

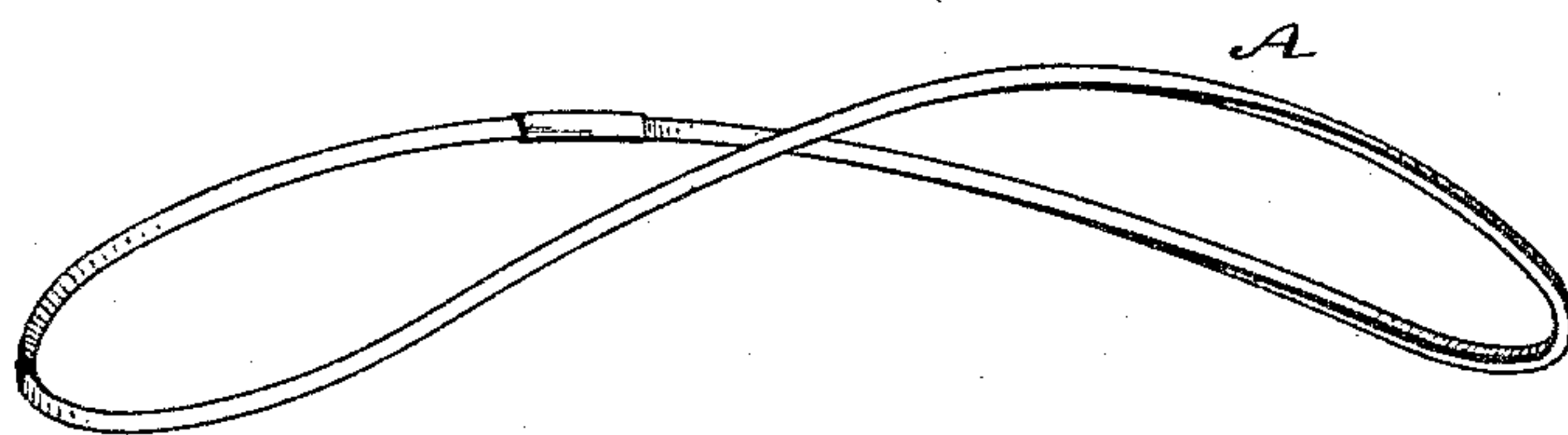
(No Model.)

A. CARY.  
HAT WIRE.

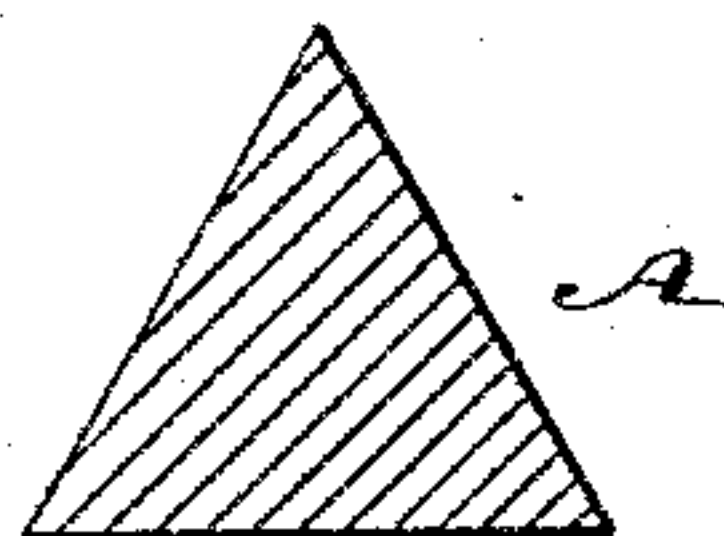
No. 381,530.

Patented Apr. 24, 1888.

