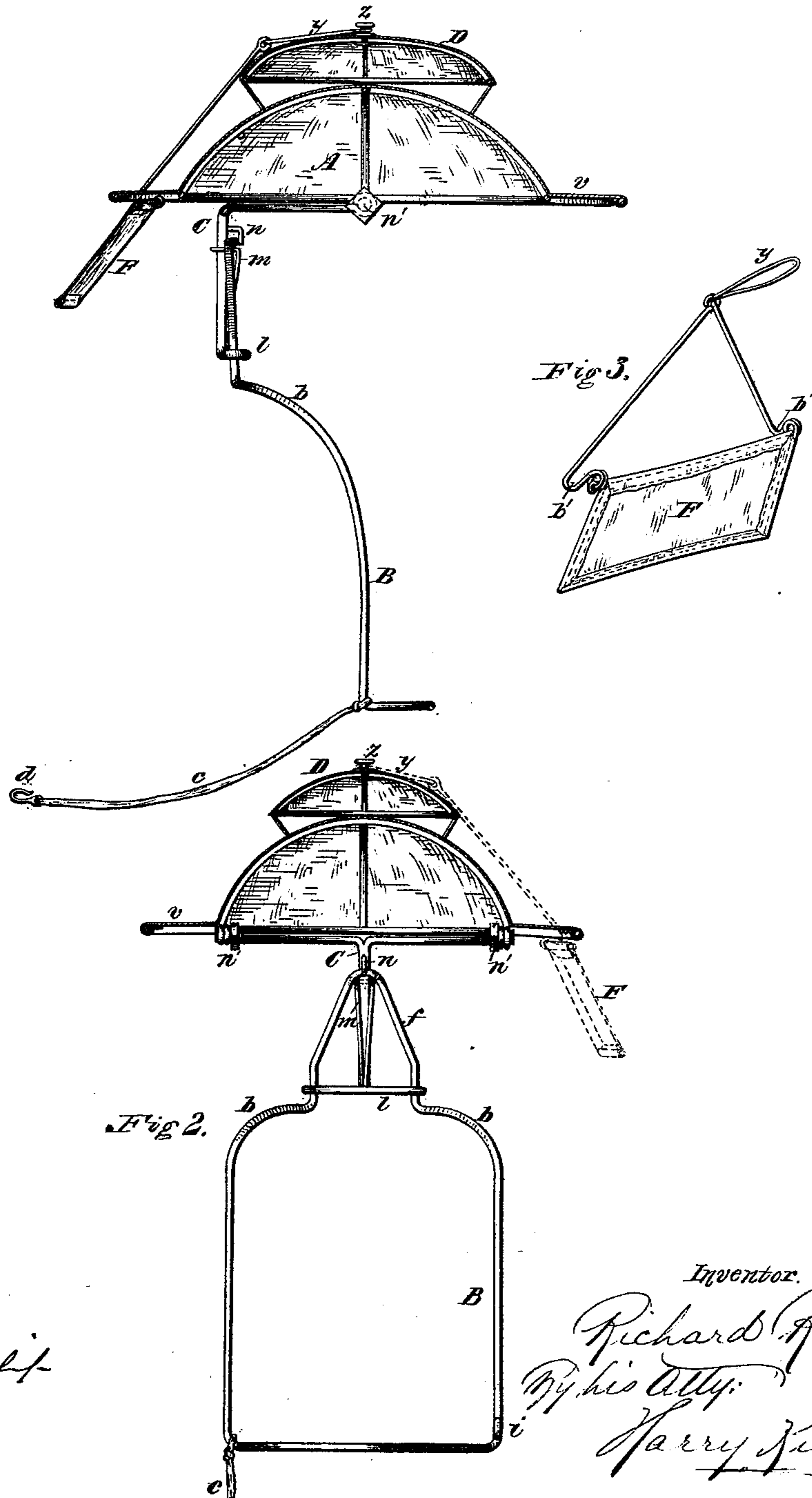


R. RAY.
Ventilating Hat.

No. 229,466.

Patented June 29, 1880.

Fig 1.



Witnesses.

J. M. O'Kearney
H. L. Fairbank

Inventor.

Richard Ray.
By his Atty:
Harry King.

R. RAY.
Ventilating Hat.

No. 229,466.

Patented June 29, 1880.

Fig 4.

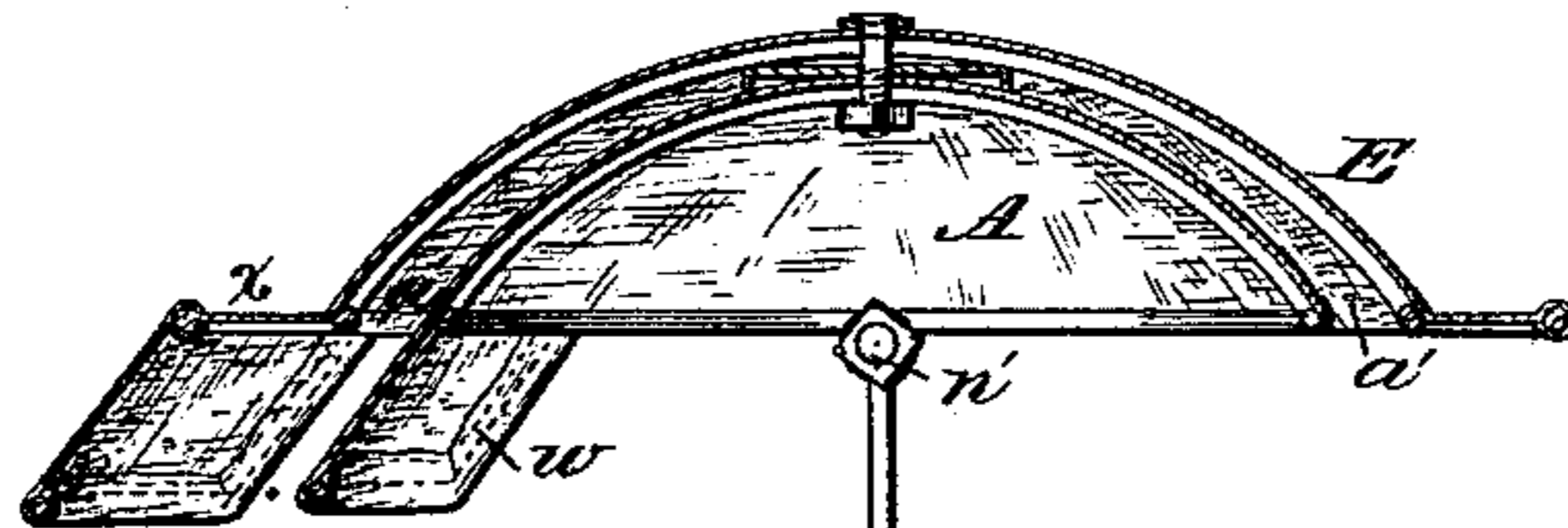


Fig 15.

