

(No Model.)

2 Sheets—Sheet 1.

T. THOMPSON.
CANOPY FOR BICYCLES.

No. 575,182.

Patented Jan. 12, 1897.

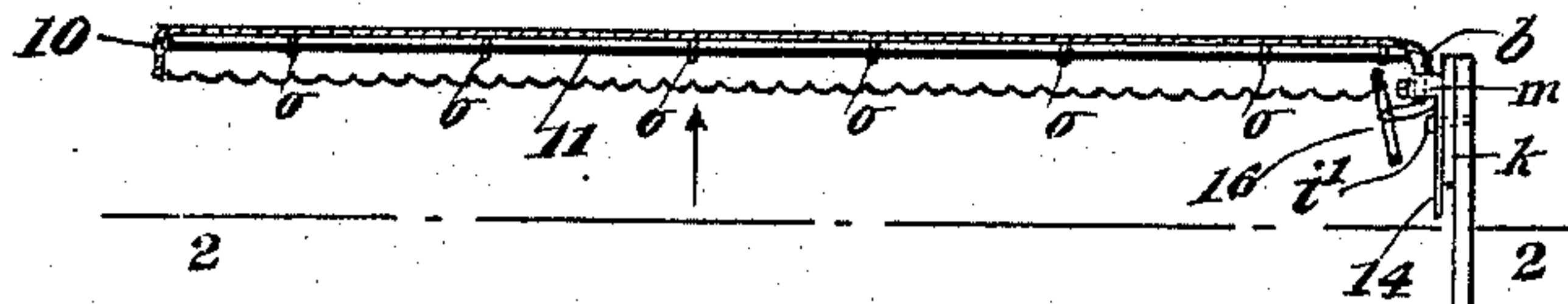


Fig. 1.

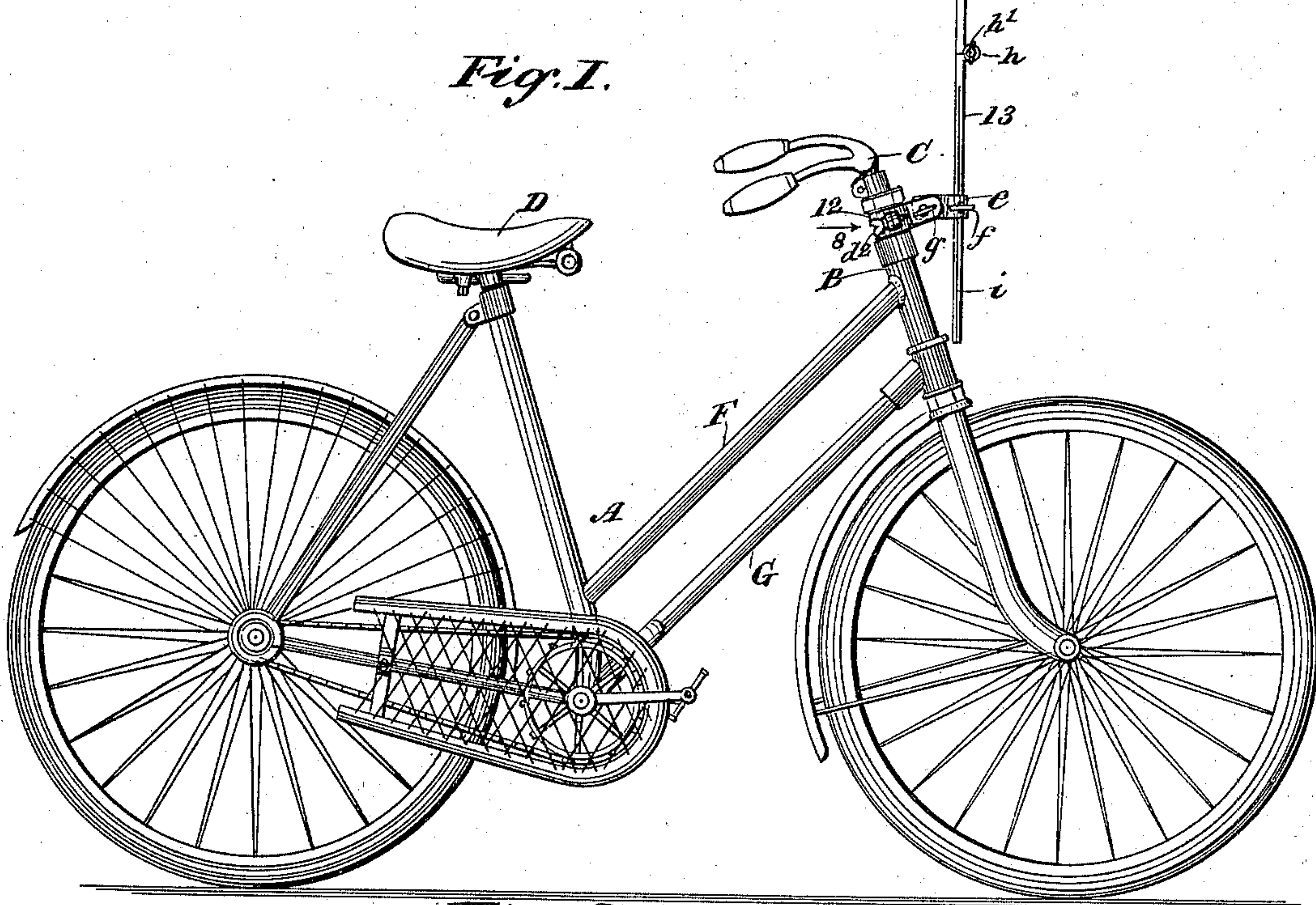
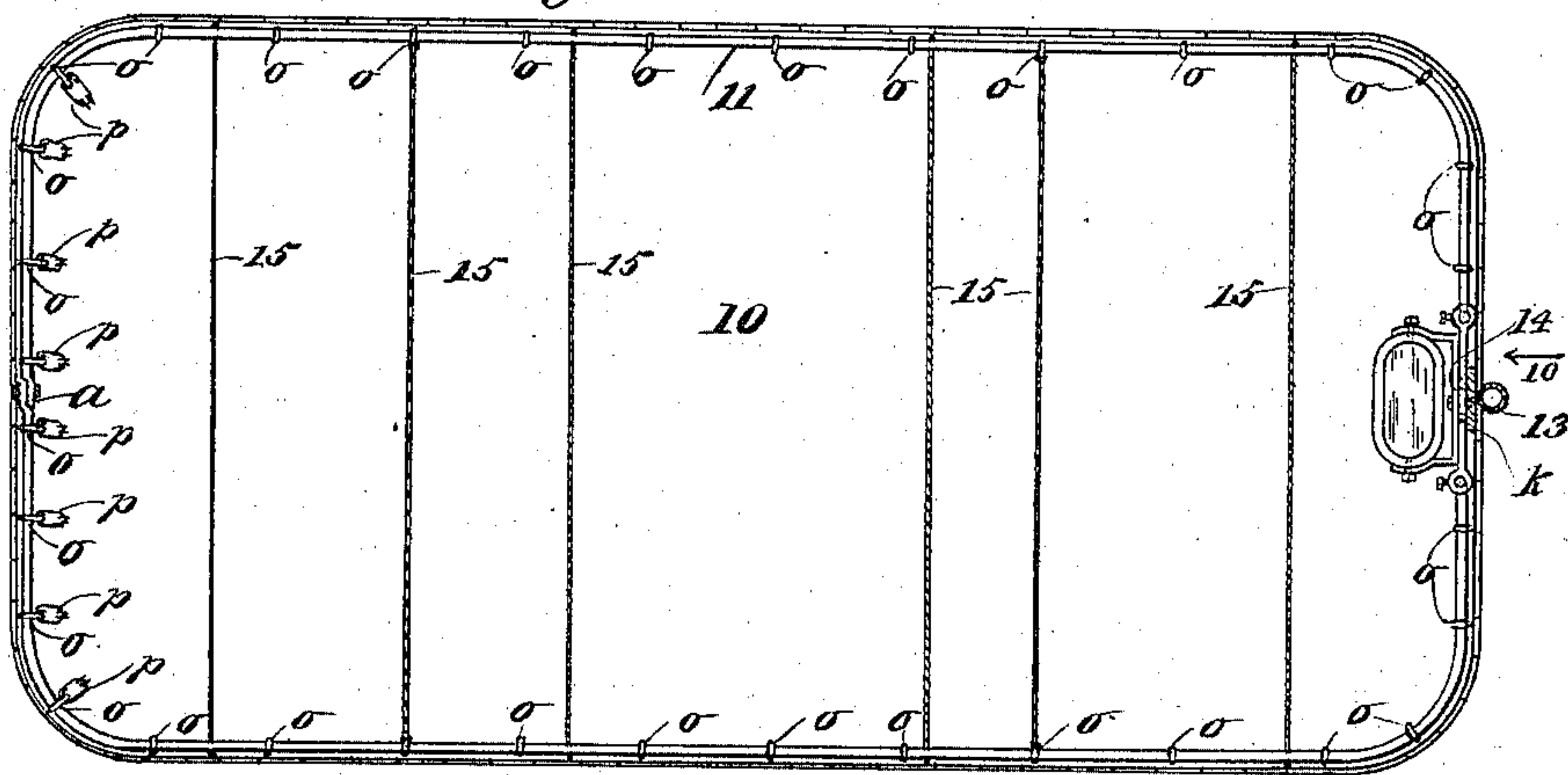


