

No. 756,691.

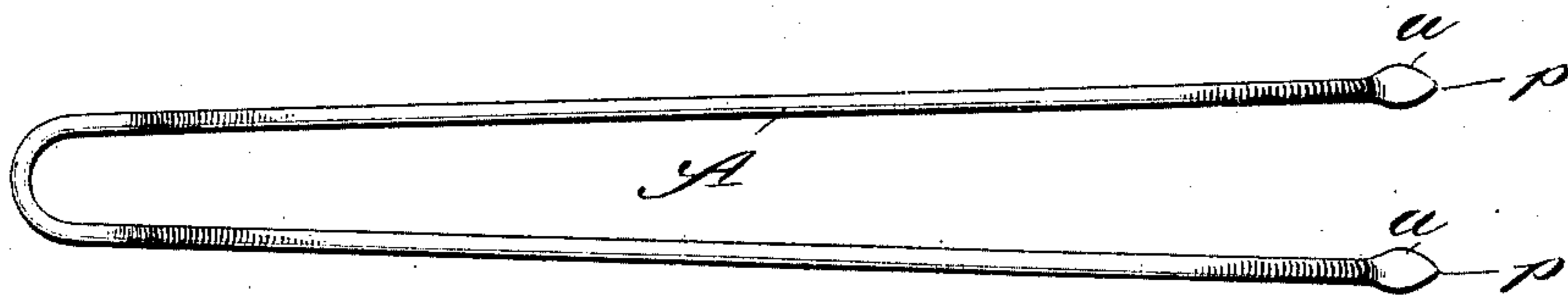
PATENTED APR. 5, 1904.

L. OUSEY.  
HAIR PIN.

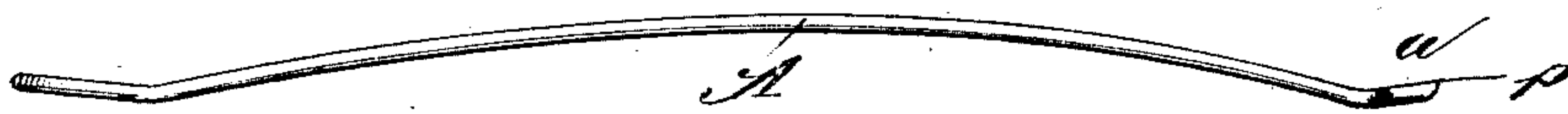
APPLICATION FILED JAN. 2, 1904.

NO MODEL.