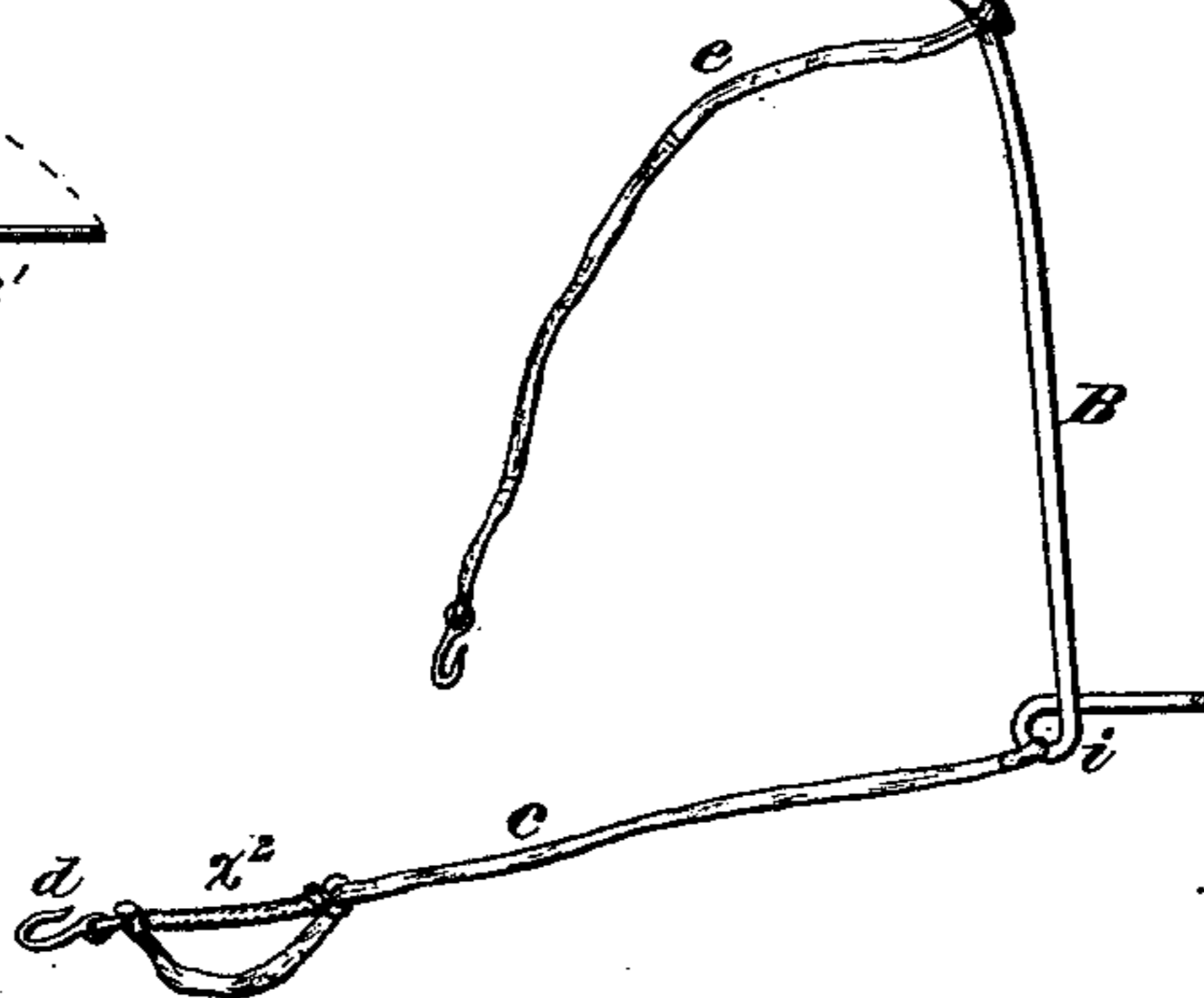
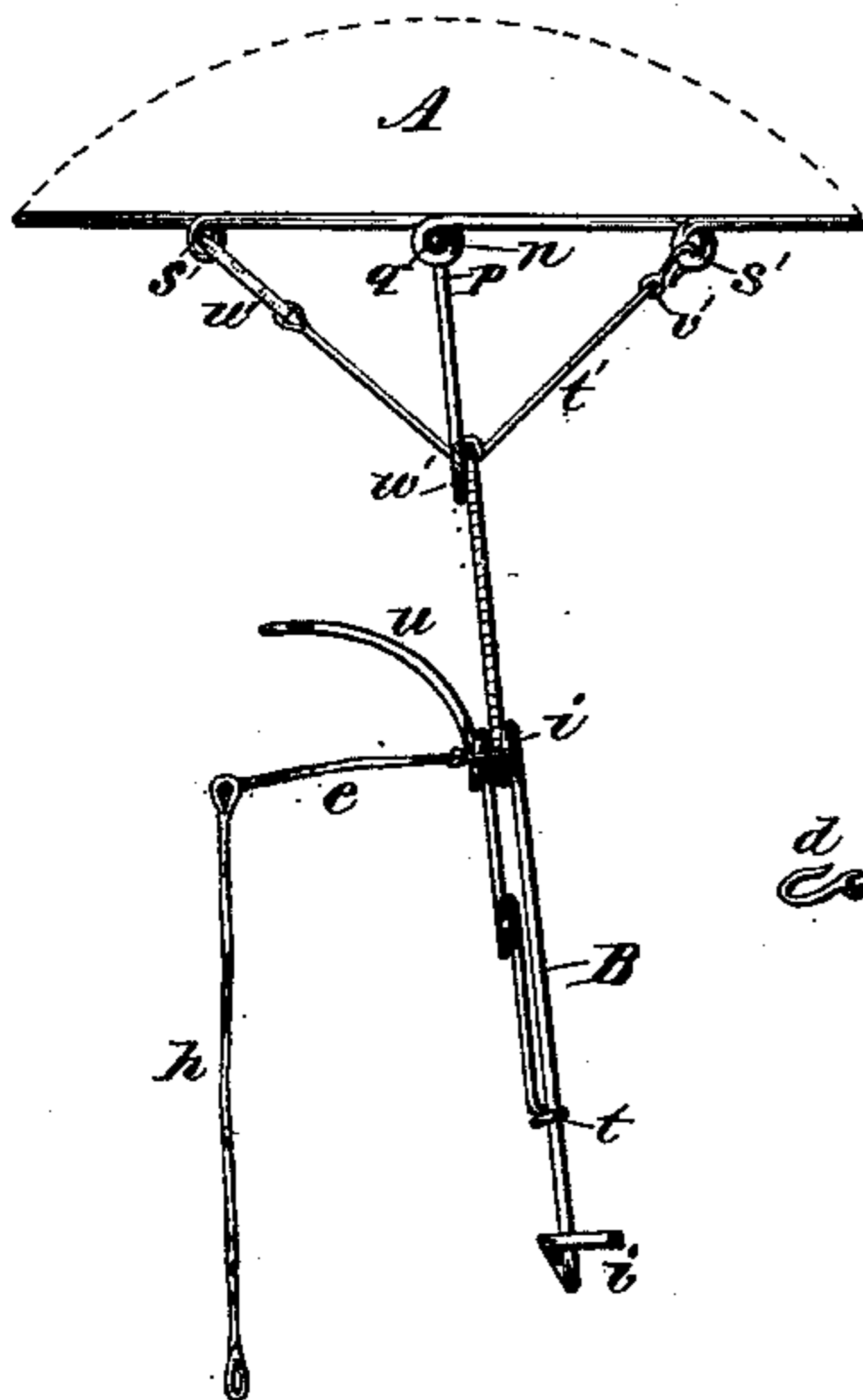
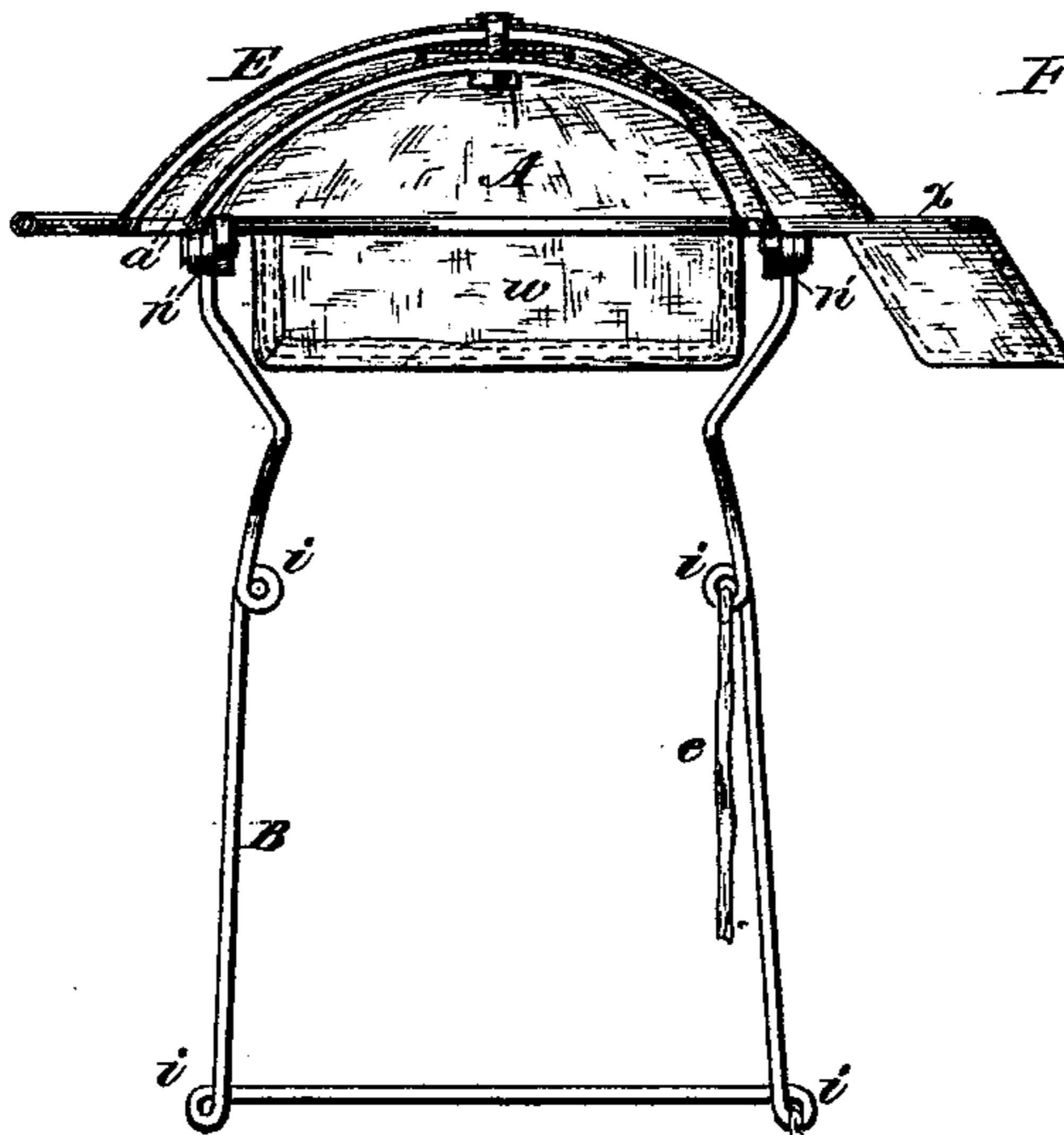