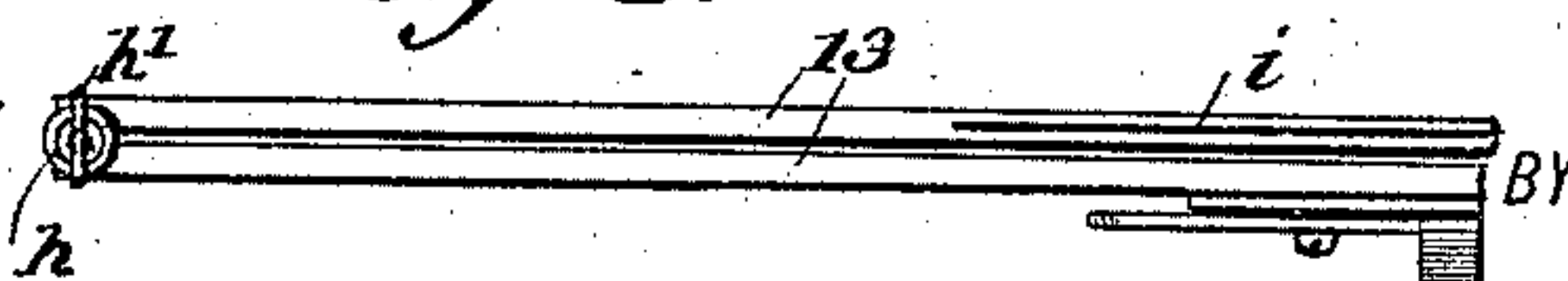
Fig. 2.



WITNESSES:

Fig. 3.

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Fig. 4.

