

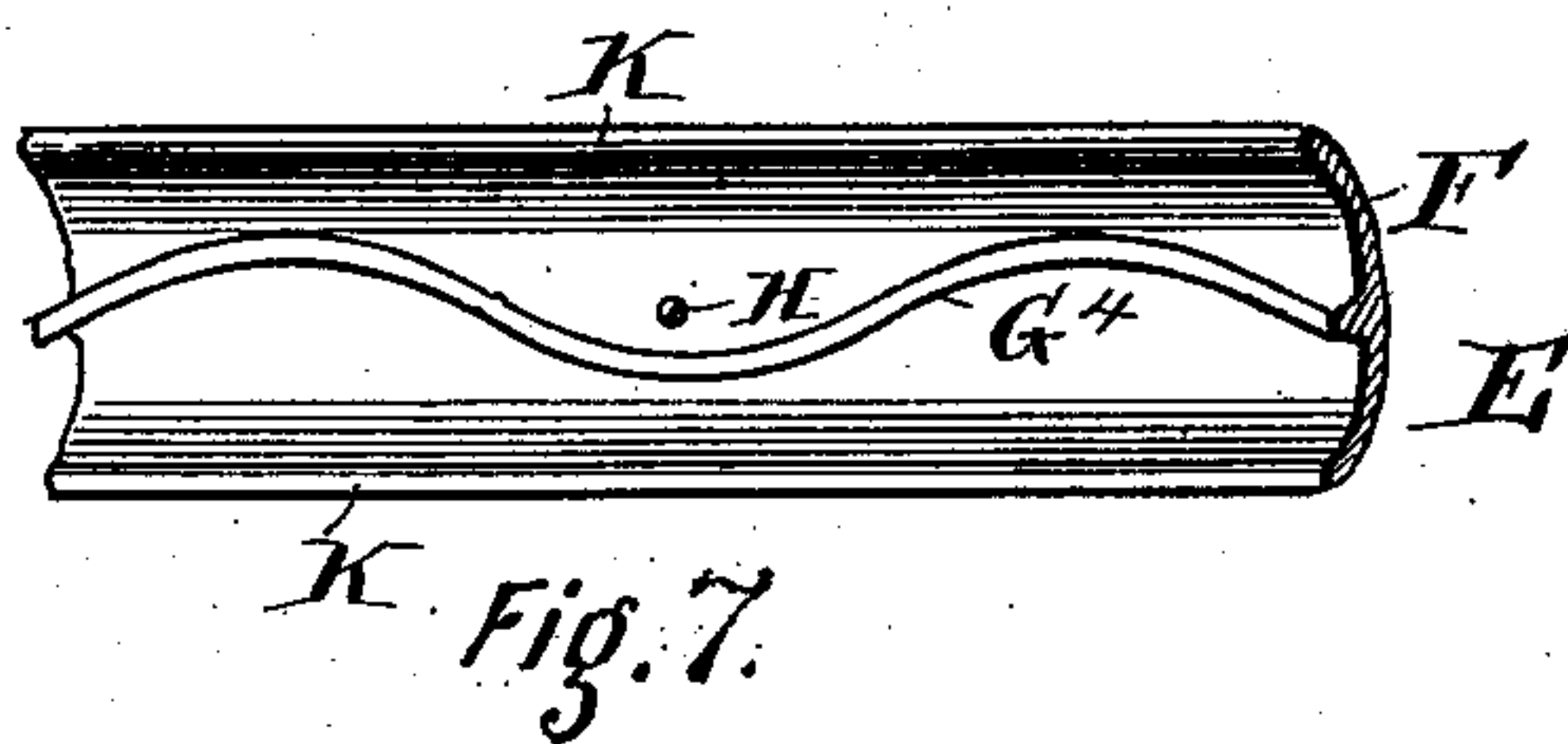