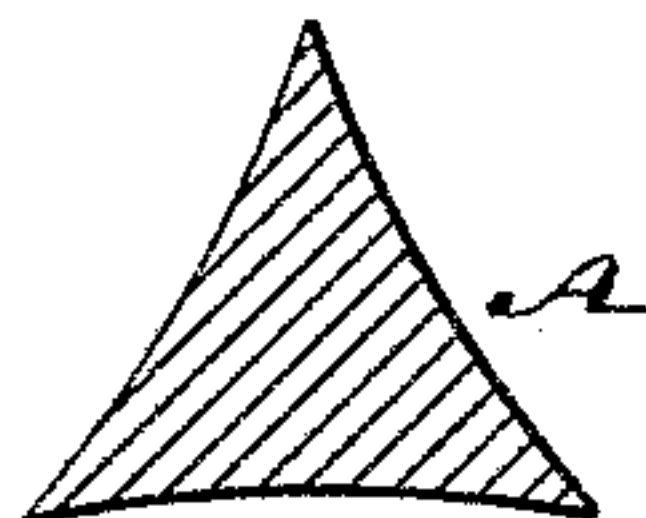
*Fig. 1.*



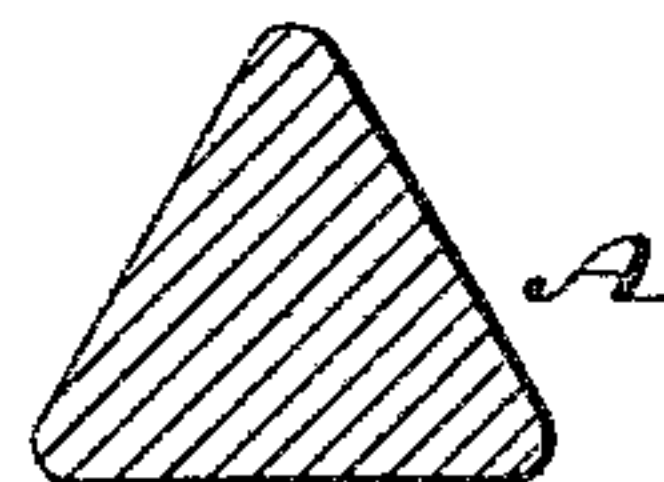
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ALANSON CARY, OF NEW YORK, N. Y.

## HAT-WIRE.

SPECIFICATION forming part of Letters Patent No. 381,530, dated April 24, 1888.

Application filed July 13, 1887. Serial No. 244,197. (No model.)

*To all whom it may concern:*

Be it known that I, ALANSON CARY, of the city, county, and State of New York, have invented a new and useful Improvement in Hat-  
5 Wires, of which the following is a full, clear, and exact description.

My invention has for its object the production of a hat-wire—that is, a wire or wire spring, such as used in the brims of hats to  
10 stiffen and hold them in shape—which shall not only combine increased lightness with strength, but be of angular form or construction on all of its sides to better adapt it to the use for which it is designed.

15 To these and other ends the invention consists in a wire for hat-brims of triangular shape in transverse section throughout its length, substantially as and hereinafter described.

20 Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a face view of a hat-  
25 wire bent to conform to the shape and brim of the hat, but of a shape in transverse section—that is, the metal of which it is composed—in accordance with my invention. Fig. 2 is a transverse section, upon a larger scale, of my  
30 improved hat-wire at any given point in its length; and Figs. 3 and 4 are similar views to Fig. 2, showing certain variations and additions in the construction of the wire.

A is the wire, which is suitably tempered  
35 to give it the necessary elasticity, and which is bent by suitable means to make it conform to the curl and shape of the brim of the hat, as shown in Fig. 1, to which it is applied and secured in the ordinary way.

40 The distinguishing feature of my hat-wire is clearly illustrated in Fig. 2 of the drawings, said continuous or endless hat-wire being of an equilateral-triangle shape in transverse section throughout its length, the same  
45 presenting three flat or non-protruding sides. It is not absolutely necessary, however, that the sides of the wire should be positively flat, as any or all of them might be made slightly con-

cave, as shown in Fig. 4; and, if desired, the angles formed by the meeting sides may be  
50 slightly rounded off or left blunt, as shown in Fig. 3, instead of being formed sharp, as shown in Figs. 2 and 4; but in each and every case the sides are virtually flat or non-protruding  
55 in distinction to being made convex or protruding intermediately of their depth. By this construction of the hat-wire increased strength or rigidity is obtained for a given weight or volume of metal, and considerable  
60 saving of metal produced over or as compared with hat-wire of different shape, especially hat-wire having one or more of its sides in transverse section of convex shape or other protruding form. My improved construction  
65 materially lessens the cost of the hat-wire and enables me to produce a much cheaper and lighter, yet equally strong or stronger, hat-wire, also one which presents greater adaptability of application to the brim of a hat by  
70 reason of the similar shape of the several sides of it at different points in its length and the fit or presentation of its edges to the angle of the curl of the brim of the hat.

By making the meeting angles of the sides of the wire rounded or blunt, as shown in Fig.  
75 3, there is not only a further saving of metal, but said wire is more conveniently handled and not liable to cut when in place in the hat-brim.

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

1. As an improved article of manufacture, a hat-brim wire of an equilateral-triangle shape in transverse section throughout its length,  
85 substantially as specified.

2. In a hat-brim wire of triangular shape in transverse section throughout its length, the wire having the angles formed by its meeting  
90 sides made rounded or blunt, essentially as described.

ALANSON CARY.

Witnesses:

EDGAR TATE,  
E. M. CLARK.