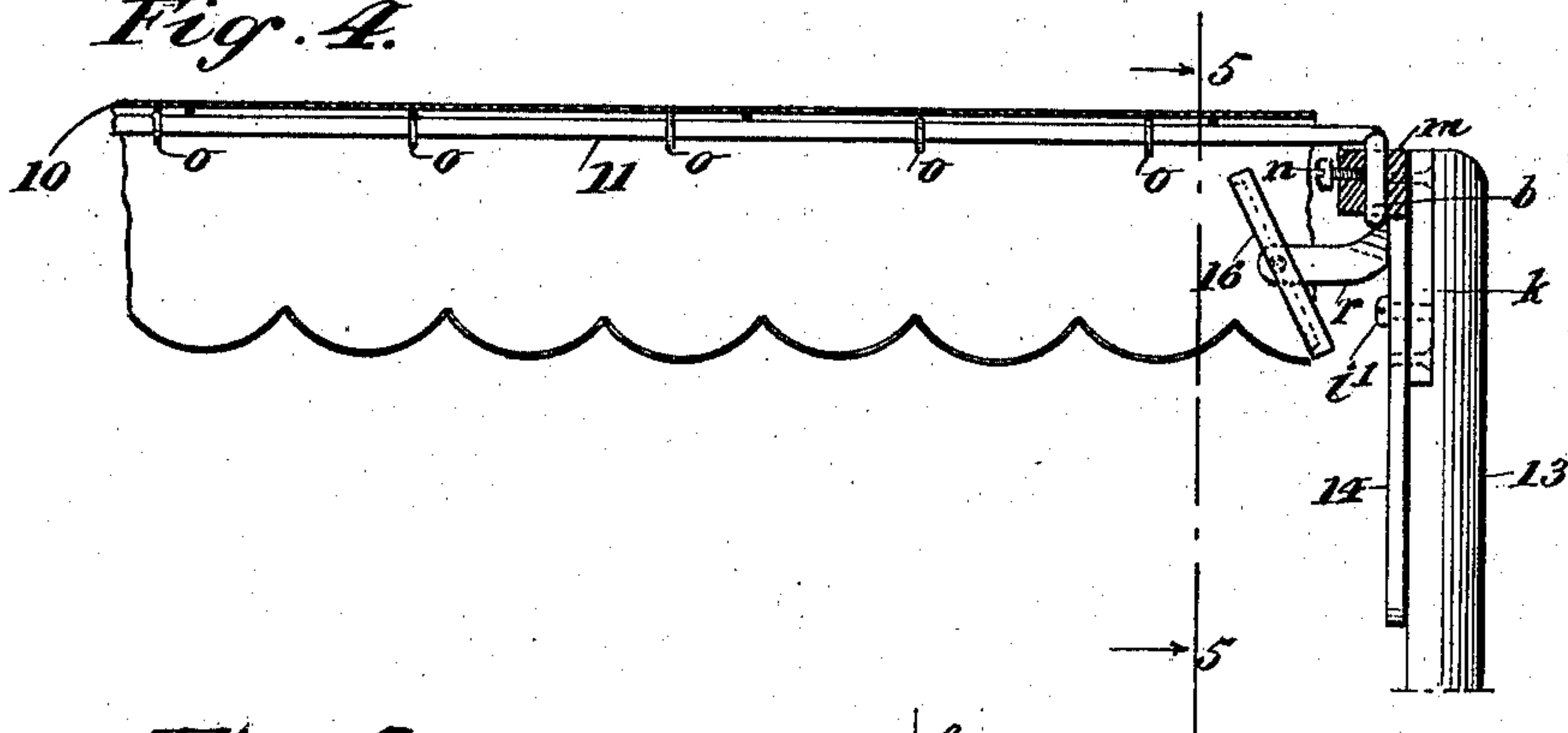


Fig. 5.