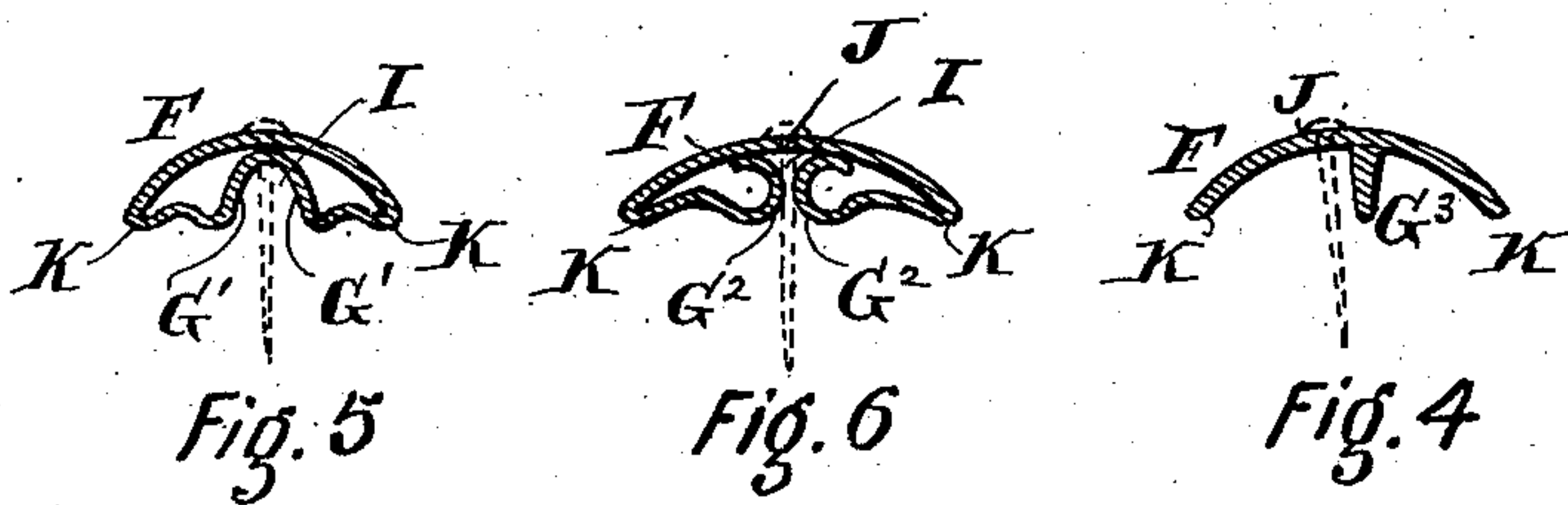
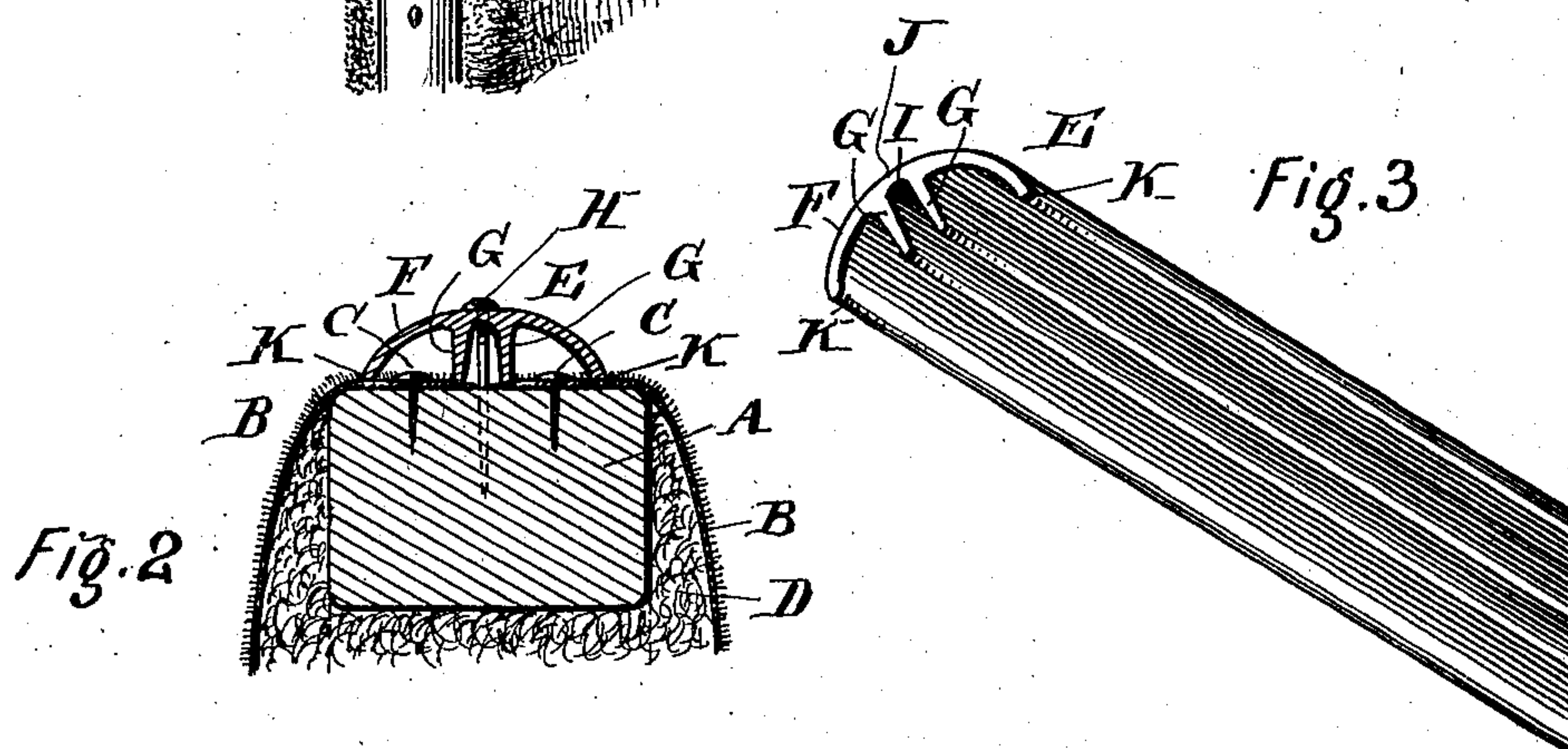
