F. S. STAFFORD.

COMBINED AUTOMOBILE TAIL LIGHT AND ILLUMINATED NUMBER.

APPLICATION FILED FEB. 21, 1910.

983,946. Patented Feb. 14, 1911.

2 SHEETS—SHEET 1.

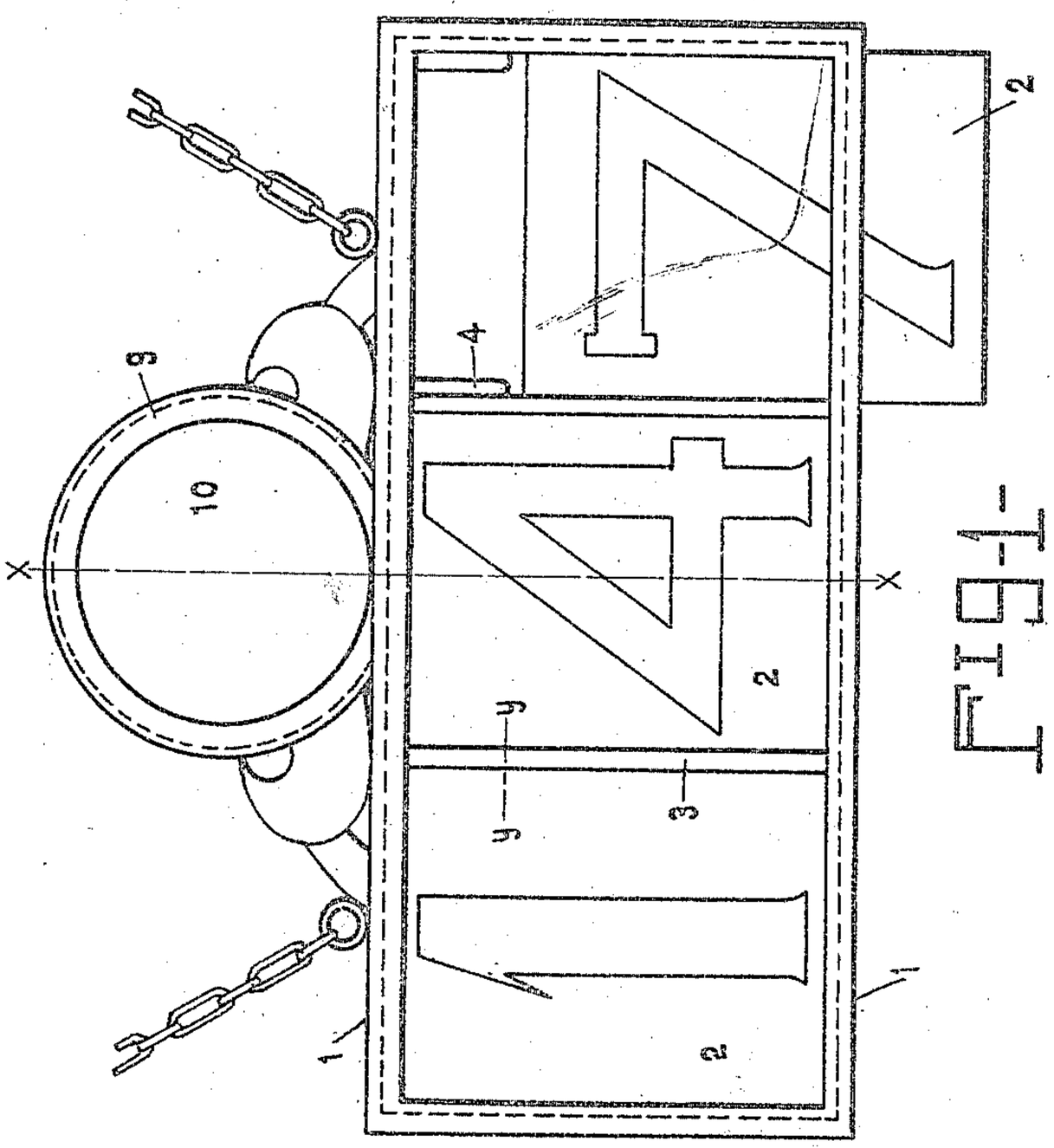

FIG. 1.

