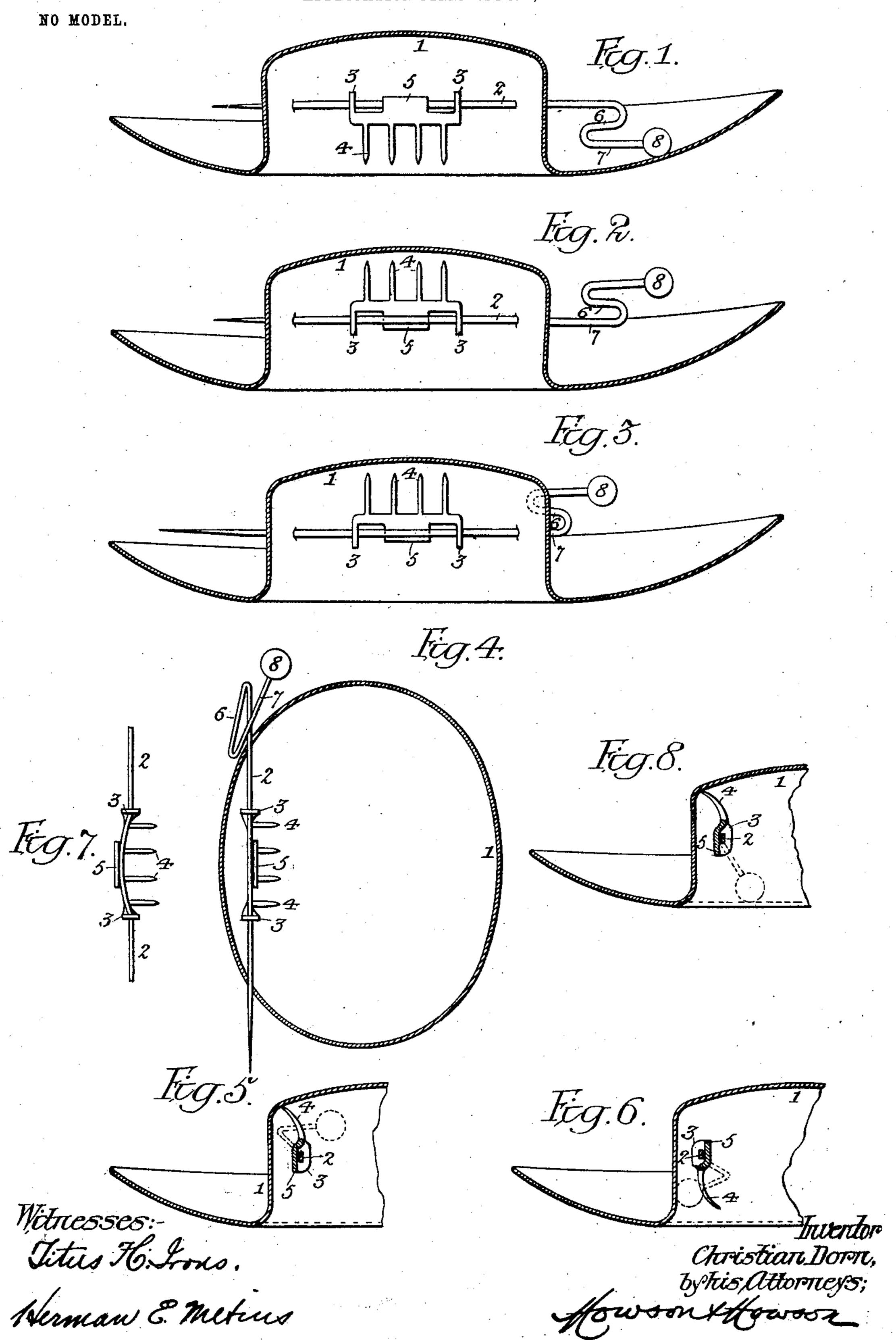
C. DORN. HAT FASTENER.

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CHRISTIAN DORN, OF PHILADELPHIA, PENNSYLVANIA.

HAT-FASTENER.

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To all whom it may concern:

Be it known that I, Christian Dorn, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Hat-Retainers, of which the following is a specification.

My invention relates to that class of hat-retainers which consist of a pin passed through the crown of the hat from front to rear or from side to side, so as to be rotatable in its bearings, said pin having on the inside of the

hat a comb with projecting teeth for engaging with the hair as the pin is turned.

The object of my invention is to so construct a hat-retainer of this class that it will not interfere with the ready application or removal of the hat or of the hat-pin, will be self-locking in the retaining position, and will not in its operation knot or entangle the hair.

This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of a hat-retainer constructed in accordance with 25 my invention, the same being shown in the releasing position. Fig. 2 is a similar view showing the retainer in position for engaging the hair and securing the hat thereto. Fig. 3 is a similar view showing the retainer locked 3° in the retaining position. Fig. 4 is a sectional plan view with the parts in the position shown in Fig. 3. Fig. 5 is a transverse section of part of a hat with the parts in the position shown in Fig. 3. Fig. 6 is a similar 35 section with the parts in the position shown in Fig. 1. Fig. 7 is a longitudinal sectional view showing the manner in which the pin engages the comb; and Fig. 8 is a view similar to Fig. 5, but illustrating a modification of 4° my invention.