Fig 5.



Witnesses.

J. M. King
H. L. Randolph

Inventor.

Richard Ray.
By his Atty.
Harry King.

R. RAY.
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Fig 6.

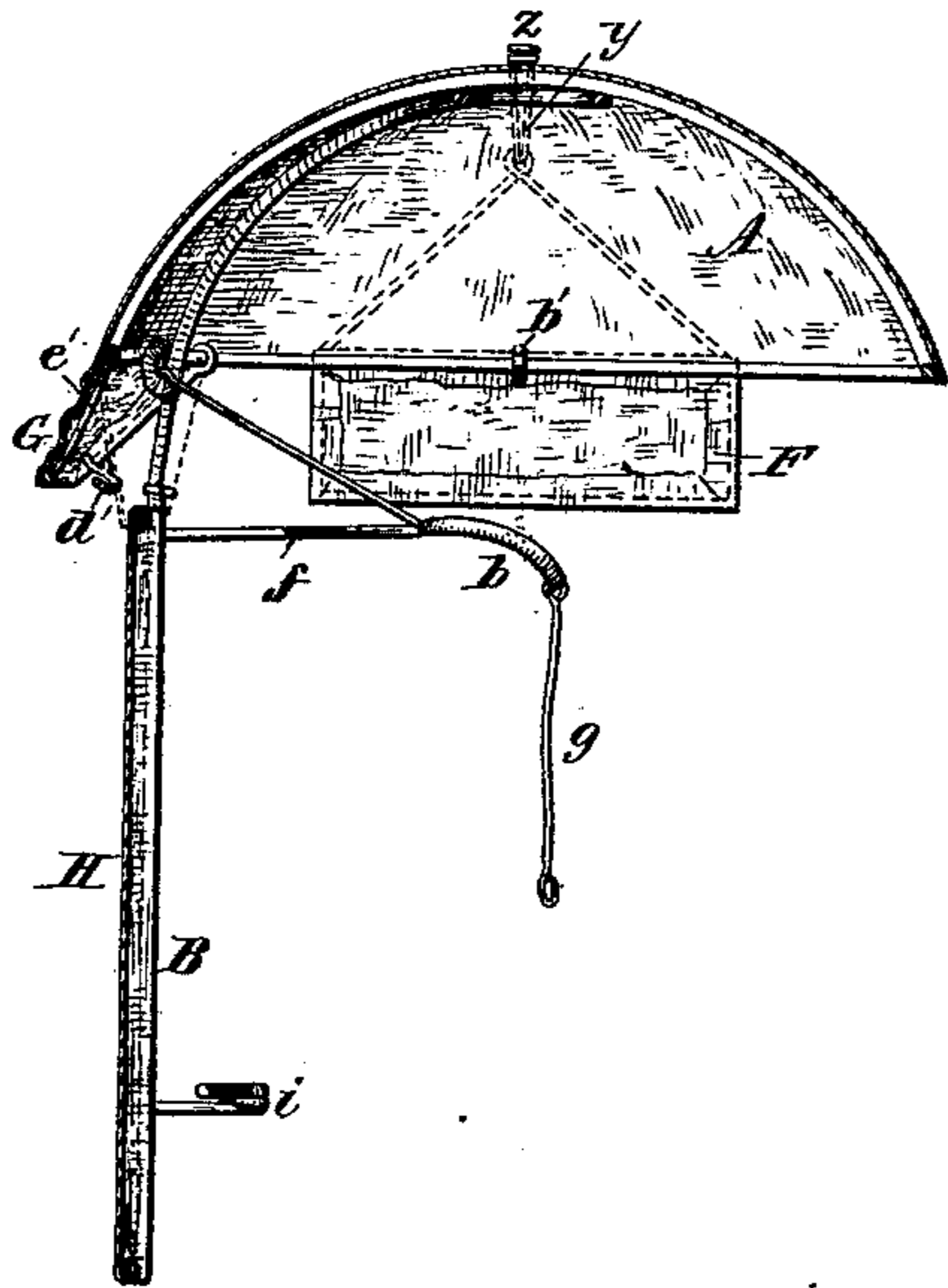


Fig 7.