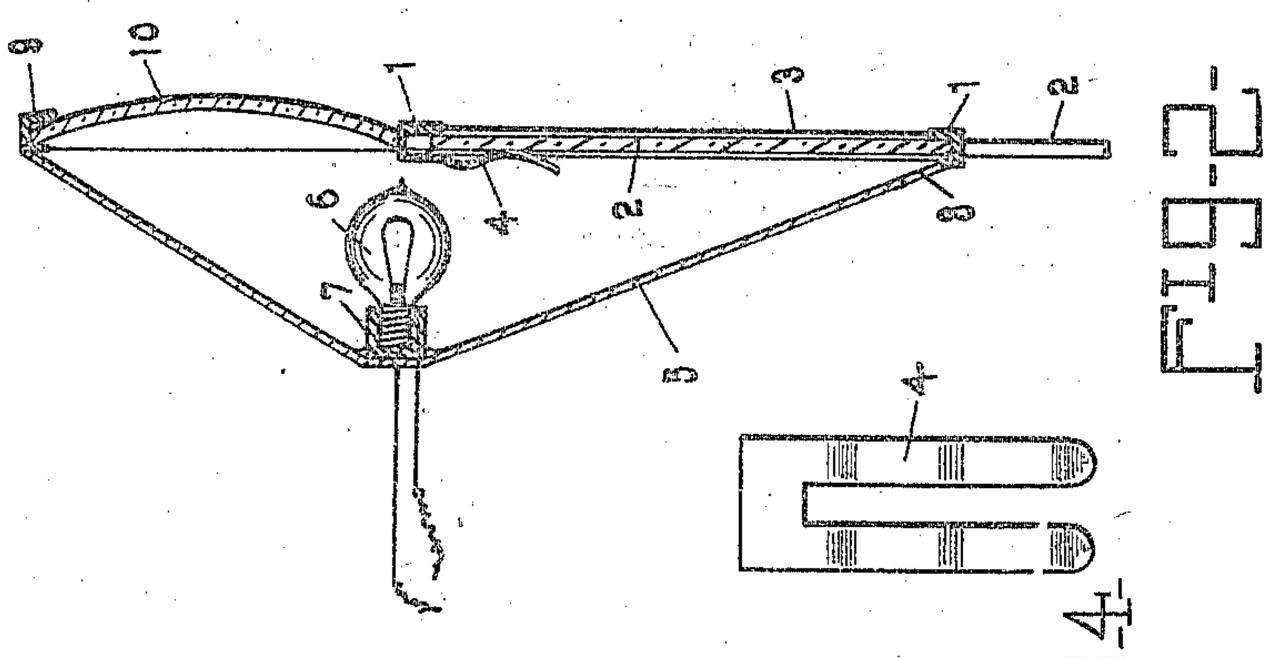

FIG. 2.

FIG. 4.

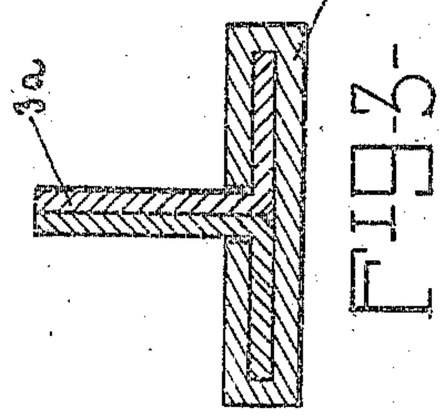

FIG. 3.

WITNESSES:

A. S. Knight.

S. Murray

INVENTOR

Frederick, S. Stafford.

BY John W. Spellman

ATTORNEY

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2 SHEETS—SHEET 2.