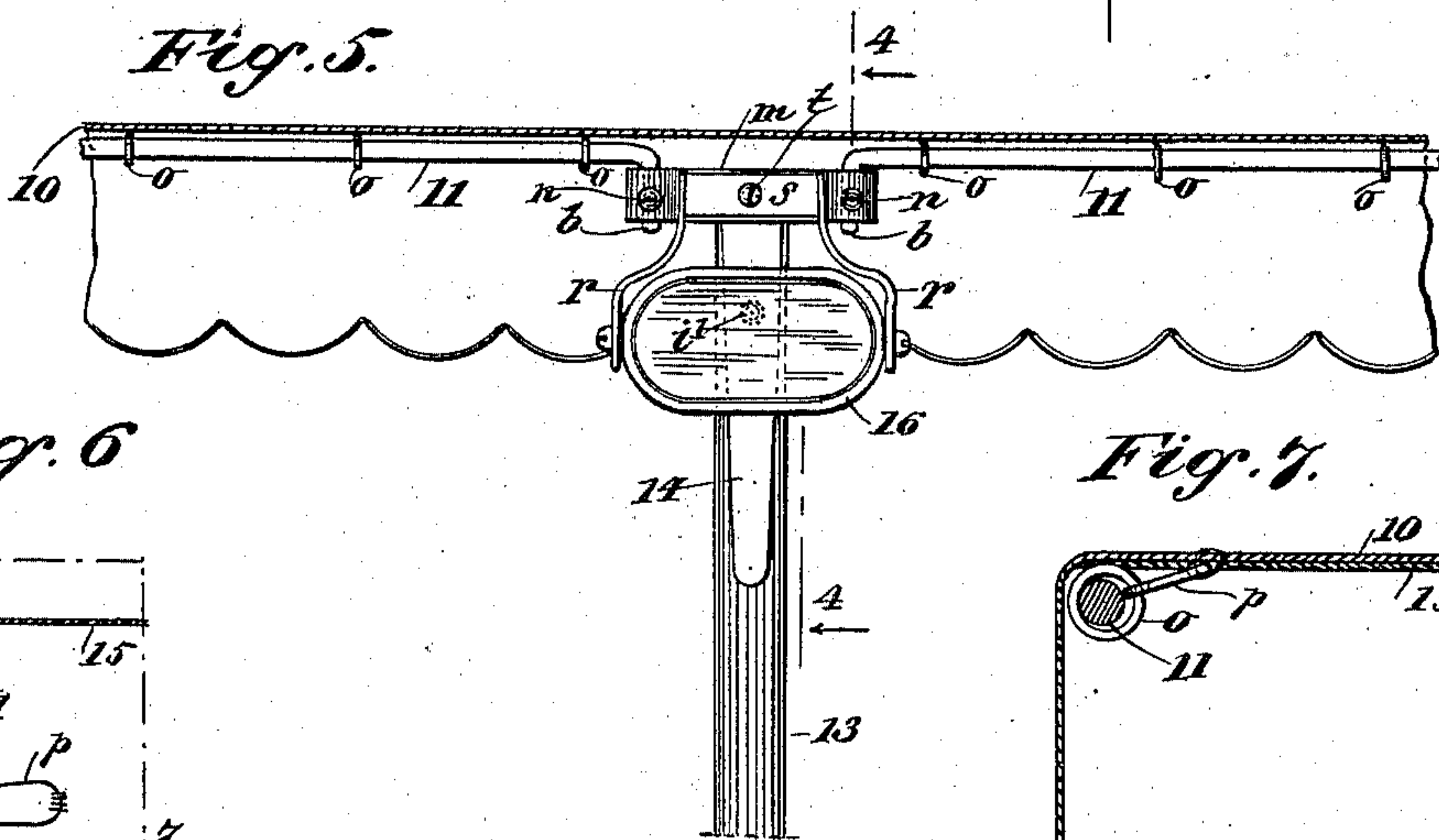


Fig. 6.

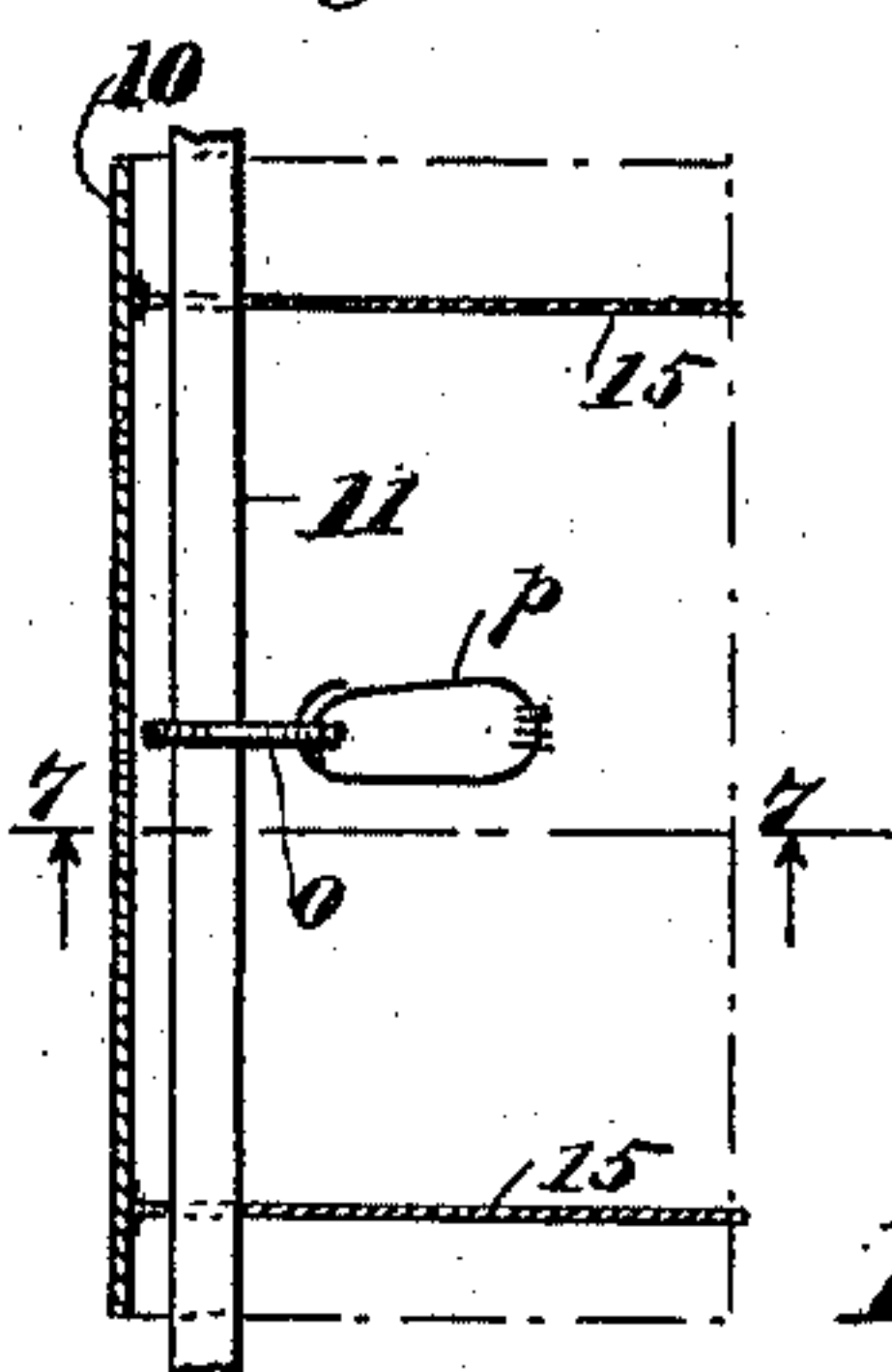


Fig. 7.

