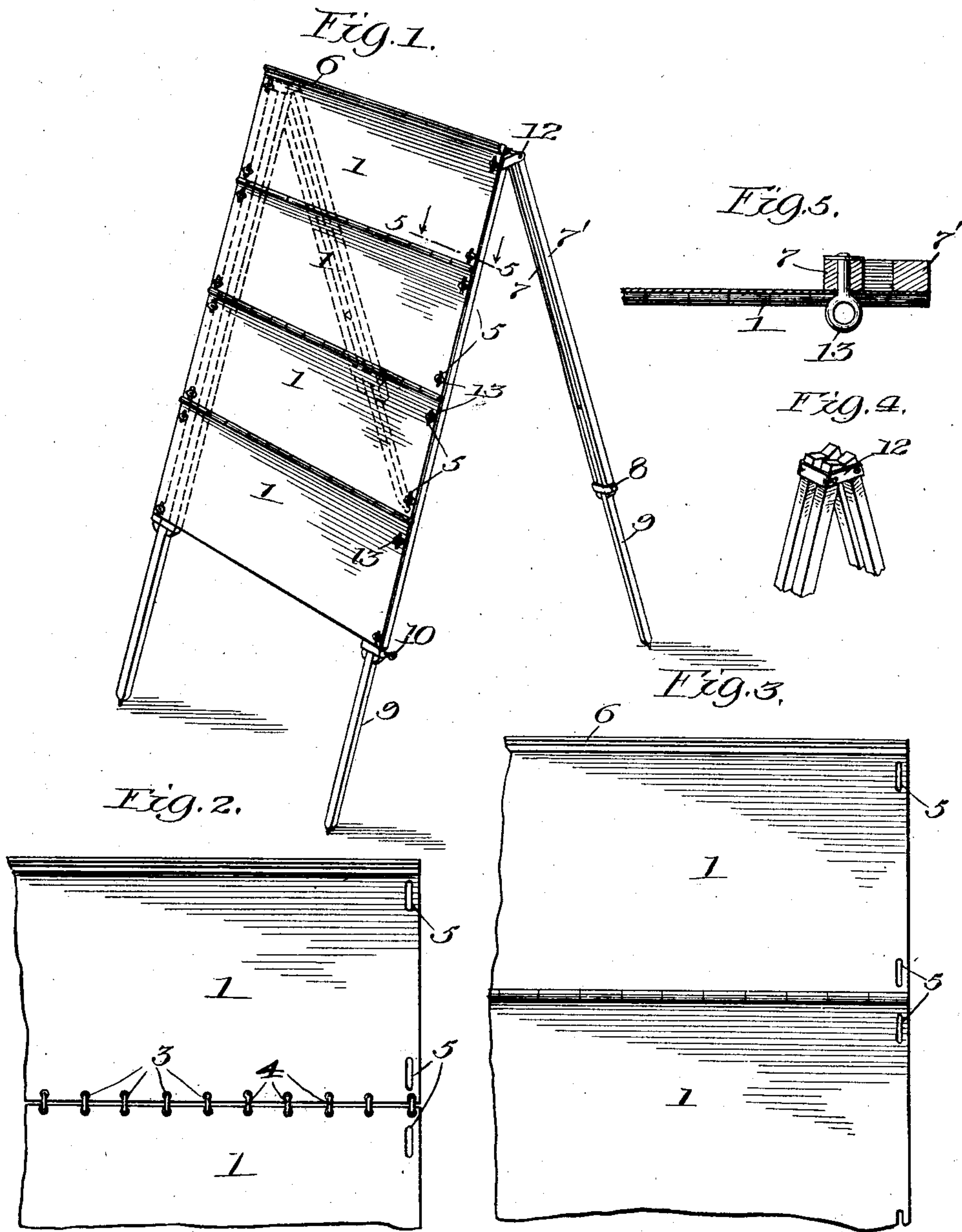


No. 890,651.

PATENTED JUNE 16, 1908.

S. HOLM.
PHOTOGRAPHIC REFLECTOR.
APPLICATION FILED APR. 1, 1907.



Witnesses
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by

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UNITED STATES PATENT OFFICE.

SARA HOLM, OF CHICAGO, ILLINOIS.

PHOTOGRAPHIC REFLECTOR.

No. 890,651.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed April 1, 1907. Serial No. 365,655.

To all whom it may concern:

Be it known that I, SARA HOLM, a citizen of the United States, residing at the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Photographic Reflectors, of which the following is a specification.

My invention relates to indoor lighting of photographic subjects.

There is a great and growing demand for portraits taken amid the familiar surroundings of the home rather than among the conventional accessories of the professional gallery. But the worker in home portraiture, either professional or amateur is confronted with difficulties of lighting which it is the object of my present invention to overcome. The light in the rooms of an ordinary dwelling usually comes from one direction, and this, falling on one side of the subject only, gives too great contrasts of light and shade. Moreover, sufficient exposure to give detail on the shaded side of the face gives over-exposure in the high lights with obliteration of detail; while a properly timed exposure for the high lights will give little or no detail in the shadows.