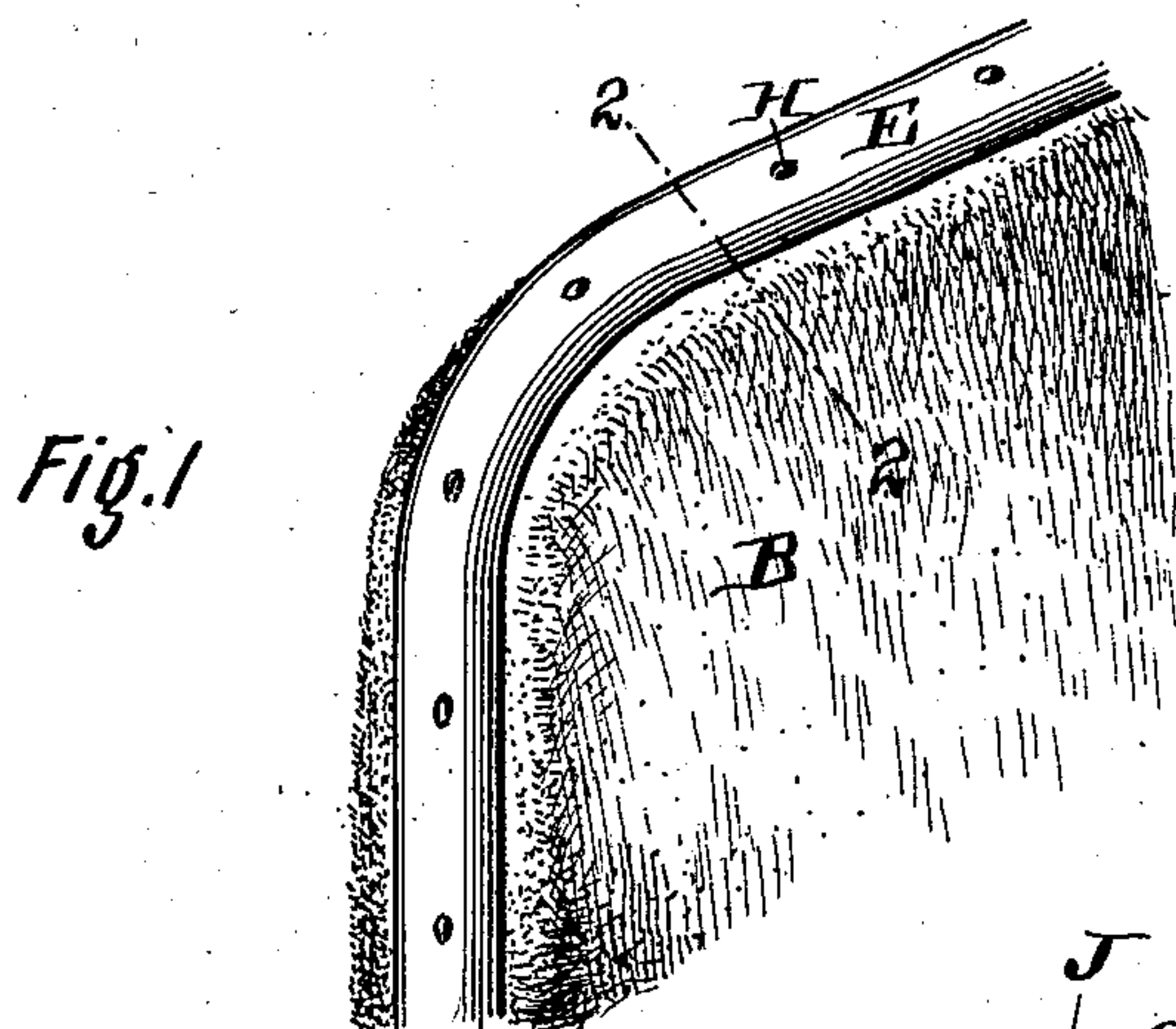
No. 744,537.