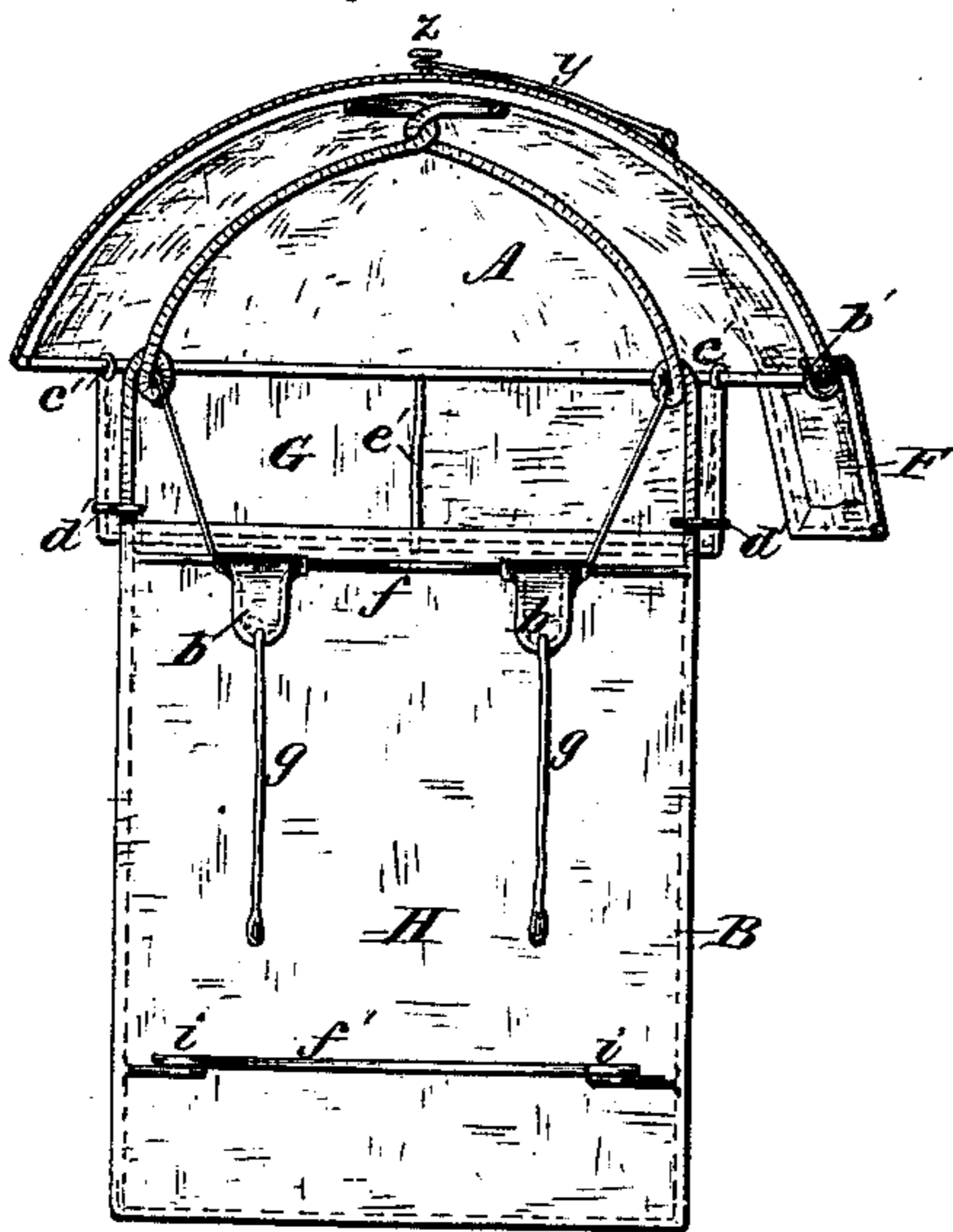
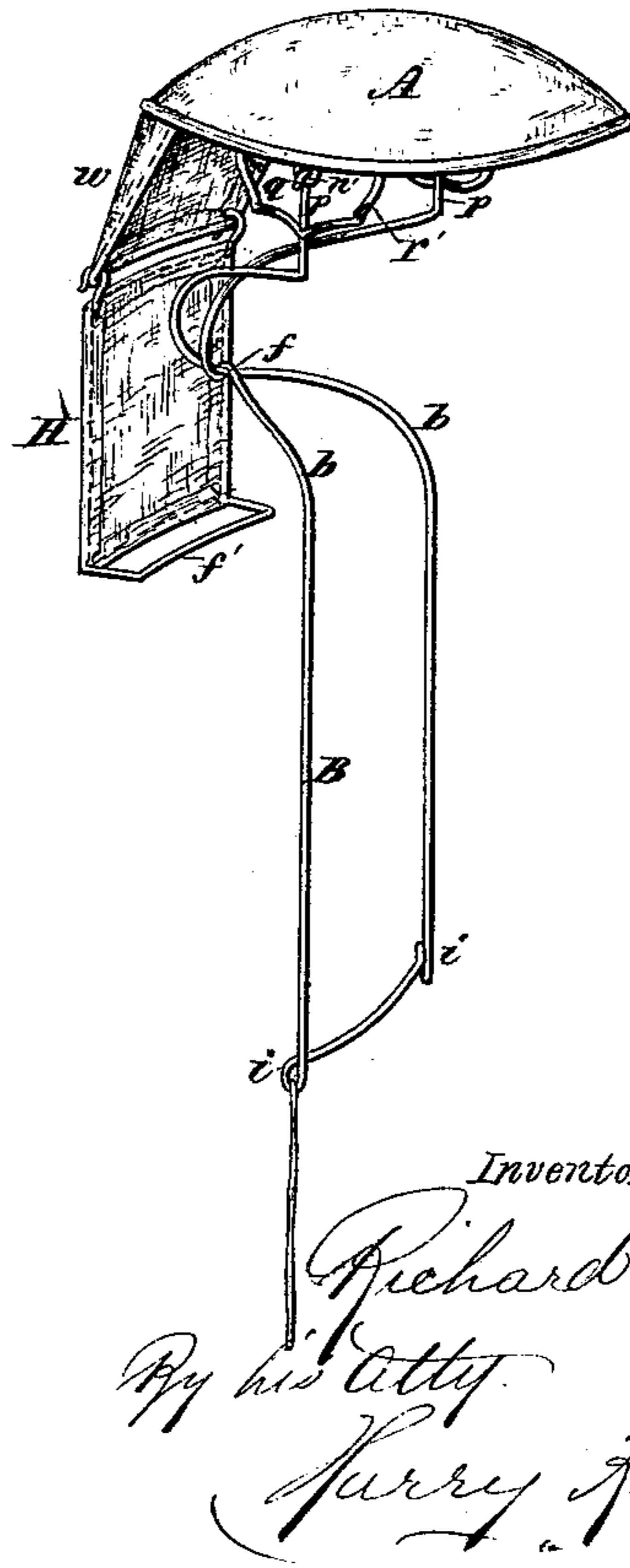


Fig 8.



Witnesses.

J. M. King
H. L. Trenchard

Inventor.

Richard Ray
By his Atty.
Jury King.

R. RAY.
Ventilating Hat.

No. 229,466.

Patented June 29, 1880.

Fig 9.