1 represents the crown of a hat, and 2 a pin passed through the crown and having its bearings in oppositely-disposed portions of said crown, the pin being disposed adjacent to one side of the crown if it is passed through the same from the front to rear or adjacent to the front or rear of the crown if it passes through the same from side to side. That portion of the pin which is inside of the crown of the hat engages eyes 3 at the opposite ends of the

back bar of a comb 4, whose teeth are intended to engage the hair of the wearer of the hat, so as to retain the latter in position upon the head. The pin 2 also bears upon a plate 5, located about midway of the back bar of the 55 comb, that portion of the pin which is in engagement with the comb being slightly bent, as shown in Fig. 7, so as to possess a certain amount of resiliency and bear upon the plate 5 with such force as to retain the comb in po- 60 sition longitudinally upon the pin by reason of the frictional resistance to its movements due to such pressure. One of the projecting ends of the pin has a reverse bend 67 formed in it, the outer end of the bent portion 7 be- 65 ing preferably provided with a knob or head 8 of any appropriate character and said bent portion 7 being by preference in a plane inclined in respect to the plane of that portion of the pin which passes through the hat, as 7° shown in Fig. 4.

In the use of the device the comb 4 is first placed inside of the hat in the desired position, and the pin 2 is then passed through the crown of the hat and through the eyes 3 on the back 75 bar of the comb, the bent portions of the end of the pin occupying the same relation to that portion of the pin which passes through the crown of the hat as is occupied by the teeth of the comb—that is to say, said bent por-80 tions extending downwardly from the pin if the teeth are turned downwardly and upwardly from the pin if said teeth are turned upwardly. Before applying the hat to the head the comb is turned so that its teeth pro- 85 ject downwardly, as shown in Figs. 1 and 6, the pin 2 being withdrawn to such an extent that its bent portions are beyond the crown of the hat, as shown in Fig. 1. The pin is then turned in its bearings in the hat-crown, 9° so as to raise the comb 4 and cause its teeth to engage with the hair, as shown in Fig. 2, after which the pin is pushed forwardly until its bent portion 7 bears against the side of the hat-crown, as shown in Figs. 3 and 4, and 95 thus locks the pin against rotation, and consequently retains the comb in the raised or engaging position, (shown in Figs. 3 and 5,) so that any movement of the comb necessary to

hair is absolutely prevented. In order to release the hat, these operations are reversed—that is to say, the pin is withdrawn until its bent portion is clear of the crown of the hat, and said bent portion is then turned downwardly, so as to correspondingly turn downward the comb 4 and permit it to be lifted with the hat from the hair.

The comb when in the retaining position 10 may be caused to clamp the hair as firmly as desired, owing to the fact that the curve of the hat-crown acts with a wedging effect upon the bent portion 7 of the pin as the latter is pushed forwardly. Hence the farther this forward movement of the pin the greater the wedge action and the tighter the pressure of the comb 4 against the inside of the hat-crown. This action is facilitated by the inclination of the bend 7 of the pin, although such wedge 20 action is effected even if said bent portion of the pin is not so inclined, and a similar action may be effected by giving the pin but a single forward bend instead of the reverse bend which I have shown, the latter, however, be-25 ing preferred. As the pin is confined to the comb solely by reason of the frictional bearing of the same thereupon, it can be introduced into or withdrawn from the hat as readily as an ordinary hat-pin, and the re-30 tainer can thus be readily applied to or removed from the hat, the same retainer being susceptible of use in connection with a number of different hats.

I have shown the retainer as applied to one side only of a hat; but in practice a retainer may be used at each side of the same.

In some cases the bent portion of the pin may be caused to engage with the brim of the hat instead of with the crown in order to retain the comb 4 in locking position, such construction being illustrated in Fig. 8, the brim yielding sufficiently to permit the knob to be carried inwardly beyond a position directly below the axial line of the pin, so that releasing movement of the pin can only be effected by corresponding depression of the brim, the power exerted upon the comb to effect the releasing movement of the same not being sufficient to effect such depression.

• Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A hat-retainer consisting of a pin adapted to bearings in opposite portions of the crown of the hat, and having within said crown a comb for engaging the hair, an external portion of said pin being bent so as to engage with some portion of the hat in order to retain the comb in engaging position, substantially as specified.

2. A hat-retainer consisting of a pin adapted

to bearings in opposite portions of the crown of the hat, and having within said crown a comb for engaging the hair, an external portion of said pin being bent so as to engage with the crown of the hat in order to retain 65 the comb in engaging position, substantially as specified.

3. A hat-retainer consisting of a pin adapted to bearings in opposite portions of the crown of the hat, and having within said crown a 70 comb for engaging the hair, an external portion of said pin being bent so as to engage with the crown of the hat to retain the comb in engaging position, said bent portion of the pin being inclined in respect to the axial line 75 of said pin, substantially as specified.

4. A hat-retainer consisting of a pin adapted to opposite bearings in the crown of the hat, and having within said crown a comb for engaging with the hair, an external portion of 80 the pin having a reversely-bent portion for engaging with the crown of the hat and locking the comb in retaining position, substantially as specified.

5. A hat-retainer consisting of a pin adapted 85 to opposite bearings in the crown of the hat, and having within said crown a comb for engaging with the hair, an external portion of the pin having a reversely-bent portion for engaging with the crown of the hat and lock-90 ing the comb in retaining position, the second bend being inclined in respect to the axial line of the pin, substantially as specified.

6. A hat-retainer consisting of a pin adapted to opposite bearings in the crown of the hat, 95 and having within said crown a comb for engaging the hair, said pin being susceptible of longitudinal movement in respect to the comb, and having an external bent portion engaging with the crown of the hat to lock the comb in its retaining position, substantially as specified.

7. A hat-retainer consisting of a pin adapted to opposite bearings in the crown of the hat, and having within said crown a comb for engaging the hair, said pin being susceptible of longitudinal movement in respect to the comb, and having an external bent portion engaging with the crown of the hat to lock the comb in its retaining position, said bent portion being also inclined to the plane of movement of the pin in respect to the comb, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHRISTIAN DORN.

Witnesses:
F. E. Bechtold,
Jos. H. Klein.