PATENTED NOV. 17, 1903.

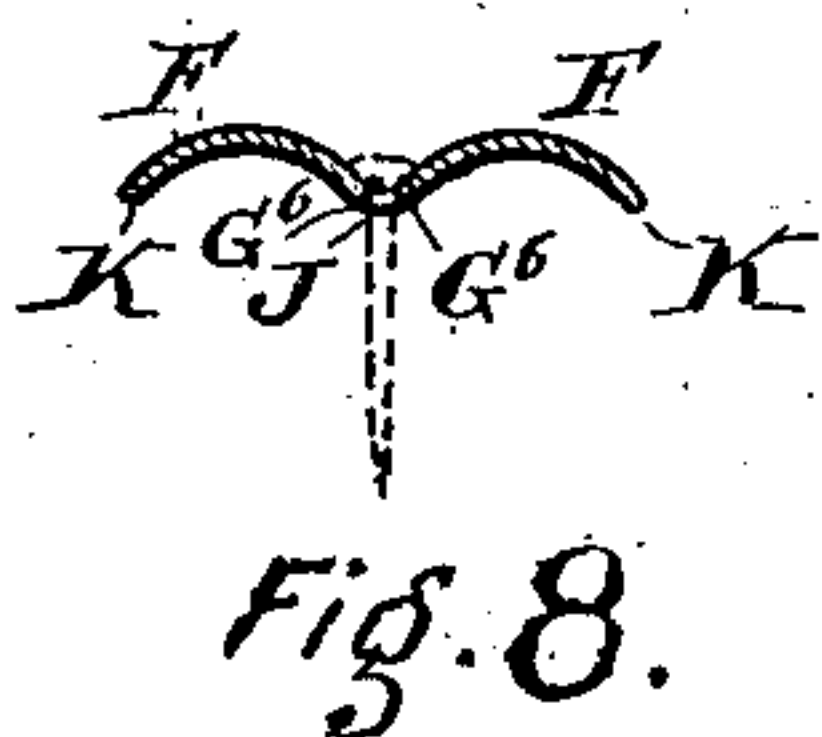
H. S. HALE.  
BEADING STRIP.

APPLICATION FILED JULY 26, 1902.

NO MODEL.



Attest  
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# UNITED STATES PATENT OFFICE.

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## BEADING-STRIP.

SPECIFICATION forming part of Letters Patent No. 744,537, dated November 17, 1903.

Application filed July 26, 1902. Serial No. 117,142. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY S. HALE, of the city and county of Philadelphia, State of Pennsylvania, have invented an Improve-  
5 ment in Beading-Strips, of which the following is a specification.

More particularly, it is the object of my invention to provide a beading-strip especially adapted for car-seat backs and the like which  
10 shall be light in weight, economical to manufacture, and easily applied to the frame of the car-seat back or other article to which it is applied.