My invention provides means for reflecting the light at any angle, so that the lighting of the subject under the described conditions may be equalized with a normal exposure, and a properly graded succession of tones with any desired detail may be obtained in the high lights, half tones and shadows.

It is a further object of my invention to provide a device which shall be simple, cheap and substantial, that can be readily moved or adjusted, and that can be folded into small compass for carrying or storage.

The principles of my invention are illustrated in the drawings, in which—

Figure 1 shows a perspective view of my photographic reflector; Fig. 2 is an enlarged detail of two of the reflecting plates; Fig. 3 is a similar view showing an alternative means of hinging the plates together; Fig. 4 is a detail of the supporting legs where hinged together, and Fig. 5 is a fractional cross section on the line 5—5 of Fig. 1.

Further describing my invention with reference to the drawings—I represents a series of plates preferably of thin sheet metal which should be highly polished on one side. For lightness and durability of polish these plates may be of aluminum, and for reasons hereinafter set out one side of said plates should

be given a dull or matte surface. These plates should be joined together so that when extended the faces of corresponding finish are on the same side of the device. They may be secured together in any convenient way, that shown in Fig. 2 being a practical and convenient one. Holes 3 are formed in the adjacent edges of the plates through which are passed small metallic rings 4 which thereby make a joint at which the plates may be readily folded upon each other so that except for thickness they will form a package the size of a single plate. The alternative method of construction shown in Fig. 3 consists in forming a hinge by turning alternate portions of the edges of adjacent plates over a rod or pintle. Slots 5, parallel to the short edge of the plates, may be formed therein. A stiffening rod 6 which may be a strip of wood of any suitable size or shape should be secured to the upper edge of the top plate.

The reflector thus formed may be suspended as most convenient upon an ordinary tripod or upon the supporting device which is shown, and which is designed in combination with the reflecting surfaces to produce a solid and substantial structure, and one which may be readily adjusted. To this end I provide two pairs of legs, each one of the same comprising two parallel members 7 and 7' secured together at a little distance from each other at the lower part by a strap 8. A third member 9 is adapted to move between the parallel members and to be held in proper position by the thumb screw 10 or other convenient means. Two legs formed as described may be pivotally attached at their upper portions to the connecting plate 12. In one of the upper members of the leg may be placed a flat headed device 13, the head of which is adapted, when placed parallel to the supporting member, to be passed through the slots 5, and when turned at right angles thereto to secure the said plates to the legs. A number of these devices being provided, the plates form a bracing against lateral displacement of the legs. The swinging legs which are free from the plates provide, together with the sliding adjustment of the members 9, means by which the whole device may be placed in any desired position.

By placing the device opposite a window and the subject between them, any desired effect of illumination may be obtained. On a dull day the polished surface will give a full

reflection. With stronger light a softer and more diffused illumination may be obtained from the matte side. And lighting intermediate in quality and amount may be obtained
 5 by different combinations of the two surfaces and by changing the angle and distance of the device as may be suggested by the skill and experience of the operator.

I claim:

13 1. In a photographic reflector; a multiplicity of light reflecting plates of sheet metal, and means for foldably attaching the same together at their adjacent edges.

15 2. In a photographic reflector; a multiplicity of plates of sheet metal, and means for foldably attaching the same together at their adjacent edges, said plates having a polished surface on one side and a matte surface on the other.

20 3. In a photographic reflector; a multiplicity of light reflecting plates of sheet metal, means for foldably attaching the plates together at their adjacent edges, and means attachable to the plates when extended for adjusting the operative angle thereof.

25 4. In a photographic reflector; a multiplicity of light reflecting plates of sheet metal, means for foldably attaching the plates together at their adjacent edges, supports detachably attachable to the free edges of the reflector, and means for adjusting the operative angle thereof.

30 5. A photographic reflector comprising a multiplicity of rectangular plates hinged together, supports by which said plates may be alined in the same plane, means for mutual

engagement between the plates and the supports, and bracing means for supporting the apparatus at an operative angle.

6. A photographic reflector comprising a 40 multiplicity of rectangular plates hinged together, having slots in the free edges thereof, supports by which said plates may be alined in the same plane, devices carried by the supports to engage the plates through the 45 slots, and bracing means for supporting the apparatus at an operative angle.

7. In a photographic reflector; a multiplicity of light reflecting plates, and means for foldably attaching the same together at their 50 adjacent edges, said plates having a light reflecting surface on one side and a light diffusing surface on the other side.

8. In a photographic reflector; a multiplicity of light reflecting plates, means for fold- 55 ably attaching the plates together at their adjacent edges, and detachable means securable to the plates when extended for adjusting the operative angle thereof.

9. A photographic reflector comprising a 60 multiplicity of plates foldably attached to each other, means for supporting said plates, and means for securing said plates to the supporting means in operative relation to each other. 65

In witness whereof, I have hereunto set my hand, this 27th day of March A. D. 1907, in the presence of two subscribing witnesses.

SARA HOLM.

Witnesses:

C. K. CHAMBERLAIN,
 A. S. PHILLIPS.