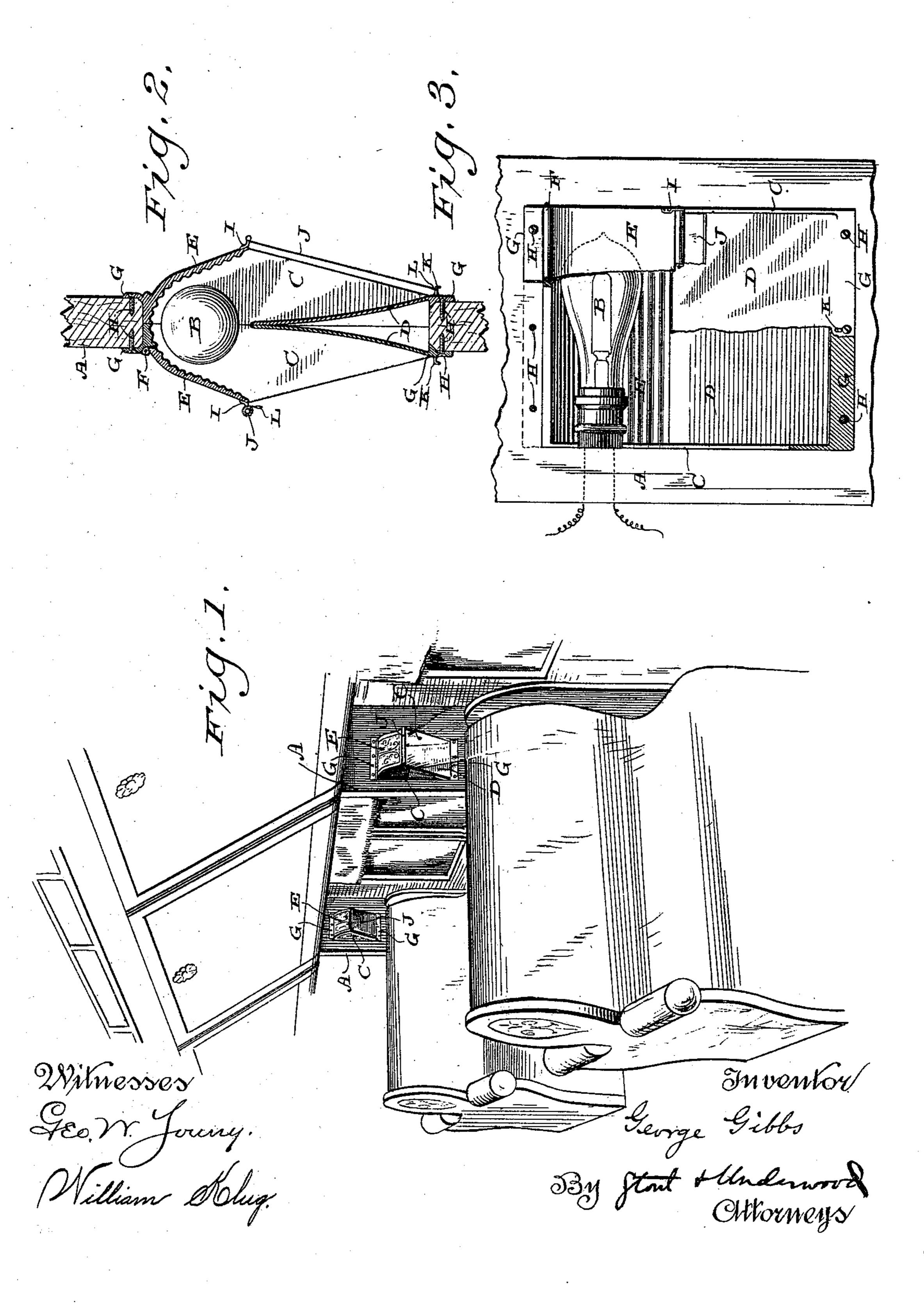
(No Model.)

G. GIBBS.

SHIELD AND REFLECTOR FOR INCANDESCENT ELECTRIC LAMPS.

No. 408,478.

Patented Aug. 6, 1889.



## UNITED STATES PATENT OFFICE.

GEORGE GIBBS, OF MILWAUKEE, WISCONSIN.

SHIELD AND REFLECTOR FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 408,478, dated August 6, 1889.

Application filed December 10, 1888. Serial No. 293, 198. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GIBBS, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain 5 new and useful Improvements in Shields and Reflectors for Incandescent Electric Lamps; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to shields and reflect-10 ors for incandescent electric lamps or other illuminating devices; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings,

15 and subsequently claimed.

In the drawings, Figure 1 represents a perspective view of a portion of a sleeping-car and illustrates an application of my device; Fig. 2, a vertical transverse section of a shield 20 and reflector constructed according to my invention, and Fig. 3 a front elevation of the same with parts broken away for the purpose | of better illustration.