FIG-6-

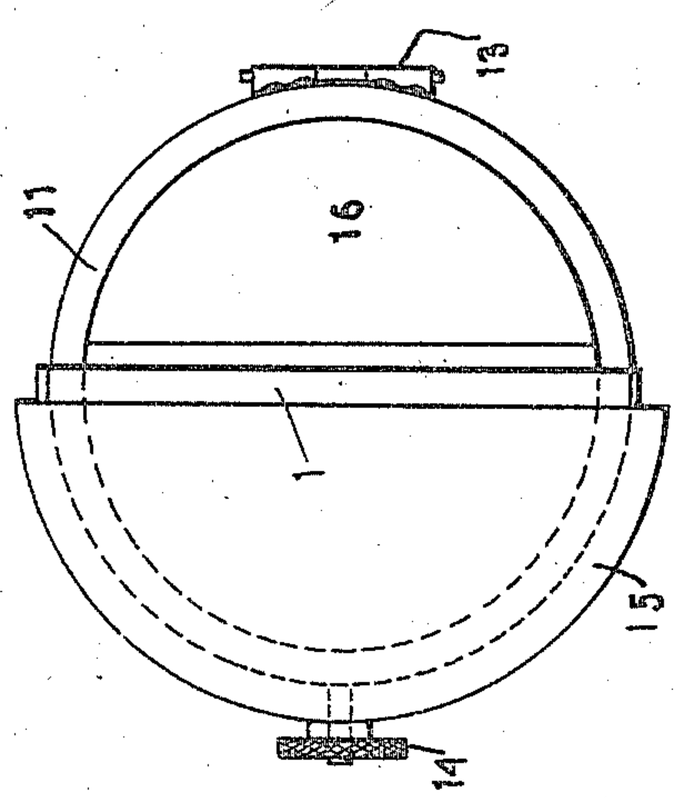


FIG-5-

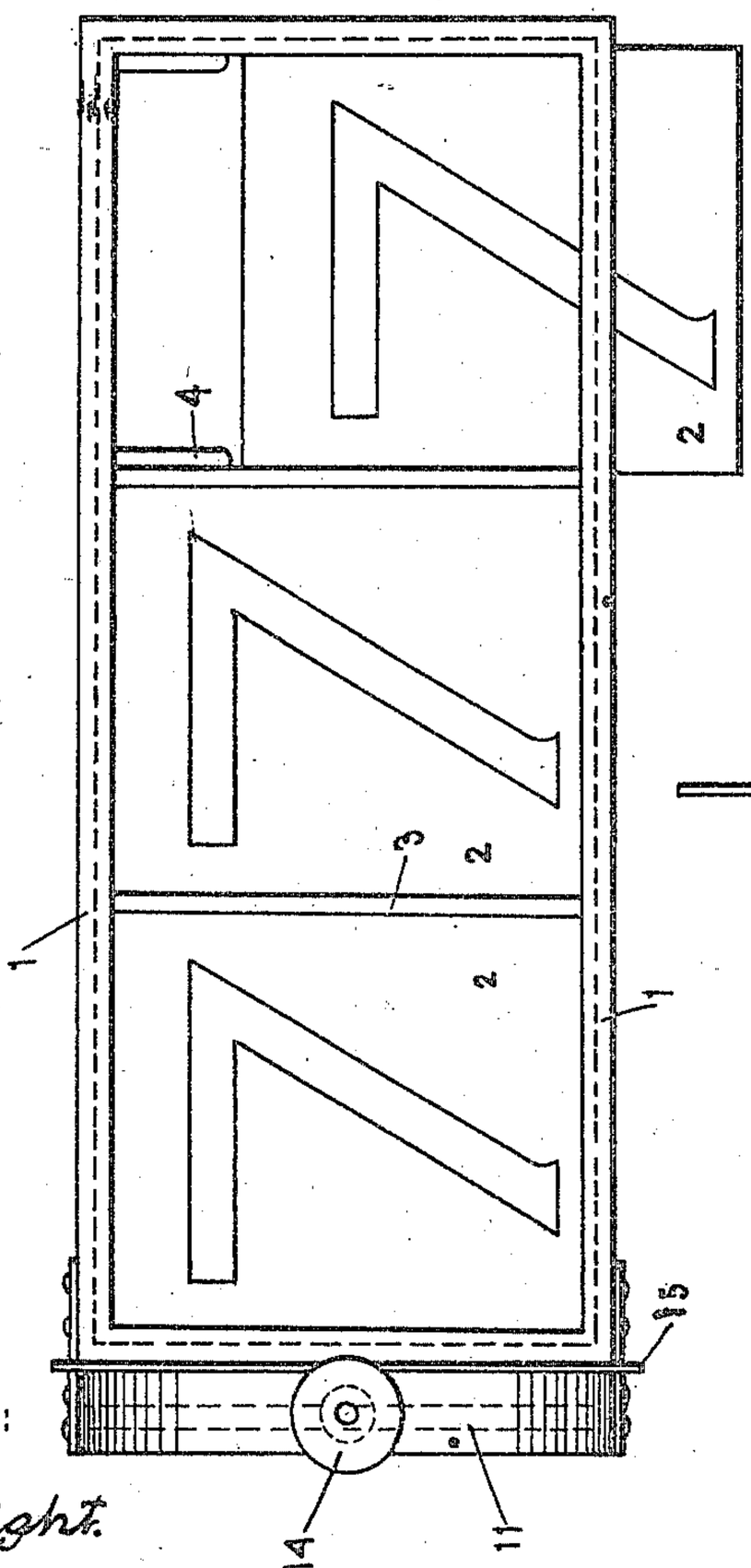
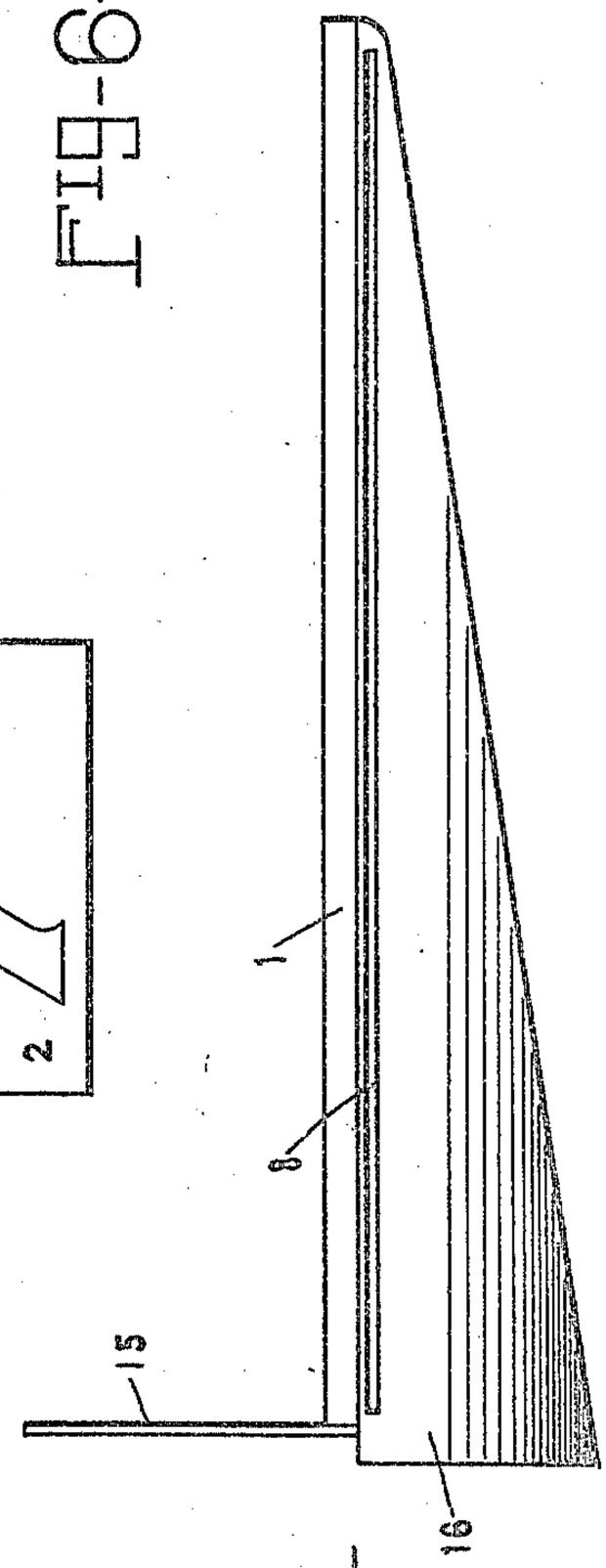