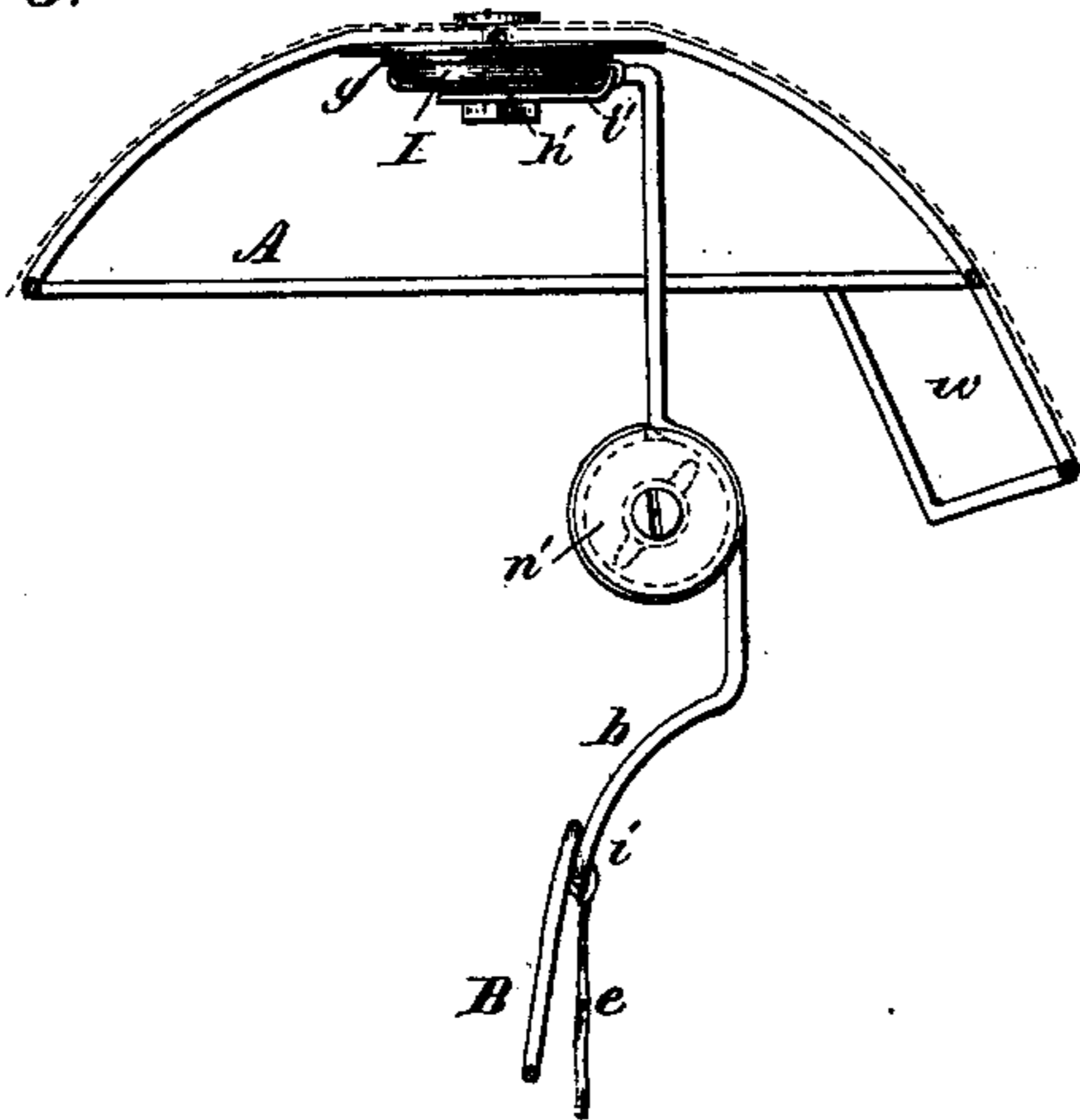


Fig 10.

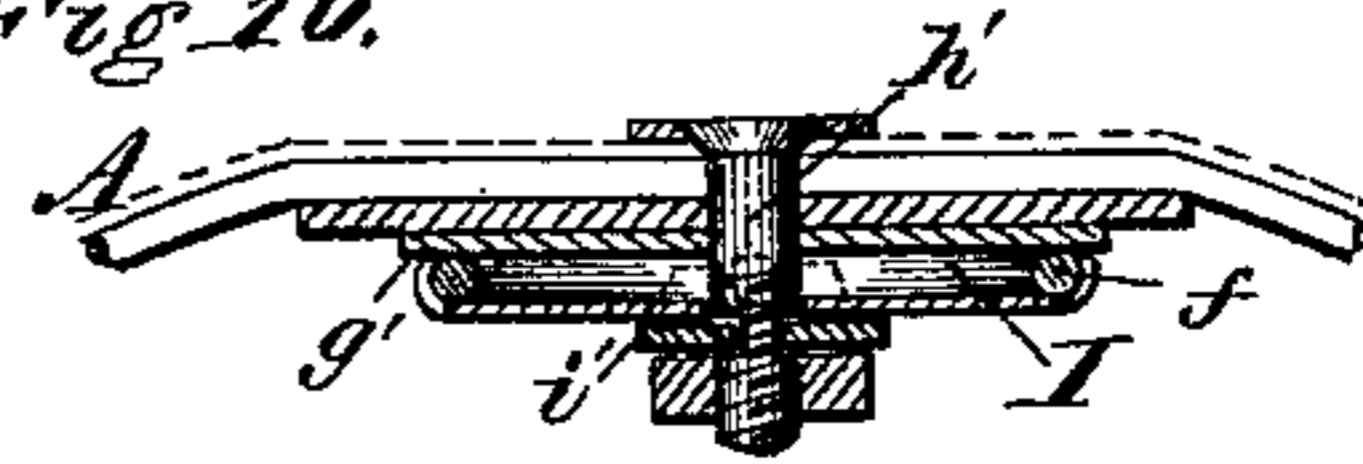


Fig 11.

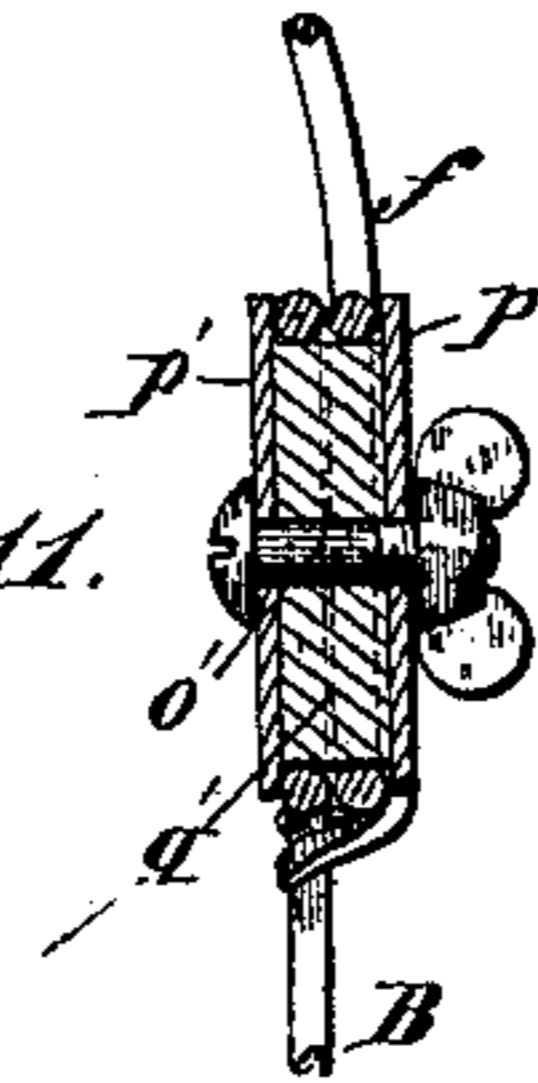


Fig 12.

