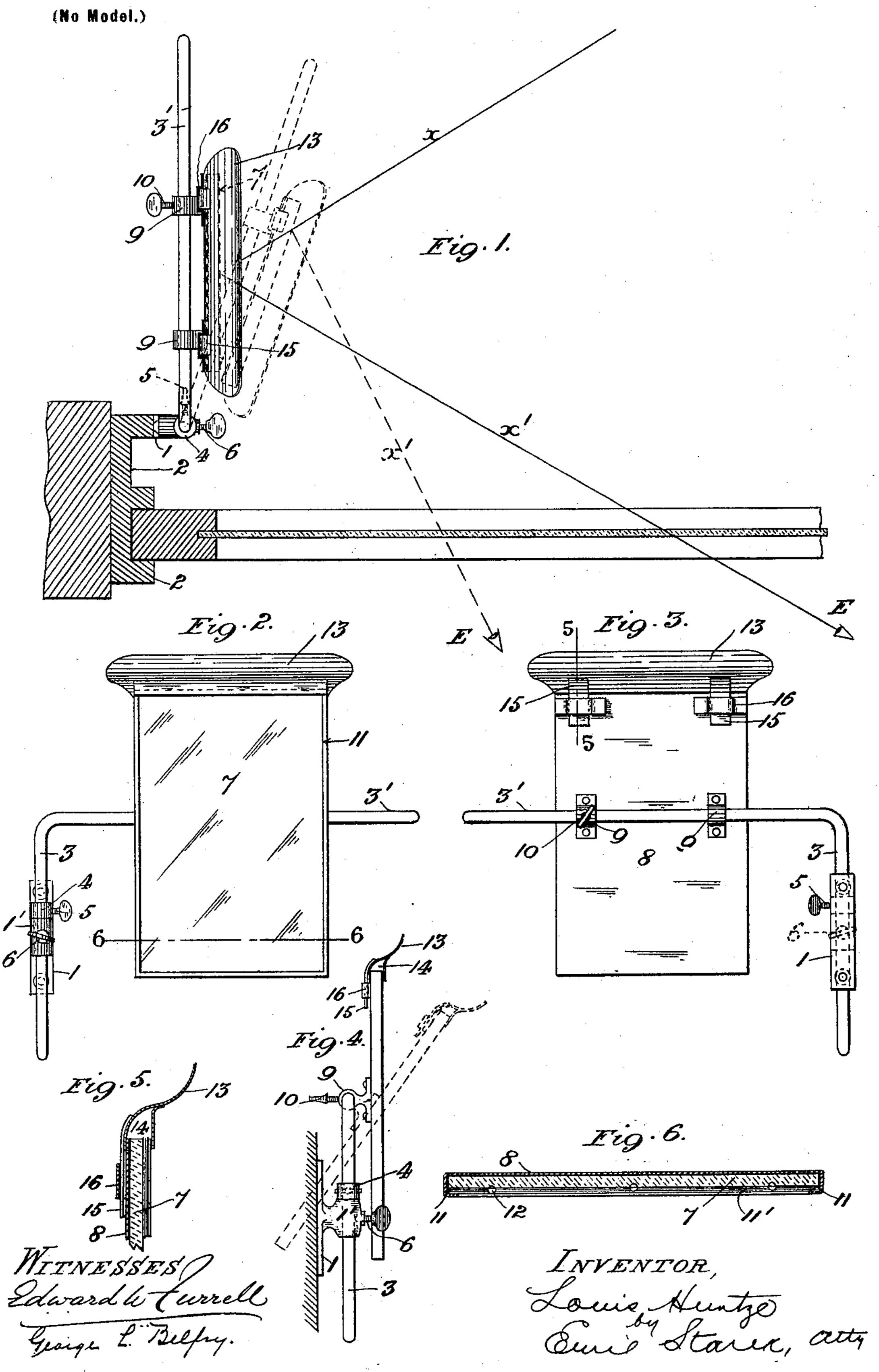
L. HUNTZE. REFLECTOR.

(Application filed Apr. 10, 1899.)



United States Patent Office.

LOUIS HUNTZE, OF ST. LOUIS, MISSOURI.

REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 629,691, dated July 25, 1899.

Application filed April 10, 1899. Serial No. 712,504. (No model.)

To all whom it may concern:

Be it known that I, Louis Huntze, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new 5 and useful Improvements in Reflectors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements to in reflectors; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a transverse or 15 horizontal section taken through a window and frame thereof, showing a top plan view of my reflector as secured to the vertical member of the frame, the dotted lines showing one of the numerous positions to which the re-20 flector can be swung in a horizontal plane. Fig. 2 is a front elevation of the mirror and swinging arm carrying same. Fig. 3 is a rear elevation. Fig. 4 is a side elevation or edge view, the dotted lines showing one of the nu-25 merous positions to which the mirror can be tilted in a vertical plane. Fig. 5 is a sectional detail on line 5 5 of Fig. 3; and Fig. 6 is a section on line 6 6 of Fig. 2, showing the drip-openings at the bottom channel of the 30 frame.