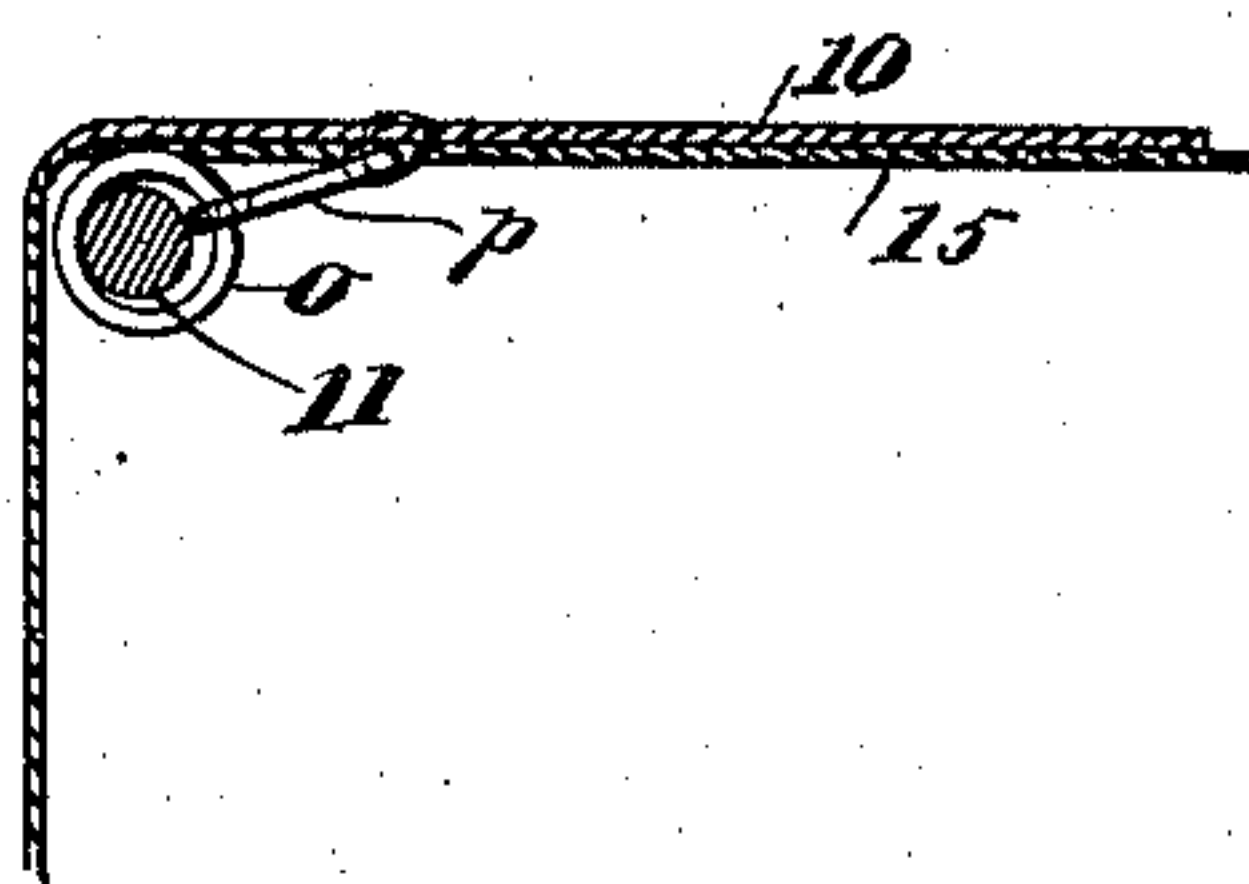


Fig. 8.

