

No. 730,677.

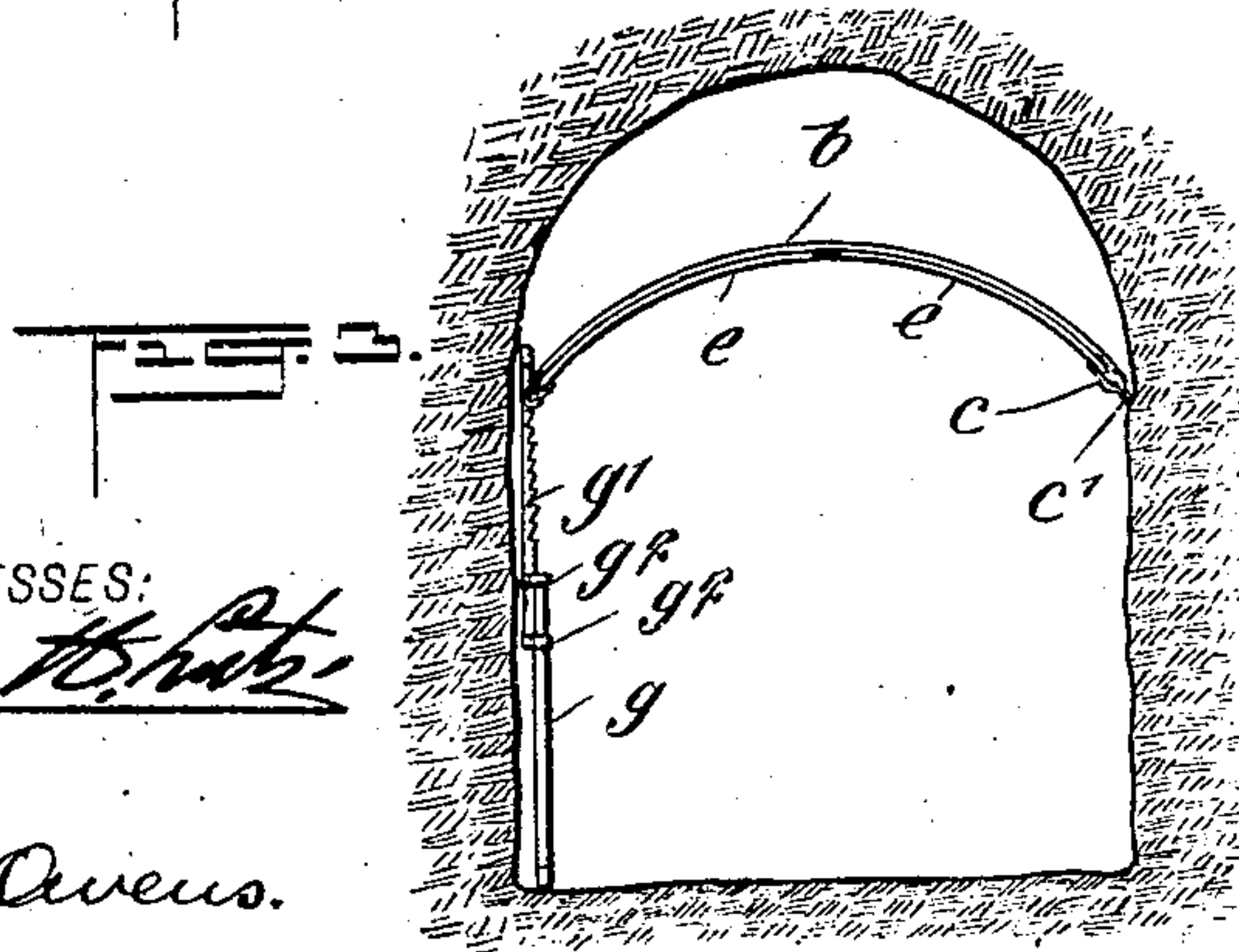
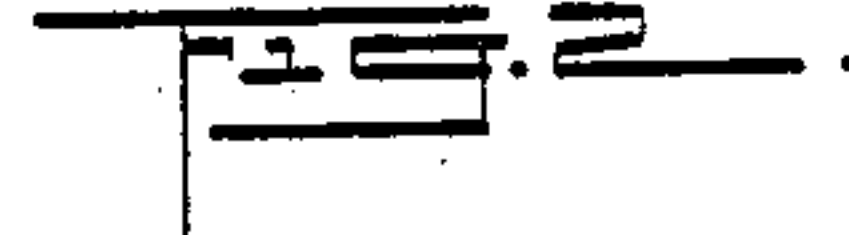