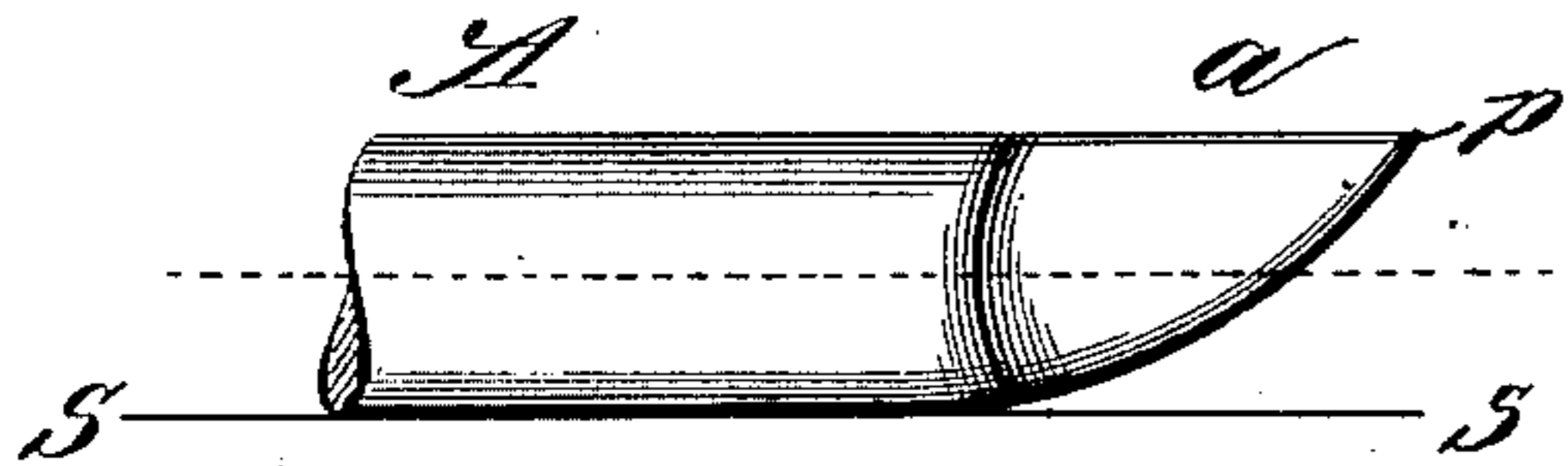
*Fig. 1.*



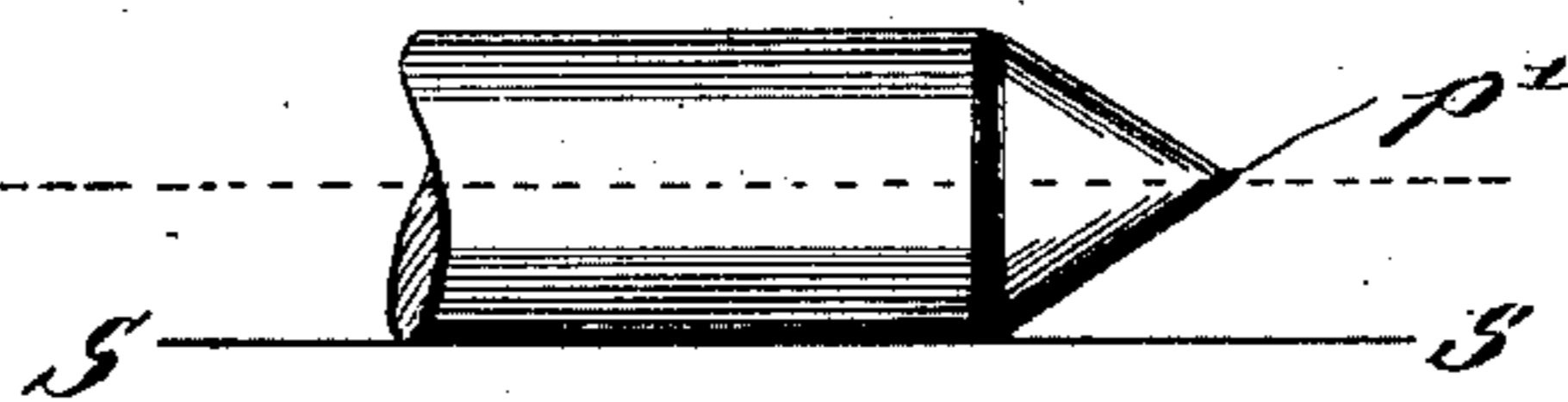
*Fig. 2.*



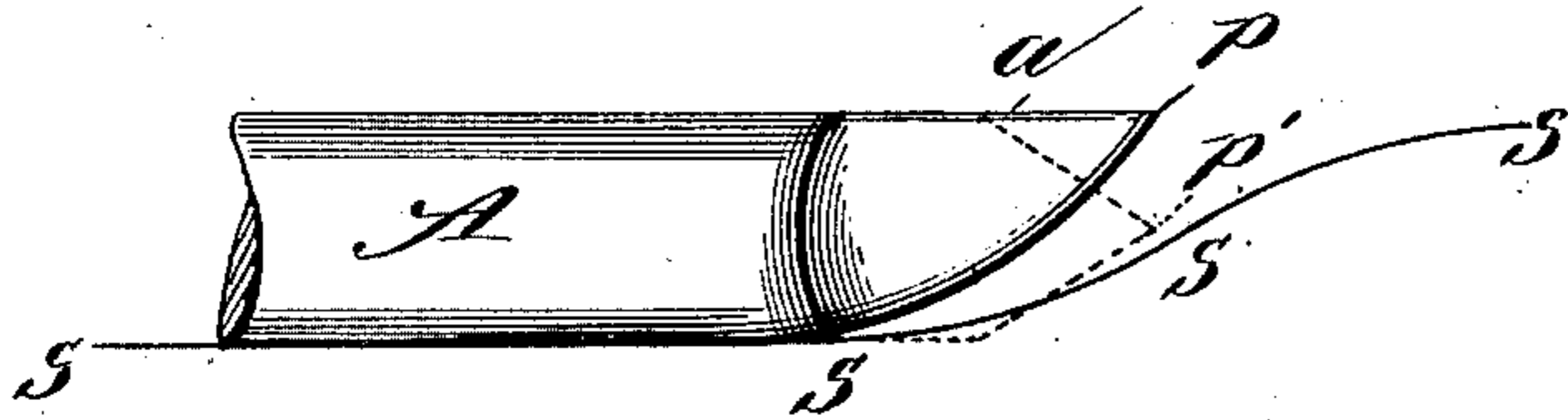
*Fig. 3.*



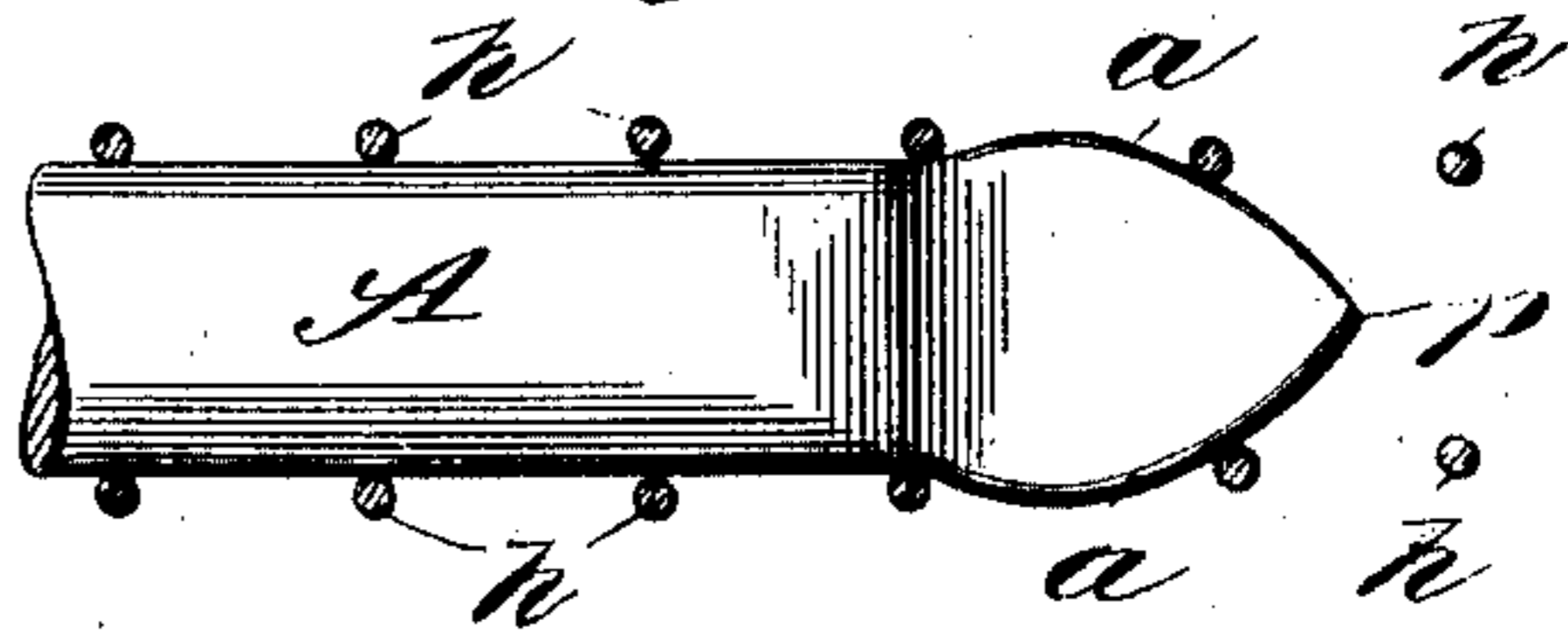
*Fig. 3.a.*



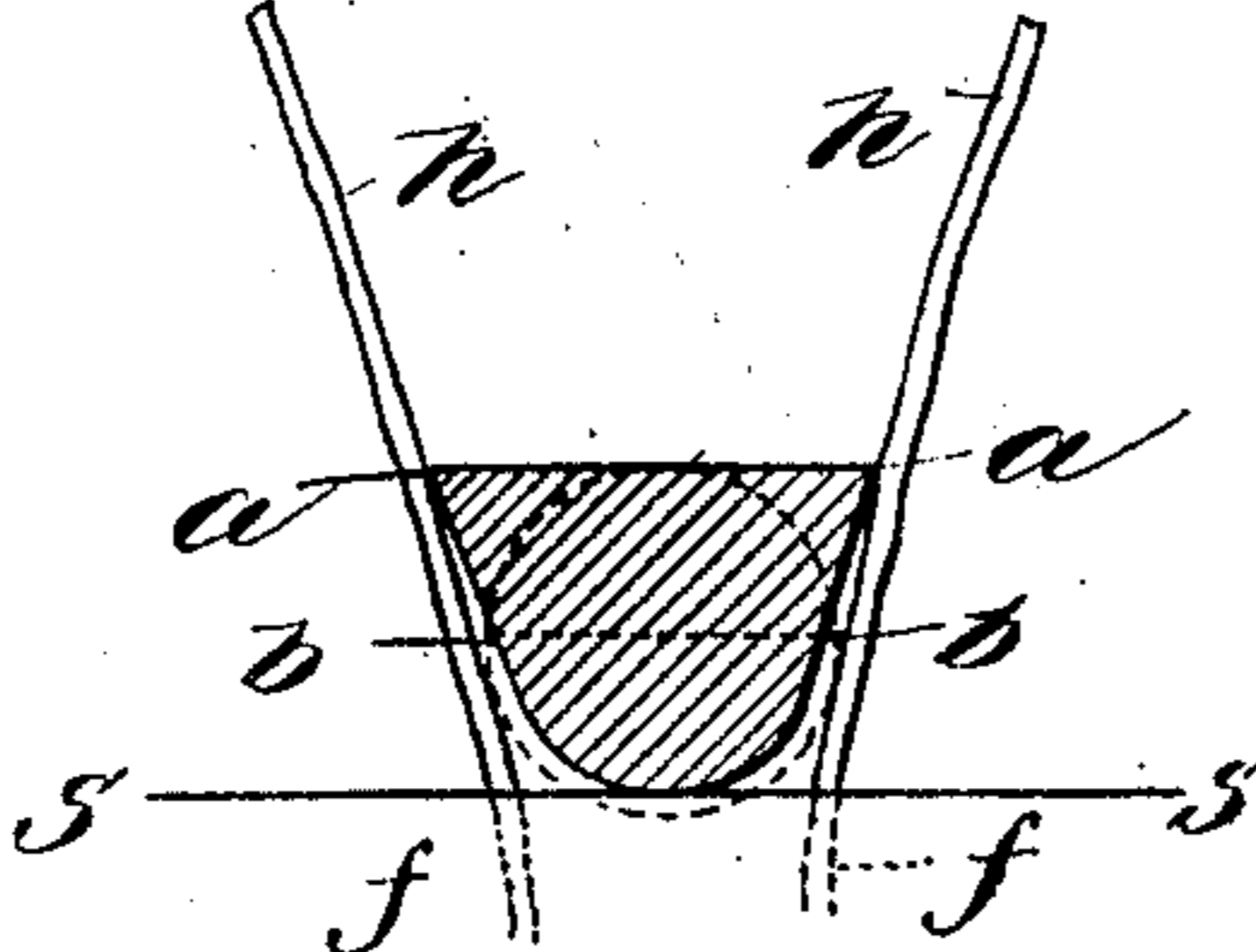
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



WITNESSES:

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INVENTOR

*Louisa Ousey*  
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## UNITED STATES PATENT OFFICE.

LOUISA OUSEY, OF SOUTH WIMBLEDON, ENGLAND.

## HAIR-PIN.

SPECIFICATION forming part of Letters Patent No. 756,691, dated April 5, 1904.

Application filed January 2, 1904. Serial No. 187,431. (No model.)

*To all whom it may concern:*

Be it known that I, LOUISA OUSEY, a subject of the King of England, and a resident of Bellevue Villa, South Wimbledon, Surrey county, England, have invented a new and useful Improvement in Hair-Pins, of which the following is a specification.

My invention is in the nature of an improved hair-pin constructed in such a manner as to enter the hair easily, to glide smoothly over the scalp without pricking, abrading, or scratching the same, and at the same time to hold the pin in the hair against falling out.

To these ends my invention consists in the novel construction and arrangement of the points or advancing ends of the pin, which I will now proceed to describe, with reference to the drawings, in which—

Figure 1 is a top plan view, and Fig. 2 a side view, of a hair-pin embodying my invention. Fig. 3 is an enlarged detail, in side view, of my point; and Fig. 3<sup>a</sup>, a similar view of the old form of hair-pin point juxtaposed for the elucidation of my novel features. Fig. 4 is a detail side view of my point, showing its relation to the scalp while being inserted. Fig. 5 is an enlarged plan view of my point shown in relation to the hair-stems to illustrate how the pin is prevented from falling out; and Fig. 6 is an enlarged cross-section through the point of my pin shown in relation to the hair-stems to illustrate how it avoids damaging strains incident to the lateral deflection of the hair-stems.