In carrying out my invention I form the  
15 beading-strip of a strip of suitable material, preferably metal, provided in its under surface, which is adapted to rest upon the frame to which the strip is attached, with a strut or supporting part between the longitudinal  
20 side extremities of the strip and extending to a depth reaching the plane between the said extremities, and also having an open space or spaces on its under surface forming a thin crown adjacent to the strut or sup-  
25 porting part for the passage of the fastening nails or screws.

The invention may be embodied in various forms; but the strut or supporting part is preferably a longitudinal rib integral with  
30 the curved body portion, and in my preferred construction I employ two parallel ribs forming between them the open crown-capped space for the passage of the fastening-nails.

The essential feature of my invention is  
35 that the beading-strip must have an outwardly-curved surface or surfaces and its outer longitudinal edges and one or more supporting parts or struts between the side edges shall lie in the same plane, whereby there  
40 shall be no liability to crush in the outwardly-curved surfaces when driving in the nails.

A strip embodying my invention while preserving substantially the strength and outward appearance of a solid hemispherical or  
45 outwardly-swelled metal beading-strip is much less in weight of metal, and consequently less expensive, and may be applied with much greater facility, since by reason of the open space for the passage of the nails  
50 or screws it is not necessary to drill holes through any substantial thickness of metal,

and when the crown formed by the body is thin enough the nails may be driven through without any drilling. The structure is also  
such that it may be more easily curved over 55 the rounded corners of the back than is the case with wooden or solid metal beading-strips.

In the drawings, Figure 1 is a perspective view of a corner of a car-seat back provided 60 with my improved beading-strip. Fig. 2 is a cross-section of the same on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of one form of my beading-strip. Figs. 4, 5, 6, and 8 are cross-sectional views illustrating differ- 65 ent forms of the strip, and Fig. 7 is an inverted plan view illustrating still another form.

The strip E consists of a longitudinal piece of suitable material, preferably having an 70 arched or curved outer surface F, the extremities K K of which rest upon the frame or body A to which the strip is attached.

Between the extremities K K on the inner side of the strip are struts or supporting parts 75 adapted to rest upon the surface of the frame or body A and support the arched or outwardly-curved body F. These struts or supports are preferably integral longitudinal ribs or portions and may be formed in various 80 ways without departing from the invention. A number of forms are shown in the drawings. In the construction shown in Figs. 2 and 3 the struts or supports consist of two parallel longitudinal integral ribs G G, adja- 85 cent to the center and extending to the depth reaching the plane between the extremities K K, so that when the strip is in place the extremities K K and the ends of the longitudinal ribs G G will rest upon the surface of 90 the support. The ribs G G thus act as struts or supports resting on the surface of the frame to sustain or support the body of the strip at points between its side extremities.

Between the strut-ribs G G is an open space 95 I, the top of which is capped by a thin crown formed of the body of the metal. The fastening nails or screws H pass through this thin cap or crown and through the open space I into the frame or part A, to which the strip 100 is secured.

Suitable holes J for the nails or screws H



may be drilled in the thin cap or crown; but in cases where the cap or crown is sufficiently thin the holes may be omitted and the nails may be driven through the metal.

5 The construction shown in Fig. 4 is similar to that shown in Figs. 2 and 3, except that in this case only one longitudinal strut-rib  $G^3$  is used. As this construction would tend to throw the fastening nails or screws out of  
10 the median line, this single strut-rib may be made of wavy form, as shown at  $G^4$  in Fig. 7, in which case the nails may be arranged in the bends of the curves of the rib, so as to be on the median line of the strip.

15 The construction shown in Fig. 7 is similar to that shown in Figs. 2 and 3, except that the ribs  $G$  extend solidly to the extremities  $K K$ . This forms a stronger strip, but uses more metal.

20 In the forms described with metal strips the beading-strips will be cast or formed by drawing, planing, or shaping solid metal strips.

In the construction shown in Figs. 5 and 6 the strips are formed of thin sheet metal. In  
25 the first form, Fig. 5, a thin metal tube is drawn through dies to compress the lower portion and bend in the metal on each side into the longitudinal strut-ribs  $G'$ , forming the open space  $I$  between, capped by the thin  
30 crown formed of the double thickness of the metal. In the second form, Fig. 6, the strip is formed from a flat strip, the two sides of which are bent inward and curved back at the ends to form the longitudinal strut-ribs  
35 or supports  $G^2 G^2$ , with open space  $I$  between, which in this case is capped by a crown formed of a single thickness of the metal.