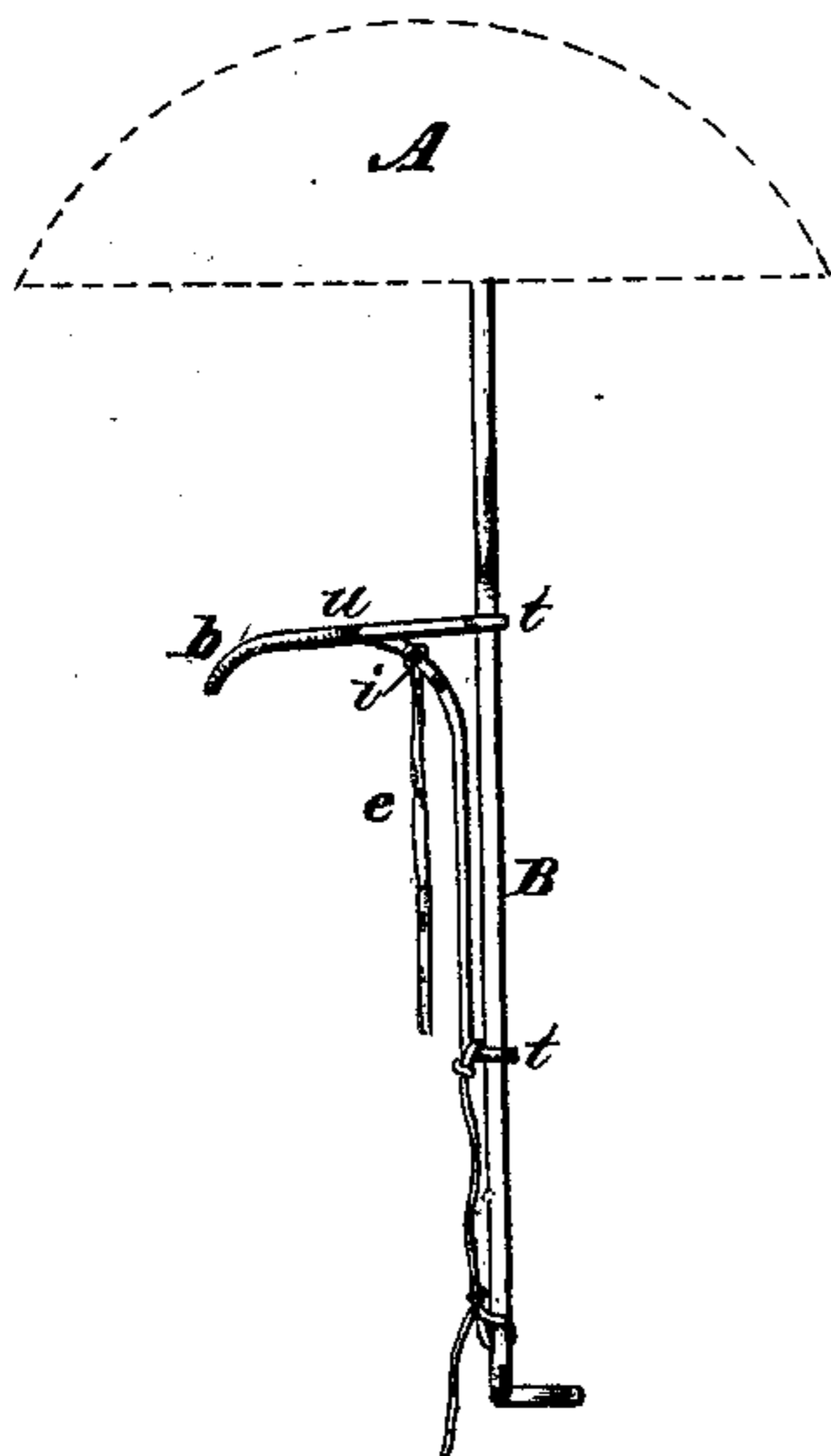


Fig 13.

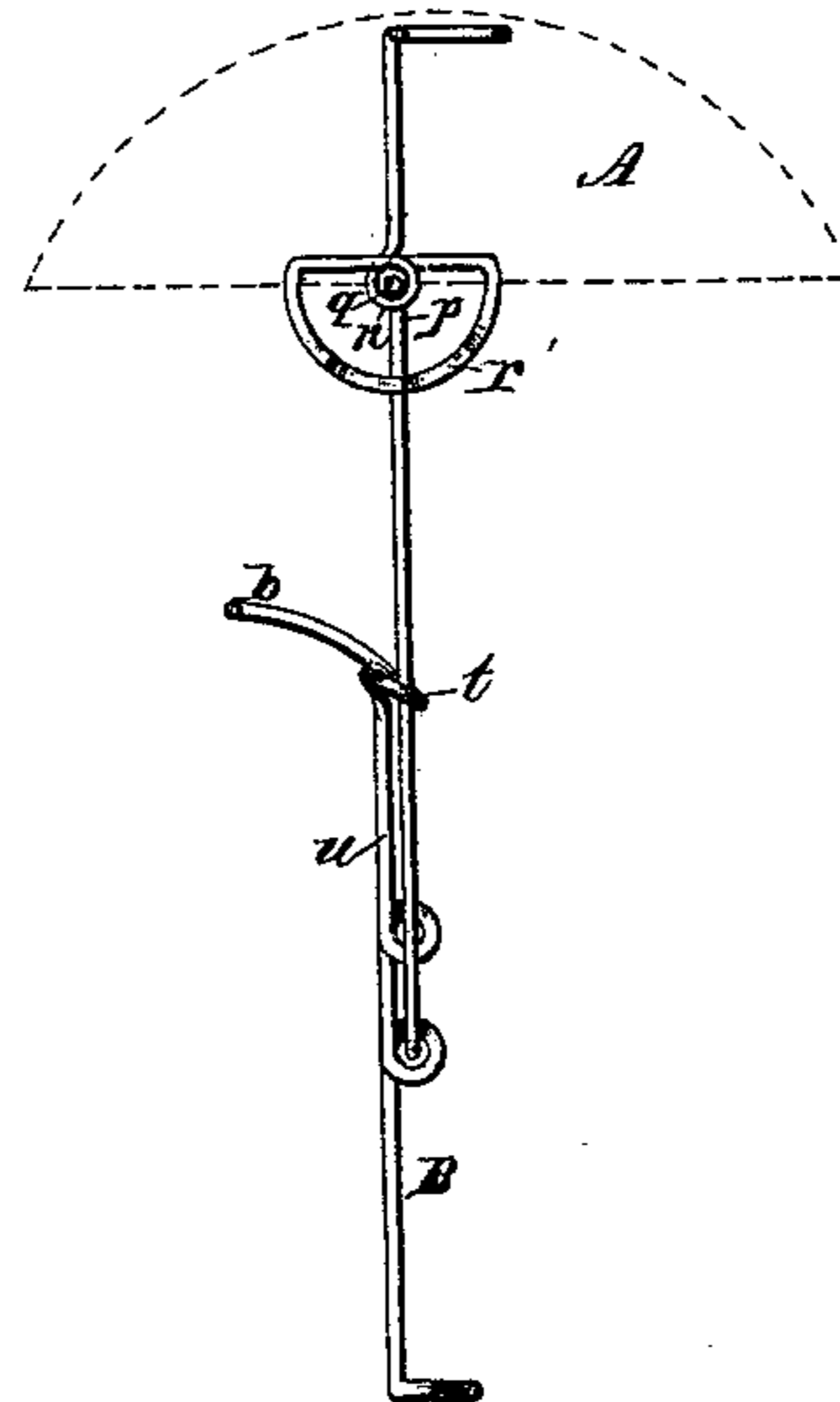
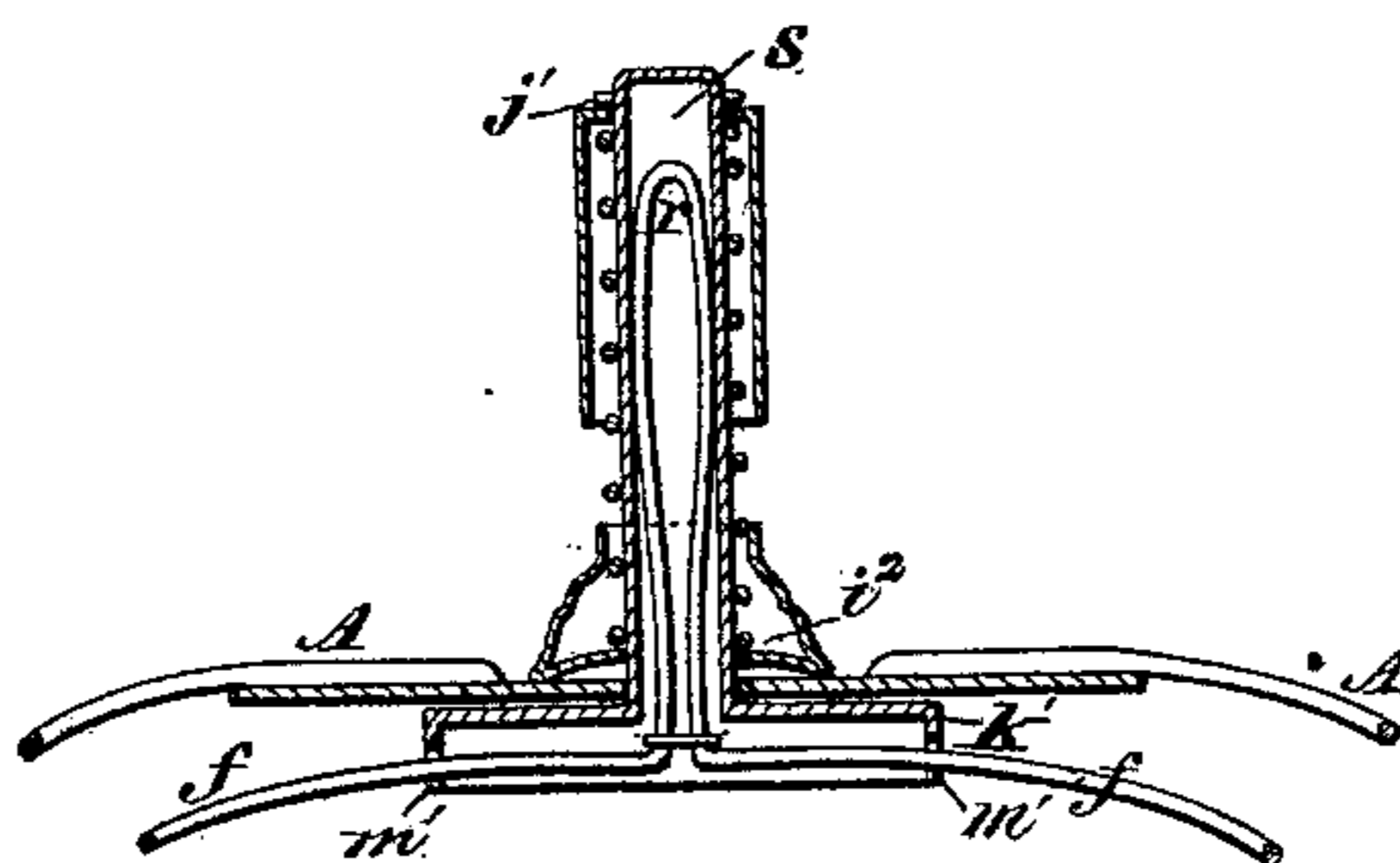


