

J. W. LIEBENROOD.
 PHOTOGRAPHIC PRINTING DEVICE.
 APPLICATION FILED MAY 16, 1911.

1,031,563.

Patented July 2, 1912.

2 SHEETS-SHEET 1.

Fig. 1.

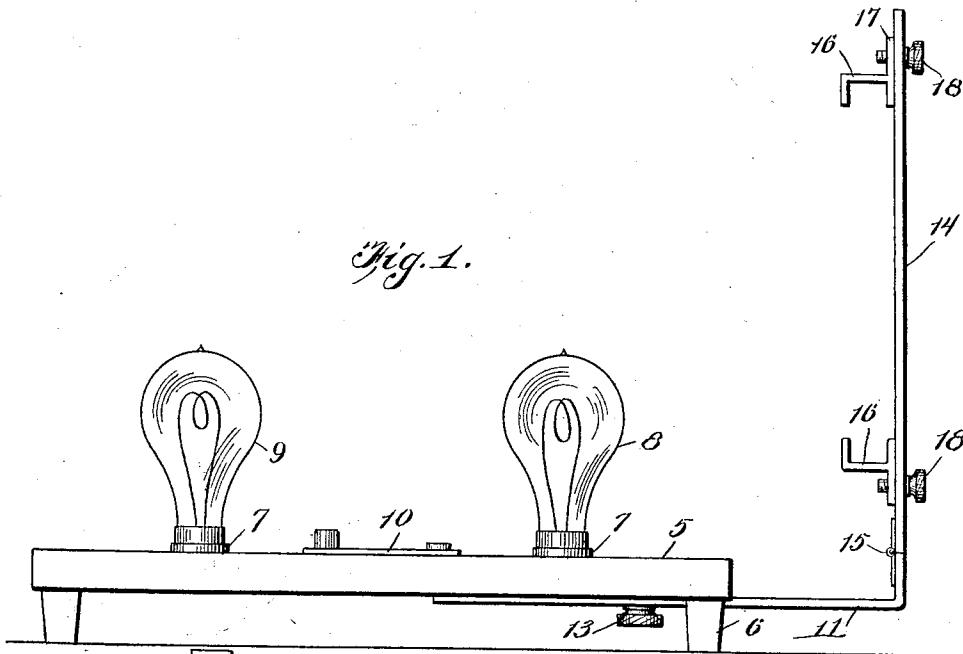
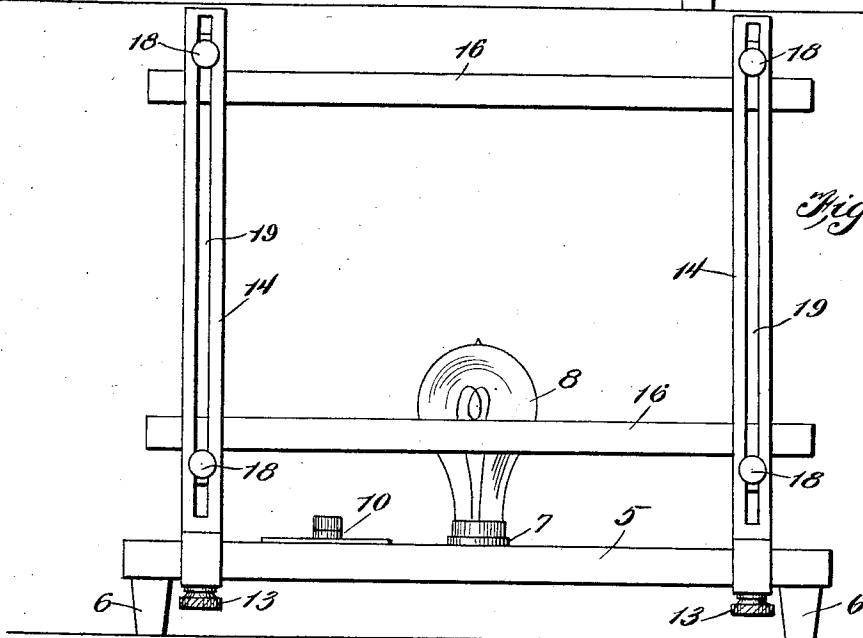


Fig. 3.