In the form shown in Fig. 8 the metal is very thin and has two outwardly-curved parts  
40  $F F$ , having their side extremities  $K K$  in the same plane with the intermediate supporting parts  $G^6 G^6$ , adjacent to which are the holes  $J$  for the nails.

While I prefer to form the beading-strips of  
45 metal, they may be formed of wood or any other suitable material.

In Figs. 1 and 2 I have shown the strip applied to a car-seat back of usual construction, in which  $A$  is the wooden frame, and  $B B$  the  
50 outer covering over the filling  $D$ , which is secured to the wooden frame  $A$  by the tacks  $C C$ . The strip is laid upon the frame over the edges of the covering, with the extremities  $K K$  and struts in contact with the framework  
55 and is secured in place by the nails or screws  $H$ .

While I have shown the strip applied to a car-seat, it is to be understood that I do not mean to limit myself to such application, as the strip may be used for a great variety of  
60 purposes.

What I claim as new, and desire to secure by Letters Patent, is as follows:

1. A beading-strip consisting of a longitudinal strip provided upon its under surface,  
65 which is adapted to rest upon the frame to which the strip is secured, with a strut or support between the longitudinal side ex-

70 tremities of the strip and extending to a depth reaching the plane between said extremities, said strip also having an open space on its under surface forming at the top a thin crown adjacent to the strut or support for the passage of the fastening nails or screws.

2. A beading-strip consisting of a longitudinal strip provided on its under surface,  
75 which is adapted to rest upon the frame to which the strip is secured with a longitudinal strut-rib between the side extremities of the strip and extending to a depth reaching its plane between said extremities, said strip also  
80 having on its under surface a longitudinal open space adjacent to said rib and forming at the top a thin crown adjacent to the strut-rib for the passage of the fastening nails or screws.

3. A beading-strip, consisting of a longitudinal strip provided on its under surface with two parallel longitudinal ribs of a depth extending to the plane between the extremities  
90 of the strip and forming between them an open space for the passage of the fastening nails or screws capped at the top by a thin crown composed of the body of the strip.

4. A beading-strip, consisting of a longitudinal strip provided on its under surface with  
95 two parallel longitudinal ribs of a depth extending to the plane between the extremities of the strip and forming between them an open space for the passage of the fastening nails or screws capped at the top by a thin  
100 crown composed of the body of the strip, said crown being provided with openings for the nails or screws communicating with the open space between the ribs.

5. A beading-strip, consisting of a longitudinal metal strip provided on its under surface with two parallel integral longitudinal ribs of a depth extending to the plane between the extremities of the strip and forming  
105 between them an open space for the passage of the fastening nails or screws capped at the top by a thin crown composed of the body of the strip.

6. A beading-strip, consisting of a strip of thin sheet metal bent to form a curved outer  
115 body portion terminating in longitudinal extremities adapted to rest upon the surface of the frame to which the strip is attached, and having the metal beyond an extremity bent inward under the body portion into a longitudinal  
120 strut-rib of a depth extending to the plane between the side extremities and leaving an open space adjacent to said strut-rib for the passage of the fastening nails or screws.

7. A beading-strip, consisting of a strip of thin sheet metal bent to form a curved outer  
125 body portion terminating in longitudinal extremities adapted to rest upon the surfaces of the frame to which the strip is attached, and having the metal beyond said extremities on each side bent inward under the body portion into two longitudinal strut-ribs of a depth  
130 extending to the plane between the side ex-



tremities and leaving an open space between said strut-ribs for the passage of the fastening nails or screws.

5 8. A beading-strip for car-seats, consisting of a strip of thin sheet metal having the outer curved edges terminating in longitudinal clamping extremities adapted to rest upon the edges of the upholstery covering of the seat and clamp them to the frame, said strip  
10 being formed with a strut between said longitudinal clamping extremities extending to

a depth reaching the plane between said extremities and having two parallel longitudinal edges adapted to rest on the surface of the frame between which the fastening nail 15 or screw is inserted.

In testimony of which invention I have hereunto set my hand.

HENRY S. HALE.

Witnesses:

JOHN B. KILBURN,  
GEO. H. RAPSON.