Referring by letter to the drawings, A rep-25 resents the stationary panels that project from the sides of a sleeping-car between the compartments or sections of the latter. Fitted to each of the panels A in any suitable manner is one or more incandescent electric 30 lamps B or other illuminating devices; but in practice I prefer to use only one of these lamps to each panel, as will be hereinafter described.

Secured to either or both sides of each panel 35 A is a casting that constitutes my shield and reflector, said casting being composed of side pieces C, a back piece D, and cover-piece E, the latter being preferably indented or corrugated upon the inner side and extended 40 down far enough to come in front of the lamp, as best illustrated by Fig. 2. In order to facilitate access to the lamp or lamps, a portion of the cover-piece E of each shield and reflector may be hinged in place, as is also shown at 45 F in Fig. 2.

The side pieces C of the shield and reflector are preferably tapered or otherwise shaped to gradually diminish toward their lower ends, and at least one of these side pieces, (pref-50 erably the inner one,) the back piece D, and I

cover-piece E have their adjacent surfaces highly polished or treated with some suitable reflecting material.

The back piece D and cover-piece E of the device are preferably provided with vertical 55 lugs or strips G, that, in connection with screws H, form the means by which the device

is secured in position for use.

Ordinarily I prefer to cut an opening in each of the panels A and arrange the lamp B so 60 that the bulb thereof extends equally on both sides of said opening. A shield and reflector such as has been above described is secured to each side of the panel to cover the opening therein, and thus the light from the single 65 lamp is reflected into two adjoining compartments or sections of the car, the corrugations upon the inner sides of the cover-pieces E serving to prevent the reflection of any distinct image to the occupants of said compartments. 70

It is obvious that two of the shields and reflectors above described may be united in such a manner as to form one device capable of being fitted in the panel-opening, as illustrated by Figs. 2 and 3, this construction be- 75 ing merely a question of expediency or convenience and the one most likely to be em-

ployed.

The cover-pieces E of my device are shown as provided with brackets or bearings I for So the rollers of curtains J, and hooks K are attached to the back pieces D of said device to engage eyes L on said curtains when the latter are drawn down to obscure the light. While I have shown the curtains as a means 85 for obscuring the light, it is obvious that any style of screen may be employed for the same purpose.

The shield and reflector shown in the drawings and above described is rectangular in 90 form, but for corner-lights it may be made triangular in form without departing from the spirit of my invention, and in such a case the back piece D may possiby be omitted, as the two side pieces will form the angle that 95 exists between said back piece and each side piece in said rectangular form of the device.

By the employment of a device such as I have shown and described the light of an incan descent electric lamp or other illuminating 100 device may be shielded from the direct vision and the rays so contracted as to be reflected down and out to illuminate a particular space.

My device is particularly useful in sleeping-cars, in case the occupant of a seat desires
to engage in reading or other occupation requiring a good light, as it will be readily seen
that all of the illumination from an incandescent electric lamp will be reflected over
to the shoulder of the passenger directly on the
work upon which he may be engaged.

Another advantage of my device as applied to sleeping-cars lies in the fact that after the lower berths are made up and the curtains drawn the occupants have a good light by which to arrange their toilet and read, in case the latter occupation is desirable, while lying down; and, as previously described, the peculiar construction of the cover-pieces of my device prevent the occupant of one berth or section from seeing any distinct image of anything in the adjoining berth or berths, in case two of said devices are joined together and fitted in an opening in the panels between said berths.

At any time when it is desirable to entirely obscure the light the curtain or curtains J may be drawn down, and thus it will be seen that when the preferred form of my device is employed the occupant of one section of the car can shut off said light from his section without inconveniencing the occupants of the adjoining sections.

While I have described my device more particularly in connection with a sleeping-car, it is obvious that it may be otherwise employed with equal facility where it is desirable to shield the light of an incandescent electric lamp from the direct vision and contract and reflect its rays within a limited

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

1. The combination, with an illuminating 45 device, of a reflector having vertical side pieces surmounted by a cover of such area and arrangement as to come over in front of said illuminating device to shield the latter from direct vision and deflect its rays in a 50 downward direction, substantially as set forth.

2. The combination, with an illuminating device, of a reflector having vertical side pieces surmounted by a cover of such area and arrangement as to come over in front of 55 said illuminating device to shield the latter from direct vision and deflect its rays in a downward direction, and a curtain or analogous device connected to the reflector to shut off the illumination, substantially as set forth. 60

3. The combination, in a car, of a panel, an illuminating device connected to the panel, and a reflector for the illuminating device, having vertical side pieces surmounted by a cover of such area and arrangement as to come 65 over in front of said illuminating device to shield the latter from direct vision and deflect its rays in a downward direction, substantially as set forth.

4. The combination, in a car, of a panel 70 having an opening therein, an illuminating device arranged within the opening, a reflector arranged to distribute the light in opposite directions, and provided with side pieces surmounted by a cover of such area 75 and arrangement as to come over in front of the illuminating device on both sides of said panel, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in 80 the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

GEORGE GIBBS.

Witnesses:

N. E. OLIPHANT, H. G. UNDERWOOD.