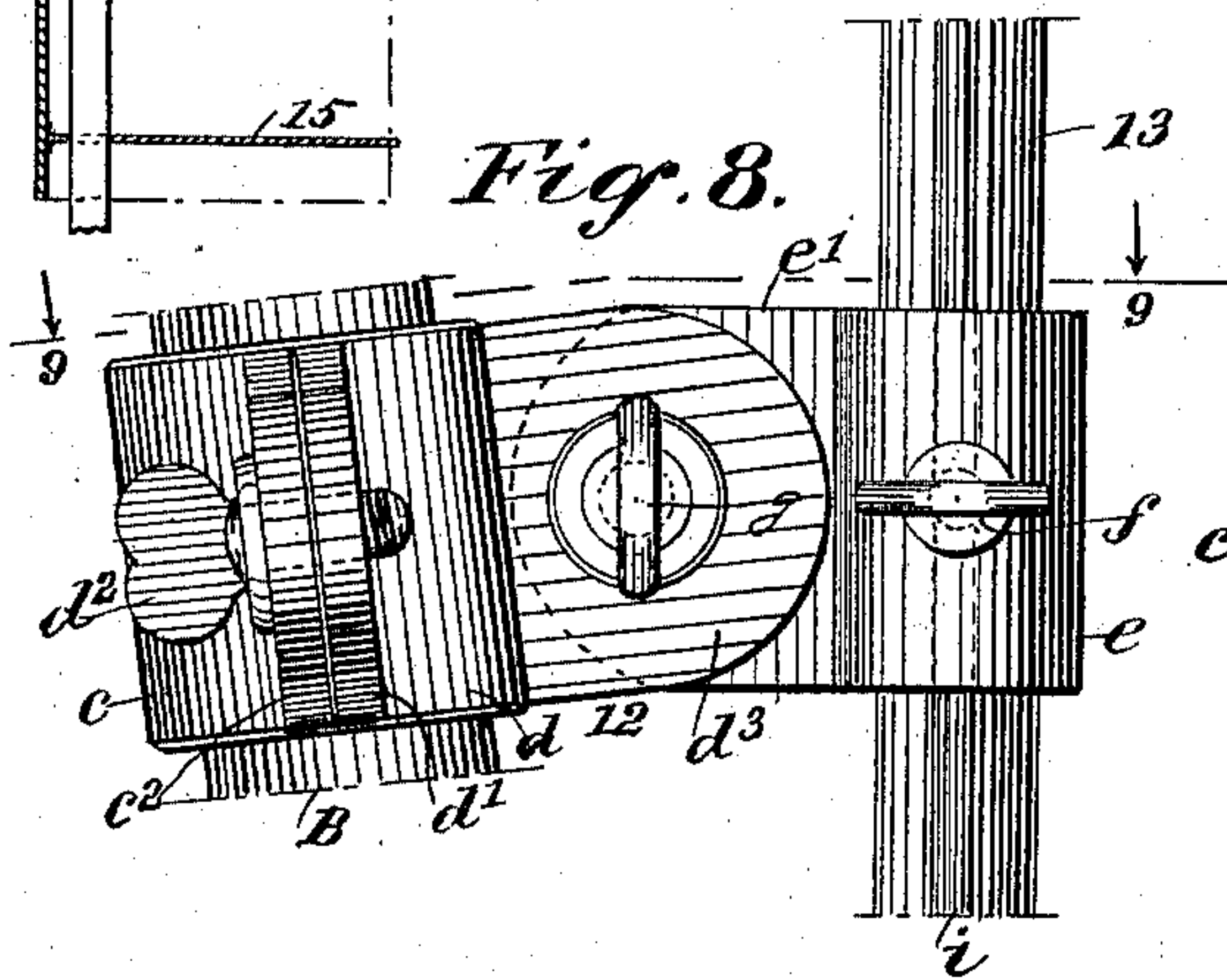
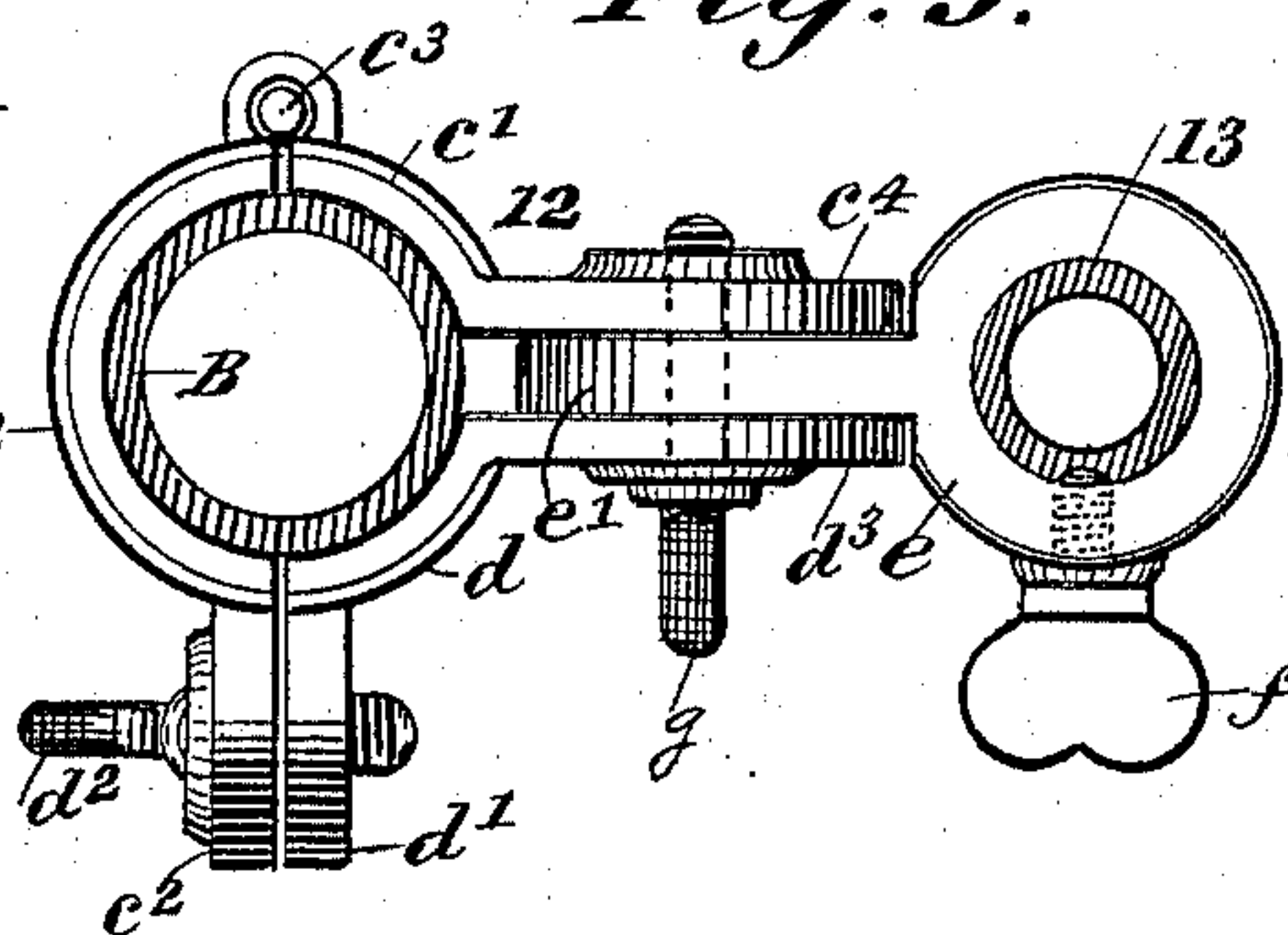


Fig. 9.



WITNESSES:

Fig. 10.



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UNITED STATES PATENT OFFICE.

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CANOPY FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 575,182, dated January 12, 1897.

Application filed July 2, 1896. Serial No. 597,806. (No model.)

To all whom it may concern:

Be it known that I, THOMAS THOMPSON, of Danbury, in the county of Fairfield and State of Connecticut, have invented a new and Improved Canopy for Bicycles and Like Vehicles, of which the following is a full, clear, and exact description.