FIG-7-



WITNESSES:

A. S. Knight.

J. S. Murray

INVENTOR

Frederick S. Stafford.

BY John M. Spellman

ATTORNEY

UNITED STATES PATENT OFFICE.

FREDERICK S. STAFFORD, OF DALLAS, TEXAS.

COMBINED AUTOMOBILE TAIL-LIGHT AND ILLUMINATED NUMBER.

983,946. Specification of Letters Patent. Patented Feb. 14, 1911.

Application filed February 21, 1910. Serial No. 544,981.

To all whom it may concern:

Be it known that I, FREDERICK S. STAFFORD, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Combined Automobile Tail-Lights and Illuminated Numbers, of which the following is a specification.

My invention relates to new and useful improvements in combined automobile tail lights and illuminated numbers. Its object is to provide a frame to receive an automobile number, which number will be so illuminated that it may be read for a considerable distance.

Another object is to provide a hollow casing adapted to receive a glass plate bearing the number of the automobile, the source of light being placed within said casing to illuminate the number.

A further object is to provide said casing with a window fitted with red glass through which the light from said source will pass forming a danger signal.

A still further object is to provide means by which said glass plates which carry numerals forming the number will be made interchangeable.

Finally, the object of the invention is to provide a device of the character described that will be strong, durable, simple and efficient, and comparatively easy to construct, and also one which will not be likely to get out of working order.

