

W. R. BOWLES.
LAMP BOX.
APPLICATION FILED OCT. 10, 1910.

1,000,231.

Patented Aug. 8, 1911.

Fig. 1.

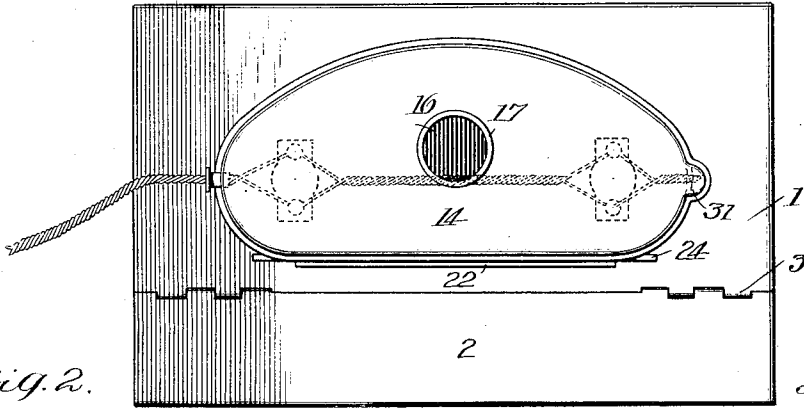


Fig. 2.

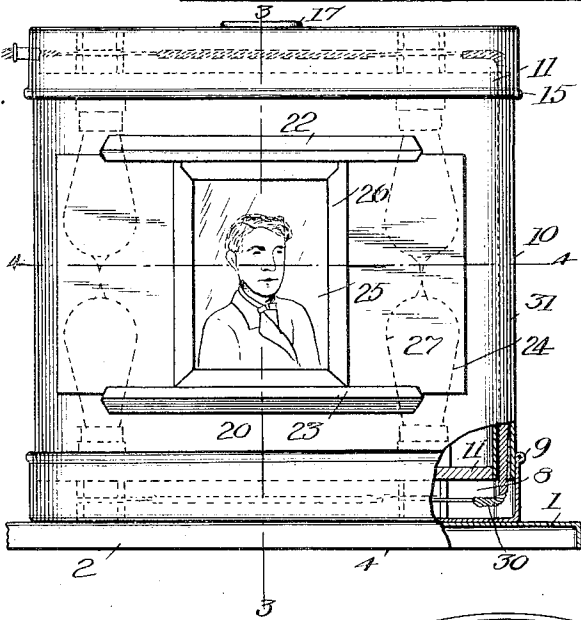


Fig. 3.

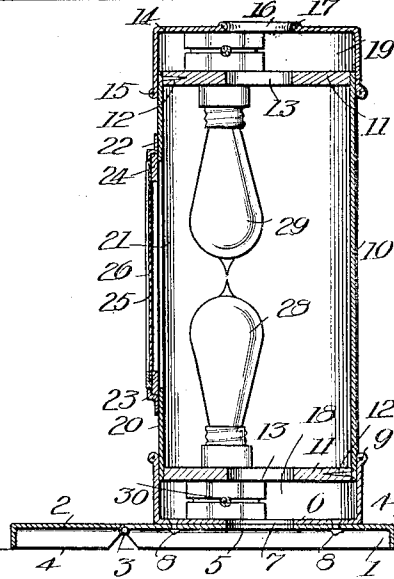


Fig. 4.

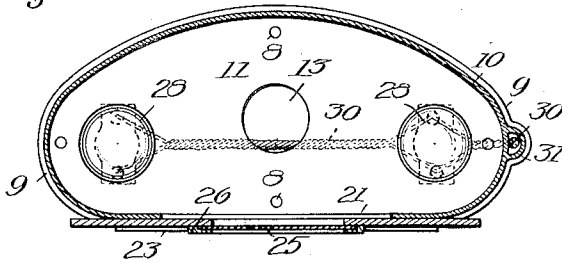
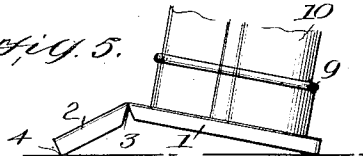


Fig. 5.