Fig 14.



Witnesses.

J. M. King
H. L. King

Inventor.

Richard Ray.
By his Atty.
Harry King.

UNITED STATES PATENT OFFICE.

RICHARD RAY, OF LAKE CITY, FLORIDA.

VENTILATING-HAT.

SPECIFICATION forming part of Letters Patent No. 229,466, dated June 29, 1880.

Application filed March 10, 1879.

To all whom it may concern:

Be it known that I, RICHARD RAY, of Lake City, in the county of Columbia and State of Florida, have invented certain new and useful
5 Improvements in Ventilating-Hats; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same,
10 reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of hats adapted to be worn in warm climates; and it
15 consists in, first, the combination of a hat-body of peculiar construction with or without a rim, in whole or in part, adjustably or rigidly attached to the hat, and a body-frame to which the hat is either rigidly or adjustably attached,
20 and upon which the hat-body may be adjusted either in a vertical, a horizontal, or an inclined plane; and, secondly, the combination, with the above generally described hat and body frame, of a back shield or protector attached either
25 to the hat-rim or body-frame, as will be hereinafter more fully set forth.

In the drawings, Figure 1 is a side view of one form of my invention, with the hat and adjustable segmental rim in section. Fig. 2 is a
30 front view of same, with the hat in section, showing segmental frame in dotted lines. Fig. 3 is a perspective view of one form of adjustable segmental frame. Fig. 4 is a vertical longitudinal section of modified form of my invention. Fig. 5 is a front view of same, with
35 hat in section. Fig. 6 is a vertical longitudinal section of another form of my invention, to which is attached a modified form of adjustable segmental rim. Fig. 7 is a front view of same, with hat and adjustable segmental rim
40 in section. Fig. 8 is a perspective view of another form of my improvement, with a loosely-swinging back shade attached to a rigid segmental rim. Fig. 9 is a side view of a portion
45 of the hat and body-frame, showing friction-joints for horizontal and oblique adjustment of the hat on the body-frame. Fig. 10 is an enlarged vertical section of one form of friction-joint, whereby the hat is horizontally ad-
50 justed or swung on to the body-frame. Fig. 11 is a similar section of one form of friction-joint,

whereby the hat-body is obliquely adjusted on the body-frame. Fig. 12 is a side view of body-frame, showing one form of vertical adjustment for the hat. Fig. 13 is a similar view of body-
55 frame, showing a modified form of vertical adjustment for the hat. Fig. 14 is an enlarged vertical section of modified form of friction-joint, whereby the hat is horizontally adjusted or swung on to the body-frame. Fig. 15 is a
60 vertical section through the body-frame and a portion of the hat-frame, showing modified form of vertical adjustment for the hat.

In all of that class of hats made for use in seasons of the year when the heat from the sun
65 is the greatest, or in the tropical or other oppressively-warm regions, and where the crown of the hat is of greater diameter than the crown of the wearer's head, the weight of the hat has heretofore been borne by the head. One of
70 the main objects of my invention is to free the head from this oppressive weight by providing a light but strong support, which is attached directly to the body of the wearer.

The hat-body A is made of larger diameter
75 than that of the wearer's head, in order to allow of free circulation of air around the head, and is attached to a body-frame, B, as shown in the drawings, and as hereinafter more fully
80 described. This frame is provided with supports *b b*, which rest upon the shoulders of the wearer, and is continued downward on each side of the wearer's body and crossed over in front of the wearer's waist.

Waistbands *c*, Figs. 1, 2, 4, 5, and 8, are
85 provided, so as to extend around behind the waist and fasten to the frame on the opposite side by means of hooks *d*, or their equivalents. Neck-bands *e* are also provided, and are in
90 like manner rigidly secured at one end to one side of the body-frame and passed around behind the wearer's neck, to be secured at the other end to the frame on the opposite side of the wearer.

For the purpose of more effectually retain-
95 ing the hook in its respective eye in the frame when the frame is adjusted on the body of the wearer, I interpose a piece of elastic material in the waist or neck band, as at *x*², Fig. 4, in
100 such a manner that when the band is adjusted or hooked around the back of the wearer's waist or neck the elastic will pull on the hook

secured to the eye, and thus prevent its being accidentally disengaged from said eye.

Should the body-frame be crossed over behind the neck, as shown in Figs. 1, 2, 6, 7, 8, 5 and 13, the neck-bands can be dispensed with, as the cross-head *f* so formed will then prevent the body-frame from falling forward should the wearer stoop or the wind blow from behind.

I find the method of fastening the upper portion of the frame to the body, as shown in Figs. 6 and 7, to be very effective. In this case I secure to each of the shoulder-rests, which are generally padded, a suspender, *g*, which is provided upon its free end with a hook, loop, or buckle, by which it is fastened to buttons on the front of the wearer's pantaloons-waistband.

A modification of the above is shown in Fig. 15. A rear suspender, *h*, is attached at its upper end to the neck-band, and at its lower end is attached, by means of hook, loop, or buckle, to a button on the rear of the wearer's waistband.

The body-frame is preferably made of wire, and is provided with loops or eyes *i i*, to which are attached the hook ends of the various neck and waist bands.

When desired the hat may be easily removed from the body-frame by means of the catch device shown in Figs. 1 and 2, consisting of a loop, *l*, located upon the lower extremity of a supplemental or intermediate frame, *C*, a latch-spring, *m*, and a fixed notched shoulder, *n*, placed above the spring-latch. The loop *l* is passed down over the cross-head *f*, and is pressed downward and forward until the latch catches under the cross-head, when, by the conjoint operation of the spring-latch and notched shoulder, the upper end of the cross-head is secured in place. To release the intermediate frame, upon which is placed the hat, from the body-frame the spring-latch is forced backward and the intermediate frame and hat lifted from the body-frame.