With these and various other objects in view my invention has relation to certain novel features of the construction and operation, an example of which is described in the following specification and illustrated in the accompanying drawing, wherein:—

Figure 1 is a front view of the herein described device showing one of the glass plates partially removed from its frame. Fig. 2 is a sectional view of the same taken on the line *x*—*x* of Fig. 1. Fig. 3 is a detail cross section taken on the line *y*—*y* of Fig. 1. Fig. 4 is a detail view of one of the double springs which are employed to exert pressure upon the glass plates to hold them firmly in their frame. Fig. 5 is a front view of a slightly modified form of the invention which may be attached to an ordinary automobile tail lamp and illuminated thereby. In this view only a door of the lamp is shown, the lamp itself being thought unnecessary to an understanding of the invention. Fig. 6 is a side view of the same. Fig. 7 is a bottom view of the modified device detached from the door of the lamp.

Referring now more particularly to the drawings, wherein like numerals of reference designate similar parts in all the figures, the numeral 1 denotes a rectangular frame of approximately U-shaped cross section which forms the front of the hollow casing within which the source of light is placed, said frame being adapted to receive a number of glass plates 2, each of which carries one of the numerals forming the automobile number. A number of vertical ribs 3 of T-shaped cross-section are vertically positioned in the frame 1 and serve to divide it into a number of compartments each of which is adapted to receive one of said glass plates. The ribs 3 will preferably have the composite construction illustrated in Fig. 3, which construction is adapted to afford the maximum strength. Each of the ribs 3 is positioned with its portion 3^a toward the rear forming a partition between the glass plates 2. Upon the portion 3^a of each rib adjacent to the top thereof there is mounted a double spring 4 the two parts of which, passing on each side of the portion 3^a, are adapted to bear against the glass plates 2.

In the rear of the frame 1 is secured a reflector 5, the walls of which slope to a common point. At this point there is mounted an incandescent bulb 6 in a suitable socket 7. In the reflector 5 there is provided a slot extending longitudinally thereof near its lower edge. Through this slot the plates 2 are introduced into the frame, their upper edges being passed under the springs 4, and forced into the upper portion of the frame. The plate is then released permitting its lower edge to drop into the lower portion of the frame 1. In order that the upper edge of the plate will not escape from contact with the upper portion of the frame, the upper edge of the frame is given a width greater than that of the lower edge thereof. A circular frame 9 centrally mounted upon the top of the rectangular frame 1 is adapted to receive a glass plate 10, which glass will be preferably dish-shaped and of a red color. The lamp 6 will serve both to illuminate the numbers carried by the glass plate 2 and to throw a colored light through the glass 10 forming a danger signal.

In the modified form of this device illustrated in Figs. 5 to 7 inclusive, numeral 11

denotes the frame of a circular door such as are in common use on automobile lamps, and 12 is the glass window thereof. This door is provided with a hinge 13 and a set-screw 14 by means of which a closure is formed with the lamp. The frame 1 is secured to the lamp door at its center in a vertical position, and projecting perpendicularly therefrom, any suitable means being employed to form a rigid attachment. A semi-circular plate 15 which is secured to that extremity of the frame 1 adjacent to the door serves to prevent light escaping from the lamp in front of the frame. A curved reflector 16 secured to the rear surface of the frame 1 has a semi-cylindrical shade adjacent to the door of the lamp, permitting a maximum amount of light to enter the casing from the lamp, and at the other end said reflector gradually reduces to a plane surface. A slot 8 as previously described is provided in the lower edge of this reflector to permit the glass plates 2 to be introduced into the frame 1. This modified form of the invention is of a cheaper construction and eliminates the necessity of a source of electric light. It may be attached to any of the ordinary oil-burning lamps which are at present used to illuminate the numbers of automobiles.

I am aware that changes may be made in the form and proportion of parts and details of construction of the device herein described as a preferable embodiment of my invention, without departing from the spirit or sacrificing the advantages thereof, and I, therefore, reserve the right to make such changes and alterations in said device as fairly come within the scope of the following claim.

What I claim is:—

In a device of the character described, the combination with a plurality of transparent plates, each of which carries a numeral, of a frame, a plurality of T-shaped ribs vertically mounted in said frame and forming compartments therein, each of which compartments is adapted to receive one of said plates, bifurcated springs mounted upon the upper portions of said ribs and bearing upon said plates, a reflector secured to the rear of said frame, a source of light adapted to illuminate said reflector, and a means adapted to prevent light from said source from passing in front of said frame.

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

FREDERICK S. STAFFORD.

Witnesses:

J. S. MURRAY,

EUGENIA HENSLEY.