In the drawings Figs. 1 and 2, A represents a hair-pin provided with my improved point. As shown, this hair-pin is of the general shape heretofore patented by me in the United States, July 31, 1894, No. 523,904. It is to be understood, however, that my points are not to be limited to the application to this particular form of hair-pin, but may be applied to any form of hair-pin.

The distinguishing features are as follows: The points at *a* are made of a generally heart shape or spoon shape, bulging laterally beyond the diameter of the wire from which they are formed. They are flat, or nearly so, on the upper or outer side and curved or shaped like a runner or shoe on the lower side,

the greatest width of the enlargement being at the upper surface and the extreme tip or apex of the point being elevated above the longitudinal axis of the wire. The plane in which the lateral enlargements extend is one parallel to a plane passing through both legs of the hair-pin or parallel to a tangent to the scalp.

In considering the proper form for the points of a hair-pin regard has to be paid to the fact that in use they are hastily thrust into the hair, where, hidden from view, the points pass over the integument of the skull among the stems of hairs springing each out of its own follicle; that these follicles lie in definite directions in the integument, directions mostly unknown to or not heeded by the user; also, that the muscle attached to each follicle suffers from any excessive deflection of the stem or base of the hair from the direction in which its follicle naturally lies, and especially when such deflection is made close to the skin it may damage the muscle, and consequently the follicle, or it may even break the hair. Again, the scalp yields to the pressure of the points of the pin as it advances. Consequently the points are liable to penetrate the skin and produce subcutaneous laceration.

In explaining how my invention has been made with reference to these considerations and how it avoids previously-existing objections I refer now to the detail views, Figs. 3 to 6.

In Figs. 3 and 3<sup>a</sup> it will be seen that the apex *p* of my hair-pin point in Fig. 3 is just twice as far removed from the scalp-line *s* as is the apex *p'* of the old form of point. (Shown in Fig. 3<sup>a</sup>.) The value of this construction is shown in Fig. 4, in which when the hair-pin is thrust into the hair and the points ride over the scalp they always form a slight depression on the scalp, that throws up a wave of flexible skin *s s s* in front of the advancing point. The elevated apex *p* of my point, it will be seen, rides easily up over this wave of skin like a sled-runner, whereas the central or axial apex of the old point (shown in dotted lines) being much lower is liable to penetrate and lacerate the skin.

Referring now to Fig. 5, as the pin-points with lateral enlargements *a a* advance through the hairs the projections at *a a* deflect the hair-stems *h*, and the latter springing back behind the enlargements *a a* lock the pin against accidentally slipping back and out of the hair. Furthermore, referring to Fig. 6, it will be seen that the widest portion of the enlargement *a a* is at the extreme upper surface and twice as far removed from the scalp-surface *s s* as is the horizontal diameter *b b* of a round pin, (shown in dotted lines,) so that while a considerable width of enlargement *a a* may be had to prevent the pin from falling out, as shown in Fig. 5, there is no excessive lateral deflection of the hair-stems *h* at a point close to the scalp, where an abrupt bend in the hair-stems may break the hair or injure the follicles at *f*, there being twice the length of hair-stems from *a* to *s* for it to bend in that there is between the diametrical line *b b* and the line *s*. This increased distance *a a* allows the hair-stem to bend gradually throughout this distance by reason of its natural elasticity, and thus avoids damaging strains to both the hair and the follicle.

In defining my invention with greater clearness in respect to the prior art I would state that I am aware that hair-pins have been made heretofore with small circular balls at the termini of its branches where the point ordinarily exists, and I make no claim to this construction. This differs radically from my invention in these respects: that my pin has a definite point and this point is located above

the central longitudinal axis of the wire and that the widest part of the enlargement in my points is at the extreme upper surface above the central longitudinal axis and twice as far removed from the scalp-line as any horizontal diameter of a circular enlargement.

In manufacturing my hair-pins I prefer to plate the points and also the loops or upper ends with gold, silver, nickel, or any other suitable metal, and these parts are polished to enable the points to more easily enter.

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

1. A hair-pin having at the termini of its branches lateral enlargements extending in a plane parallel to the plane of the legs and located above the central axial line of the wire substantially as and for the purpose described.

2. A hair-pin having at the termini of its branches points located above the central axial line and lateral enlargements made widest at the upper side above the axial line substantially as and for the purpose described.

3. A hair-pin having at the termini of its branches points located above the central axial line, lateral enlargements made widest at the top and a runner-like shoe-surface on the under side extending up to the point substantially as and for the purpose described.

LOUISA OUSEY.

Witnesses:

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