Other equivalent methods are applicable for acquiring this result, as shown in Figs. 8, 13, and 15, where the upper ends, *p*, of the body-frame are bent in an angle and are sprung into eyes or loops *q* in the hat-frame.

Another equivalent modification is shown in Fig. 14, whereby the hat is easily removed.

The upwardly-extended cross-head *f* is provided with a projection, *r*, which is constructed to snugly fit and easily slide in and out of a socket, *s*, which also forms a part of a friction-joint for a horizontally-revoluble hat-crown, to be hereinafter more fully described.

The hat and that portion of the body-frame immediately adjacent thereto may be adjusted in a vertical plane by raising or lowering the body-frame, each side of which passes through loops or guides *t*, formed in independently-constructed shoulder-rests, as shown at *u*, Figs. 12, 13, and 15.

When the proper height for the hat is attained the body-frame and shoulder-rests are rigidly secured together in any well-known manner.

In order to more effectually protect the head from the sun's rays, I provide a supplemental fixed crown or shield, *D*, as shown in Figs. 1 and 2, or a horizontally-revoluble crown, *E*, as shown in Figs. 4 and 5. Between the hat proper and supplemental crown is a passageway, *a'*, through which the air freely circulates.

The hat-crown may be provided with the usual flat stiff rim *v*, Figs. 1 and 2, or a rigid drooping segmental rim, *w*, as shown in Figs. 4, 5, 8, and 9, or both, as shown at *x*, Figs. 4 and 5; or a supplemental, segmental, adjustable, and detachable rim, *F*, may be provided, upon the upper portion of the frame of which is provided an elastic loop, *y*, which is attached to a small knob or button, *z*, located upon the top of the hat-crown. This rim *F* is provided with hooks *b'*, which catch under the fixed rim or lower edge of the hat-crown, as shown in Figs. 1, 2, 3, 6, and 7, and are there securely held in place by the tension on the elastic loop *y*.

A swinging segmental rim, *G*, may also be provided, which is pivoted to the edge of the crown or rim at *c' c'*, Figs. 6 and 7, and which can be thrown up, as at Fig. 6, for the purpose of admitting air behind the wearer's head, or closed and hooked down to the body-frame by means of hooks *d' d'*, as shown at Fig. 7. An elastic cord or spring, *e'*, is attached to this segmental rim and the hat-body, and operates to secure the rim *G* in either an open or closed state.

For the better protection of the lower portion of the neck and the back I provide an extended drooping rim, *H*, which is rigidly secured to the body-frame, as shown in Figs. 6 and 7, or is hooked or otherwise detachably connected to the body-frame or segmental rim, as shown in Fig. 8. This extended drooping rim is provided with a fender, *f'*, at its lower extremity, which rests against the back of the wearer, and by means of which an air-space is provided for the free circulation of air between the drooping rim *H* and the wearer's back.

For the purpose of more effectually retaining the hat-body in any desired horizontally-rotated position, I provide a friction-joint, *I*, at or near the apex of the hat-crown, (shown in Figs. 9 and 10,) a disk, *g'*, of any material having a tendency to increase friction, being interposed between the lower surface of the crown and upper surface of the body-frame.

The screw-pivot *h'* is locked to the body-frame and made to turn with the same by means of a bifurcated plate, *i'*, which is secured at its solid end to the body-frame, the prongs of which occupy notches cut in opposite sides of the pivot-bolt, as shown in Fig. 10.

A form of friction-joint equivalent to the above is shown in Fig. 14. The upper portion of the hat-crown *A* is interposed between a friction-plate, *i²*, and plate *k'*, detachably located upon the cross-head *f* of the body-frame.

The friction-plate *i'* is pressed downward

upon the hat-crown by a spiral spring or its equivalent, the upper end thereof resting against an adjustable shoulder, j' , attached to the socket-tube s , while the lower end impinges or presses against the friction-disk i^2 . The plate k' is prevented from horizontally rotating upon the body-frame by means of notches m' , cut in a drooping concentric flange in which the wire forming the body-frame is seated.

The hat-body A is retained in any desired incline by means of friction-pivots n' , located in a plane level with the center of the wearer's head, as shown at Fig. 9, or nearly level thereto, as shown in Figs. 1, 2, 4, and 5. The necessary friction is imparted to this joint by means of a screw-clamp, o' , which operates, in conjunction with disks p' and packing q' , to secure the hat in its inclined adjustment, as shown in Fig. 11.

Other methods which I use to secure this result are shown in Figs. 8 and 13, in which the upper ends of the body-frame are hooked into eyes q , formed in the lower edge of the hat-crown, a segmental ratchet-frame, r' , being provided with V-shaped notches, into which spring the sides of the body-frame as the hat is tilted.

In Fig. 15 is shown a modification of the above. In the frame of the hat A, I provide eyes $s' s'$. To one of these eyes I secure a string, t' , provided at one of its ends with an elastic cord, w' , and at the other end with a hook, v' . The free end of the string is passed through an eye, w' , constructed in the body-frame, and is then secured by the hook to the other eye in the hat-frame. The elastic cord affords sufficient resiliency to secure the hat in its proper inclined position.

I am aware that umbrellas have been supported upon frames attached to the body of the wearer. In using such umbrellas it has been necessary for the bearer to wear a hat in addition thereto.

To provide a hat that will be a substitute of and obviate the necessity for an umbrella, and at the same time relieve the head from the pressure occasioned by the weight of such hat, is one of the purposes of my invention.

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

1. The hat body or crown A, provided with a sectional or segmental drooping rim, w , in combination with the body-frame B, substantially as described.

2. The hat-body A, protected from the sun's rays by a supplemental shield, D, placed over the crown, in combination with body-frame B, constructed substantially as described.

3. In combination with the hat-body A, provided with a sectional or segmental drooping

rim, w , the extended back shield, H, and body-frame B, substantially as described.

4. In combination with the crown A and body-frame B, the horizontally-revoluble crown E, provided with a rigid drooping segmental rim, operating as and for the purposes set forth.

5. In combination with hat-body A, as described, the segmental detachable drooping rim F, so arranged as to be adjusted to that side of the hat exposed to the slanting rays of the sun, substantially in the manner set forth.

6. In combination with the hat-body A, an adjustable detachable segmental rim, F, elastic loop or cord y , button z , and hooks or shoulders b' , constructed to operate as and for the purposes specified.

7. In combination with the hat-body A, the vertically-swinging segmental rim G and body-frame B, operating as and for the purposes specified.

8. In combination with the hat-body A and body-frame B, the swinging segmental rim G, pivoted to the rear edge of the crown and provided with hooks d' and elastic cord or spring e' , in the manner and for the purposes specified.

9. In combination with the hat-body A, the body-frame B, and the vertically-swinging back shield, H, provided with fender f' and hooks, whereby the shield can be detached from the hat, substantially as described.

10. The body-frame B, in combination with the hat-body A, when the same is adjustably secured to the body-frame by a friction-joint, whereby the crown with its rigid segmental rim w is revolved in a horizontal plane, substantially in the manner and for the purposes set forth.

11. In combination with the hat-body A and body-frame B, the intermediate frame, C, loop l , spring-latch m , shoulder n , and cross-head f , all operating as and for the purposes specified.

12. The body-frame B, in combination with the hat-body A and friction-joint n' , whereby the front of the hat is either raised or lowered in an inclined plane, substantially in the manner described.

13. In combination with the hat-body A and body-frame B, the adjustable shoulder-rests b , whereby the hat-body is raised or lowered in a vertical plane, substantially in the manner and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

RICHARD RAY.

Witnesses:

W. M. INES, Jr.,
A. G. BIGELOW.