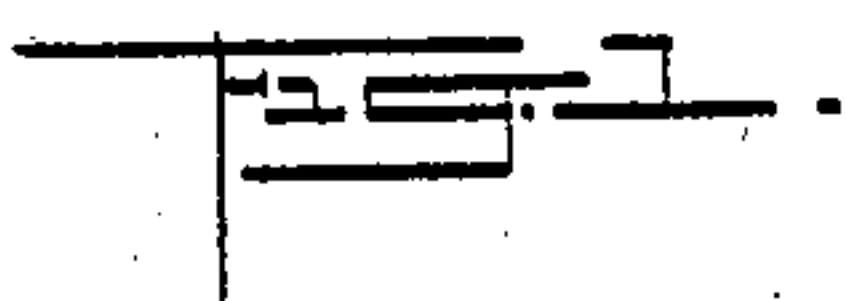
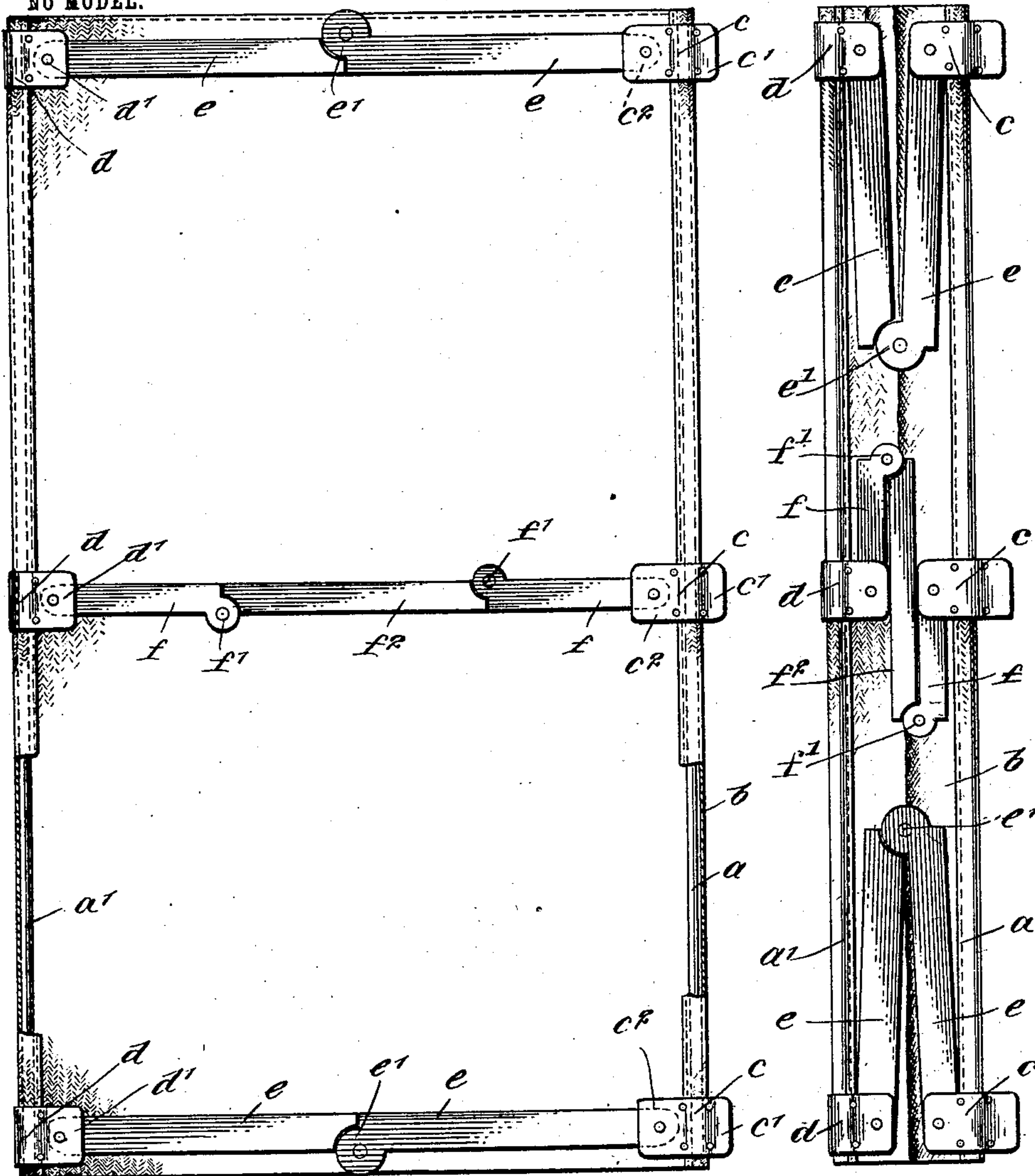
PATENTED JUNE 9, 1903.