This invention relates to an attachable canopy for protecting the rider of a bicycle or similar vehicle from the sun and rain, and has for its object to provide a novel, simple, and efficient device of the indicated character which may be quickly placed in position for service upon the bicycle or removed therefrom and that is adapted for a close folding of its parts when not in use.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and pointed out in the claims.

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

Figure 1 is a side elevation of a bicycle and a partly-sectional side view of the improved canopy thereon. Fig. 2 is an enlarged reversed plan view of the improved canopy with its supporting-standard in section. Fig. 3 is an enlarged detached side view of the standard for the canopy in folded condition. Fig. 4 is an enlarged partly-sectional side elevation of the canopy and supporting device therefor substantially on the line 4 4 in Fig. 5. Fig. 5 is an enlarged transverse sectional view substantially on the line 5 5 in Fig. 4. Fig. 6 is an enlarged reversed plan view of a portion of the canopy and its support. Fig. 7 is a transverse sectional view substantially on the line 7 7 in Fig. 6. Fig. 8 is an enlarged side view of a novel clamping-bracket for attaching the canopy-standard upon the front post of the bicycle-frame, its position being indicated by the arrow 8 in Fig. 1. Fig. 9 is a plan view of the clamping-bracket in position on the front post, shown in section, taken essentially on the line 9 9 in Fig. 8; and Fig. 10 is a detached front edge view of the stretcher-frame for the canopy, seen in the direction of the arrow in Fig. 2.

The invention in brief comprises a canopy of silk or other available fabric, preferably oblong in contour, and that is removably secured on a light stretcher-frame, which is detachably held in position on the bicycle by an upright standard and a novel bracket-clamp, the canopy being adapted for rocking adjustment, so as to incline it at either side of the bicycle for better protection of the rider from slanting rays of the sun, as occasion may require.

The invention further comprehends the provision and novel support of a mirror at front of the canopy to enable the rider to see the objects at either side and in the rear while in motion on the bicycle.

In carrying into effect the features of invention the canopy 10 is furnished of light fabric, such as silk, but other material may be used. The canopy is held extended by the stretcher-frame 11, that is of an elongated and substantially rectangular form, made of small pipe or wire-rod material.

As shown best in Figs. 2 and 10, the stretcher-frame 11 is composed of two equal parts that are longitudinally disposed and are joined together at the end which is to the rear when in position for use by a hinge connection *a*. The forward end portions of the frame 11 are bent toward each other and then downward, so as to provide a short limb *b* on each frame member, said limbs being parallel with each other and sufficiently separated to permit them to engage with a support that will now be described.

On the front frame-post *B* of a bicycle *A*, below and near the handle-bar *C*, a bracket-clamp is located, which is part of the canopy-support. The bracket-clamp (designated by the indicating-character 12 in Fig. 1) is composed of four pieces, as clearly shown in Fig. 9, said parts *c*, *c'*, *d*, and *e* being connected, as will now be explained. The part *c* is nearly semicircular in its main portion and adapted to conform with the exterior of the cylindric portion of the post *B*, that it is to partly embrace. On one edge of the semicircular portion of the piece *c* a flange *c*² is formed that projects a suitable length therefrom, and at the opposite edge an ear is produced that is

part of a hinge-joint. The part c' is curved similarly to the piece c , having its curved portion less than half the width of the latter, and on one edge has an ear that completes a hinged connection with the part c when the ears on said parts are jointed together with a pintle c^3 . The remaining portion d of the clamp that embraces the post B is curved to fit upon said post, the curved portion being about equal in width to the same portion of the clamping-section c' . The section d of the post-clamp is furnished with a flange d' , that is the counterpart of the flange c^2 , and a thumb-screw bolt d^2 is provided to draw these flanges together. On the other edges of the curved portions of the clamping-sections c' and d two joint-leaves $c^4 d^3$ are formed, which are spaced apart sufficiently to receive between them the joint-leaf e' , that is formed on the portion e of the bracket-clamp 12. The portion e is in the form of a longitudinally-perforated hub having a thumb-screw f engaging a tapped hole in one side of the same, the perforation in the hub receiving the loosely-fitting standard 13.

A thumb-screw g serves to clamp the joint-leaves $c^4 d^3 e'$ together when said parts are assembled, as shown in Fig. 9, and as these leaves are of considerable area their frictional contact, enforced by the thumb-screw, is adapted to retain the hub e and standard 13 in vertical adjustment when the clamping portion of the bracket 12 is secured on the inclined post B, as shown in Figs. 1 and 8.

The standard 13 for the sake of lightness is preferably formed tubular, and in some cases it is desirable to construct it with a rule-joint h , which will permit the standard to have its two members folded together when not in service, so as to render this portion of the device more compact for transportation, as is represented in Fig. 3, the rigid extension of the members of the standard being effected by a thumb-screw h' , that is the pintle of the rule-joint. The standard is preferably channeled longitudinally, as at i , to receive the end of the thumb-screw f , which will prevent a rotatable movement of the standard. On the upper end of the standard 13 a joint-plate k is affixed at the side that is opposite from the rule-joint h , if the latter feature is provided, and on the joint-plate the T-shaped lever 14 is pivoted through its main depending member, as clearly shown at i' in Figs. 1 and 4.

The transverse head-bar m of the T-shaped lever 14 is provided with enlargements at or near each end of the same, which portions are vertically perforated to receive the neatly-fitting limbs b of the stretcher-frame 11, and set-screws n that laterally penetrate each of the perforated enlargements mentioned serve to hold said limbs in place.

It will be seen that if the standard 13 is secured in an upright position the stretcher-frame 11, when in place on the lever 14, will be horizontally sustained and rearwardly pro-

jected above the saddle D of the bicycle at a suitable distance above the saddle, which may be varied at pleasure by a sliding adjustment and subsequent fixture of the standard in the hub e of the bracket-clamp 12.