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LAMP-BOX.

1,000,231.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM R. BOWLES, a citizen of the United States, and a resident of Hopkinsville, county of Christian, and State of Kentucky, have invented certain new and useful Improvements in Lamp-Boxes, of which the following is a specification.

My invention is an improvement in lamp boxes, and consists in certain novel constructions and combinations of parts, hereinafter described and claimed.

The object of the invention is to provide a simple and inexpensive box of the character specified, especially adapted for photographic work, and wherein a negative, picture or other object to be operated upon may be illuminated to the best advantage and with the proper character of light.

Referring to the drawings forming a part hereof, Figure 1 is a plan view of the improvement. Fig. 2 is a side view. Figs. 3 and 4 are sections on the lines 3-3, and 4-4, respectively of Fig. 2, and, Fig. 5 is a partial end view showing the box in inclined position.

The embodiment of the invention shown comprises a base composed of two sections 1 and 2 of sheet material and hinged together at one side edge at 3, and each of the sections is flanged at the outer side edge and at its ends as at 4. The section 1 is of greater width than the section 2, and is provided with a central opening 5. A cup shaped receptacle 6, substantially elliptical in cross section is arranged with its base seated on the upper face of the section 1, and the said receptacle is provided with an opening 7 registering with the opening 5 of the base section. The receptacle is secured to the base by rivets 8, and the free edges of its side walls are beaded at 9. A shell 10 is provided having a cross section similar to that of the receptacle, the shell being of sheet material, and provided at each end with a transversely arranged closure 11 consisting of a plate of wood or like material. Each of the plates has its outer face flush with the end of the shell and is secured in place by nails 12, passing through the shell

and engaging the plate. Each of the plates is also provided with a circular opening 13, registering with the openings 5 and 7 when the shell is in position. The shell is seated in the receptacle 6, and a similar receptacle or cap 14 is arranged above the shell, the said cap having a beaded free edge 15, and having an opening 16, registering with the opening 13 of the adjacent plate 11. The edges of the opening 16 of the cap are flanged or beaded as shown at 17. The cap 14 and receptacle 6 are of somewhat greater cross section than the shell, sufficient to permit the end of the shell to engage with the said cap and receptacle, but not great enough to permit the end of the shell to engage the bottom of the receptacle or cap, so that chambers 18 and 19 are formed between the end of the shell and the receptacle and cap, respectively. The front 20 of the shell is approximately plane, and is provided with an opening 21 substantially rectangular in shape. A guideway 22 is arranged above the opening and extending on each side thereof, and a similar guideway 23 is arranged below the opening. A plate 24 is slidable in the guideways over the opening, and the said plate is provided with a central opening. The negative 25 is held in place by overlying flanges 26, which encircle the opening as shown in Fig. 2. The opening 21 of the shell is of greater width than the negative to be used.

A plurality of incandescent lamp sockets 28 are secured on the plates 11, near each end thereof, and a lamp 29 is detachably engaged with each socket. The lamps 29 are arranged in parallel and the leads 30 pass from the lower sockets upwardly through a passage 31 formed in one end of the shell to the upper sockets, and from thence out of the shell through a bushing 32 in the opposite end wall.

As shown more especially in Fig. 2, the lamps are arranged on each side of the central opening of the shell, and behind the adjacent flange 27. The lamps are arranged in pairs, one pair at each end of the shell, and the openings 13 of the plates are slightly behind the plane of the lamps, so

that the leads 30 pass over the edge only of the said openings. It will be evident that when one stands directly in front of the shell, the lamps are not visible, and the rear wall 33 of the shell is curved outwardly to form a reflector, and the inner face of the said wall is preferably painted white to assist in this function. The openings 5, 7, 13 and 16 provide sufficient ventilation. The plate 24 is the negative holder, the negative being seated over the opening therein, and held in place by the flanges 26, and the flange 26 is omitted at the top, as indicated in Fig. 2, to permit the insertion and removal of the negative.