The object of my invention is to construct a reflector which shall be preferably secured along the exterior of a window-frame, whereby objects in the streets or outside objects gen-35 erally shall be reflected into the interior of the room, enabling the observer to see such objects without the necessity of putting his head out of the window.

The device affords amusement and is a 40 source of convenience in inclement weather, when, while the window may be kept closed, the person can still observe what is going on in the street.

45 follows: Referring to the drawings, 1 represents a bracket adapted to be secured to the vertical portion of the outside of the window-frame 2, the bracket being provided with a socket or 50 loop 1' to receive a cylindrical rod 3, the latter being adjustable within the loop and supported on the same by means of a sliding ring

4, loosely embracing the rod and adapted to be clamped thereto by a binding-screw 5 when once adjusted to the proper vertical position. 55 The rod can be swung in the socket to any predetermined position, and when once thus adjusted can be permanently clamped by the tightening-screw 6. The rod 3 is provided with a horizontal extension or arm 3', to which 60 the frame of the mirror or reflector 7 is directly secured. The back 8 of the frame is provided with two horizontally-disposed loops or eyes 9, adapted to be slipped over the arm 3' from the free end thereof, the reflector 65 thereby being adapted to be oscillated in a vertical plane and thereby inclined so as to receive the rays of objects near by or at a distance, at the pleasure of the observer. If the reflector is at any considerable elevation, it 70 may be tilted to "pick up" objects almost vertically below it or objects at a great distance. When once adjusted to the proper angle, it is permanently clamped by a tightening-screw 10, passed through one of the 75 eyes 9 and bearing against the arm 3'. The frame which receives the reflector is open at the top, the mirror being dropped directly into grooves or ways 11, and when once inserted the bottom edge of the reflector is 80 supported by the wall of the bottom groove 11', said wall being provided with openings 12 to allow for the escape of water in case of rain.

To protect the glass or reflector, (generally 85 against dirt, rain, dust, and the like,) I provide the frame thereof with a detachable hood 13, which projects forward a suitable distance beyond the plane of the reflectingsurface of the mirror, said hood being pro- 90 vided along the base thereof with a longitudinal pocket or channel 14, the forward wall of which overlaps the upper edge of the mirror and the rear and deeper wall overlaps the back of the frame, the lower edge of the rear 95 In detail the invention may be described as | wall of said pocket being provided with depending arms or extensions 15, which are inserted between the back and the metallic straps 16, carried by the back and adapted to embrace the arms 15.

> It will be observed from the construction as described that the mirror or reflector can be adjusted to almost any conceivable position. It may be raised or lowered vertically.

It may be shifted horizontally to or from the window-frame along the arm 3'. It may be inclined to any angle about the arm 3'. An illustration of its application is shown in Fig. 5 1. A ray of light X, coming from an object in the street, impinges against the mirror, the ray being reflected along X' to the eye E in the interior of the room. By properly adjusting the mirror the entire landscape may to be reflected into the room, the device constituting a source of considerable amusement. It is apparent, of course, that the construction may be departed from in a measure without departing from the spirit of the invention.

15 Having described my invention, what I

claim is—

1. In a reflector, a suitable arm adapted to be secured to the outside of the window-frame, a frame carried by said arm, a mirror mounted 20 in said frame, a hood carried by the frame, and projecting forward a suitable distance beyond the plane of the reflecting-surface of the mirror, the hood having a basal pocket or channel the walls of which are adapted to 25 overlap the upper edges of the mirror and frame thereof, and means for retaining the rear wall of said pocket to the back of the mirror-frame, substantially as set forth.

2. A reflector comprising a bracket, a rod adapted to be rotatably carried by the same, 30 a horizontally-projecting arm forming an extension of said rod, a frame having loops or eyes projecting from the back thereof, adapted to be slipped over the arm, and permanently secured thereto, grooves or ways along the 35 sides and bottom of the frame-back for the reception of a mirror, a hood projecting normally forward a suitable distance beyond the reflecting-surface of the mirror, and having a basal pocket or channel, the walls of which 40 are adapted to overlap the upper edges of the mirror and frame, suitable arms depending from the lower edge of the rear wall of the channel, and suitable straps carried by the back for the reception of said arms, the wall 45 of the basal groove of the frame being provided with openings for the escape of water and moisture, the parts operating substantially as and for the purpose set forth.

In testimony whereof I affix my signature 50

in presence of two witnesses.

LOUIS HUNTZE.

Witnesses: EMIL STAREK, GEORGE L. BELFRY.