H. C. MARCUS.

AWNING.

APPLICATION FILED OCT. 18, 1902.

NO MODEL.



WITNESSES:

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## UNITED STATES PATENT OFFICE.

HENRY C. MARCUS, OF BOHEMIA, OREGON.

## AWNING.

SPECIFICATION forming part of Letters Patent No. 730,677, dated June 9, 1903.

Application filed October 18, 1902. Serial No. 127,787. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. MARCUS, a citizen of the United States, and a resident of Bohemia, in the county of Lane and State of Oregon, have invented a new and Improved Awning, of which the following is a full, clear, and exact description.

This invention relates to an awning especially adapted to be placed in tunnels and drifts in mines to prevent the water from dripping from the roof upon persons working in the tunnel.

To this end it comprises a peculiarly-constructed collapsible frame formed of spring material, so that it may be arched upward and one side edge engaged with the side of the tunnel and the other side engaged either with the opposite side of the tunnel or with an extensible supporting-bar, the awning thus constructed forming an effective covering for the workmen and shedding the water to the very sides of the tunnel.

This specification is an exact description of one example of my invention, while the claims define the actual scope thereof.

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 views.

Figure 1 is a bottom plan view of the awning. Fig. 2 is a view showing the awning folded, and Fig. 3 is a reduced view illustrating the awning in use.

The framing of the awning is formed of two stout rails  $a$  and  $a'$ , between which extends the awning proper or the fabric  $b$ , this fabric having its edges permanently connected to the side rails  $a$  and  $a'$ . The side rails  $a$  have clamps  $c$  attached thereto. These clamps are preferably three in number, and each clamp has an outward blade-like portion  $c'$ , adapted to impinge against the side of the tunnel, as indicated in Fig. 3. Each clamp  $c$  has at its inner side an extension  $c^2$ , these extensions being adapted to have the collapsible frame-bars connected therewith, as will be hereinafter fully described. Fastened to the side rail  $a'$  at points respectively opposite the clamps  $c$  are clamps  $d$ , which have inward extensions  $d'$ , the same as the extensions  $c^2$ , before described.

At each end of the canopy is located a fold-

ing frame-bar formed of two sections  $e$ , having a knuckle-joint  $e'$  between them. These joints  $e'$  permit the end frame-bars to fold inward in the manner indicated in Fig. 2. The sections  $e$  of the end frame-bars are respectively in connection with the projections  $c^2$  and  $d'$  of the end clamps  $c$  and  $d$ . Intermediate the length of the awning a transverse frame-bar is located, which comprises end sections  $f$ , respectively pivoted to the inward projections  $c^2$  and  $d'$  of the intermediate clamps  $c$  and  $d$ . These end sections  $f$  are connected by oppositely-disposed knuckle-joints  $f'$  to an intermediate section or link  $f^2$ . This intermediate frame-bar thus constructed varies in the manner shown in Fig. 2—that is to say, one section  $f$  swings toward one end of the canopy, the other section swings toward the other end, and the link  $f^2$  lies in the center, connecting the free ends of the section  $f$ .

In using the invention it is extended, as shown in Fig. 1, and the various parts of the cross frame-bars being constructed of spring material the awning is bowed transversely in the manner shown in Fig. 3, the spurs  $c$  being engaged against one side of the tunnel and the opposite side of the awning being allowed to engage against the other side of the tunnel or against the supporting-beams. (Illustrated in Fig. 3.) These beams comprise a bottom section  $g$  and a top section  $g'$ , having guides  $g^2$ , which slide on the section  $g$ . The top section  $g'$  is ratcheted, as shown, and the side rail  $a'$  is adapted to be engaged with the ratchets or teeth, so that the awning will be held securely at the proper elevation. This supporting-bar may either be rested against the side of the tunnel, as shown in Fig. 3, or if the tunnel be too wide for the awning to reach across the supporting-bar may be driven down into the earth, so as to hold the outer side of the awning, or if the tunnel be too wide for the awning to reach across the supporting-bar may be placed with one end on the bottom or floor and the other end against the side of the roof of the tunnel, so as to hold the outer side of the awning. When the awning is not in use, it may be folded, as shown in Fig. 2, and conveniently transported from one place to another.



Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the intent of my claims.

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

10 1. An awning, comprising side rails, a fabric attached to and extending between them, and cross frame-bars formed of jointed sections connected to the side rails and lying in a plane parallel to that of the fabric, for the purpose specified.

15 2. An awning, comprising side rails, a fabric extending between them, cross frame-bars formed of jointed sections connected to the side rails, for the purpose specified, one of said cross frame-bars being formed of end sections pivotally connected to the side rails, and an intermediate section or link connected to the end sections by oppositely-disposed knuckles.

25 3. An awning, comprising side rails, a fabric extending between them, cross frame-bars formed of jointed sections connected to the

side rails, for the purpose specified, one of said cross frame-bars being formed of end sections pivotally connected to the side rails, and an intermediate section or link connected to the end sections by oppositely-disposed knuckles, and the end frame-bars being formed of two sections having a knuckle-joint connection between them.

35 4. The combination of an awning having spurs at one side to engage the side wall of a tunnel, and a supporting-bar adapted to be engaged by and to sustain the other side of the awning.

40 5. The combination of an awning having one side edge adapted to engage with the wall of a tunnel, and a supporting-bar engaging the other side edge, for the purpose specified, said supporting-bar being formed of sliding sections one of which has ratchet-teeth thereon.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY C. MARCUS.

Witnesses:

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ANDREW BRUND.