The preferred means for holding the canopy 10 on the frame 11 consists in providing loosely-fitting rings o , that are slid upon the frame over the ends of the limbs b , said rings being attached at spaced distances apart on the inner surface of the canopy, so removed from the edge thereof that when the rings are engaged with the frame the material of the canopy will be rendered taut, and a depending short curtain will be afforded as a finish around the exterior of the frame 11.

At the end of the canopy 10 which is farthest from the lever 14 the rings o are detachably connected therewith by the spring-metal open rings p , that are stitched or otherwise fastened upon the inner surface of the fabric of the canopy, so that the open spring-loops of the rings p may be detachably engaged with the rings o at said end portion of the canopy, as indicated in Figs. 2, 6, and 7.

By providing the split spring-rings p for connecting the hinged end of the frame 11 with the canopy 10 it will be evident that if the rings o are correctly positioned on the latter said canopy may be evenly disposed and correctly stretched upon the upper surface of the frame 11. When it is desired, the release of the spring-rings from the rings o that are on the frame 11 will allow the canopy to be removed along with such rings o as are attached thereto along its side portions and end that is disposed over the frame members having the depending limbs b thereon.

The longitudinal extension of the canopy 10 renders it very serviceable for screening the rider from the rays of the sun while in motion on the vehicle, and as the frame 11 may be inclined to tilt the canopy 10 by a lateral movement of the depending portion of the T-shaped lever 14 it will be apparent that an adjustment of the canopy may be readily effected to protect the rider from the laterally-slanting rays of the sun, or from a rain-storm that is driven toward one side of the bicycle.

To add to the support of the canopy 10, it is preferred to utilize the transversely-stretched cords 15, that are attached at their ends either to the fabric of the canopy, so as to rest on the frame 11, or said cords may be fastened to the rings o , as represented at two points in Fig. 2, and the cords may also be longitudinally extended, as indicated in Figs. 6 and 7.

The small mirror 16 (before alluded to) is an advantageous feature of the invention, as it enables the rider to scrutinize those approaching at the rear without requiring a change in position to do so. The mirror is preferably given an oblong shape and is held in a suitable frame, the latter being pivoted at its ends on the depending arms r , that are integral portions of a rockable plate s , which

is centrally pivoted, as at *t*, on the rear side of the transverse head member of the T-shaped lever 14, as shown in Fig. 5.

The pivotal supports of the mirror-frame enable the rider to tip the mirror, so as to incline it from horizontal and vertical planes and thus readily direct the mirror toward an object to be viewed, compensation for undulations of the road-bed and the tipping of the canopy being effected quickly by slight movements of the mirror-frame.

When the entire device is to be packed together for carriage until needed, the frame 11 may be folded as well as the standard 13, and the canopy 10 may be similarly treated, all said parts being adapted to form a very compact and small package that may be removably secured between the frame members F G of a lady's bicycle such as shown in Fig. 1, and thus be carried conveniently until the canopy is needed for use.

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

1. A canopy, comprising a cover, a frame having spaced depending limbs at one end, a standard, and a lever pivoted on the standard and having a transverse head-bar provided with vertical openings adapted to receive the depending limbs of the frame, substantially as specified.

2. A canopy, comprising a flexible cover, a two-part frame having its parts jointed together at one end and having depending limbs at the other end, means to detachably secure the cover on the frame, a standard, and a lever pivoted on the standard and having a transverse head-bar provided with vertical openings to receive the depending limbs of the frame, substantially as specified.

3. A canopy, comprising an oblong flexible cover, a two-part oblong frame having its parts jointed together at one end and provided with spaced depending limbs at the opposite end, means to detachably secure the cover on the said frame, a standard, and a lever pivoted on the said standard near one end and having a transverse head-bar provided with enlargements at or near each end, the said enlargements being perforated vertically and adapted to receive the spaced depending limbs of the said frame, substantially as specified.

4. In a canopy, the combination with a flexible cover, a supporting-frame therefor having spaced limbs at one end, and rings secured

to the under side of the cover at the sides and at one end thereof, and adapted to slide upon the frame over the ends of the limbs, the said rings being secured to the cover at spaced distances apart and at a sufficient distance from the edge thereof to form a depending curtain, of loose rings on the frame at one end and open rings secured to the inner surface of the cover at a corresponding end thereof and adapted for a detachable connection with the adjacent loose rings on the frame, substantially as specified.

5. The combination with an upright standard, of a rockable plate, pivotally connected at its central portion with the said standard near the upper end of the latter, the said rockable plate being formed at its ends with downwardly and rearwardly extending arms, and a mirror held in a suitable frame, the said frame being pivoted at its ends on the ends of the said arms, substantially as shown and described.

6. In a device of the described construction, the bracket-clamp comprising a clasp formed in sections and adapted to embrace a post of the bicycle, one of said sections having a semi-circular body portion and provided with a projecting flange at one edge and an ear at the opposite edge, a second section having a curved part of less width than that of the first section and provided with an ear on one edge for hinged connection with the ear on the first-mentioned section and formed with a joint-leaf at its opposite edge, and a third section having a curved portion and formed at one edge with a flange adapted to be secured to the flange on the first-mentioned section and having on the opposite edge a joint-leaf corresponding with the joint-leaf on the second section, and a standard-holder consisting of a perforated hub in which the standard is adjustable, the said hub being formed with a joint-leaf adapted to be adjustably secured between the joint-leaves of the said clasp, substantially as specified.

7. A canopy, comprising a cover, a frame, a standard, and a lever pivoted on the standard and supporting the frame at its upper end, whereby the said frame may be readily inclined to tilt the canopy by the lateral movement of the depending portion of the said lever, substantially as specified.

THOMAS THOMPSON.

Witnesses:

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EUGENE C. DEMPSEY.