The improvement may be used for a variety of purposes. By placing the base sections in the position shown in Fig. 5, that is, with the sections 1 and 2 inclined with respect to each other, the improvement may be used for retouching. The negative is placed in the slide, and when the slide is inserted, the negative is in the most favorable position for retouching. It will be understood that the hinged joint 3 is a stiff hinge so that the sections when inclined with respect to each other will hold this position by friction. The light behind, while strong, is soft and without any dazzling effect.

For use in copying, the picture to be copied, is placed on the rear face of the box and the camera is placed in front, the copy being made through the opening. The picture may be supported against the rear face of the box in any suitable manner. The picture is thus strongly illuminated on the face. By placing a negative in the slide and placing a camera in proper position in front of the slide, the device may be used to advantage in enlarging. For negatives of different size, slides having different sized openings, are made use of.

I claim:

1. A box of the character specified, comprising a base composed of sheet material and consisting of two sections hinged together at their side edges, the outer edges of the sections being flanged, a receptacle secured on one section of the base, a shell having a substantially plane front wall and an outwardly curved rear wall seated in the receptacle, said shell having at each end a transversely arranged plate provided with a central opening, a cap engaging the upper end of the shell, said cap and receptacle being spaced apart from the plates to form a chamber at each end of the shell, said shell having a central opening in its front wall, a plurality of lamps in the shell, said lamps being connected with the plates and being arranged between the flanges and the ends of the shell, guideways above and below the opening of the shell, a slide having a central opening movable in the guideways,

and means on the slide for supporting a negative in the opening thereof, the receptacle and cap having openings registering with the openings of the plates, the shell having a passage in one end wall for the leads of the lamps.

2. A box of the character specified, comprising a shell having a plane front wall provided with a central opening, guideways above and below the opening, a slide movable in the guideways and having a central opening, holders on the slide for holding a negative over the opening, illuminating means in the shell at each side of the central opening, and a base for the box, said base being composed of sections hinged together, the shell being attached to one of the sections and with the front wall facing the other section.

3. A box of the character specified, comprising a base composed of a plurality of sections hinged together by one edge, a shell having a substantially plane front, and a transversely outwardly curved back seated on one section, and facing the other section, the front having a central opening, a slide having means for supporting a negative slidably transversely of the opening, and illuminating means in the shell at each side of the opening.

4. A box of the character described, comprising a base composed of a plurality of sections hinged together by one edge, a shell having a substantially plane front, and a transversely outwardly curved back seated on one section and facing the other section, the front having a central opening, a slide having means for supporting a negative slidably transversely of the opening, and illuminating means in the shell at each side of the opening.

5. A box of the character specified, comprising a base composed of a plurality of sections hinged together, by one edge, a shell having a substantially central opening, in its front seated on one section and facing the other, illuminating means on each side of the opening, and a slide provided with a central opening and with means for supporting a negative over the opening, movable transversely of the box opening.

6. A box of the character specified, comprising a base composed of a plurality of sections hinged together, by one edge, a shell having a substantially central opening in its front seated on one section and facing the other, illuminating means on each side of the opening, and a slide provided with a central opening and with means for supporting a negative over the opening, movable transversely of the box opening.

7. A box of the character specified, comprising a case having a substantial central opening in its front, an illuminating means

on each side of the opening within the case, a slide movable transversely of the opening of the case, said slide having an opening and having means for supporting a negative over the opening, and a base for the
5 box, said base consisting of a plurality of sections hinged together, the box being on

one of the sections whereby to permit the box to be tilted by inclining the sections with respect to each other.

WILLIAM ROBERT BOWLES.

Witnesses:

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