Inventor
Josephus W. Liebenrood

Witnesses

Louis P. Heinrichs
F. O. Fawcett

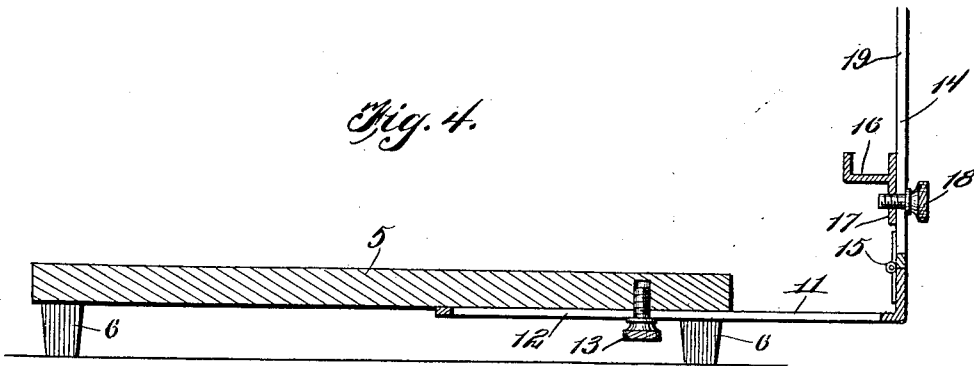
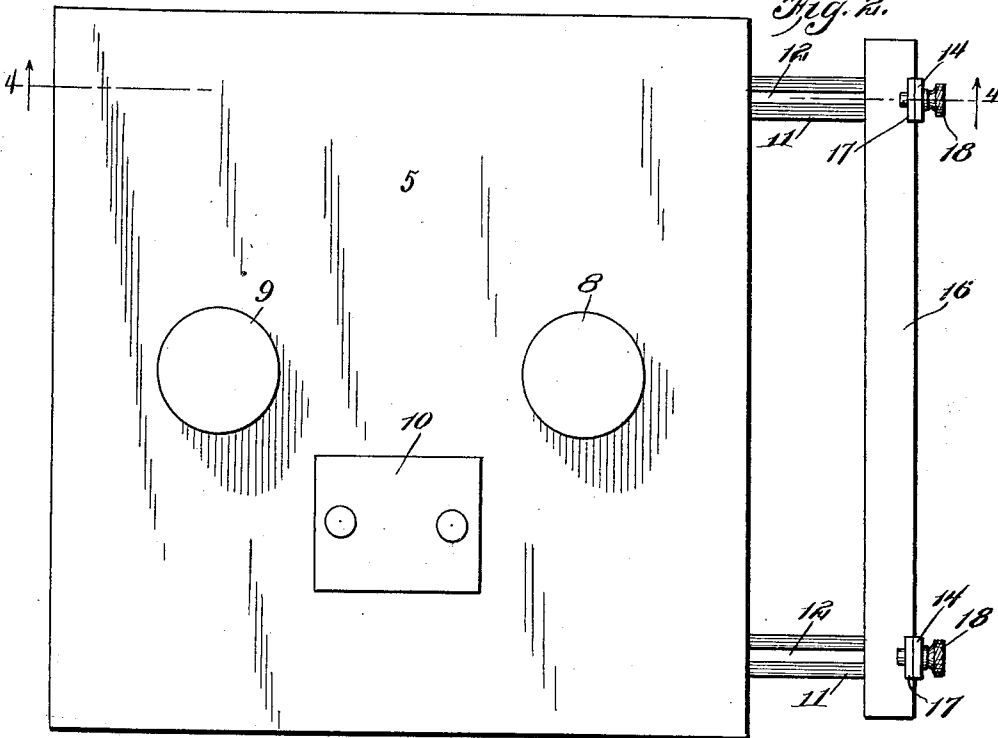
By *Victor J. Evans*
 Attorney

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Josephus W. Liebenrood

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A. O. Dandrew

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 Attorney

UNITED STATES PATENT OFFICE.

JOSEPHUS W. LIEBENROOD, OF CINCINNATI, OHIO.

PHOTOGRAPHIC-PRINTING DEVICE.

1,031,563.

Specification of Letters Patent.

Patented July 2, 1912.

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To all whom it may concern:

Be it known that I, JOSEPHUS W. LIEBENROOD, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented new and useful Improvements in Photographic-Printing Devices, of which the following is a specification.

The invention relates to a printing device, and more particularly to the class of photographic printing apparatus.

The primary object of the invention is the provision of a printing apparatus in which a runway is arranged to receive a printing frame, which is positioned so as to be subjected to the rays of an actinic lamp, for the printing of the sensitized paper from a negative held within the printing frame for the making of photographic copies.

Another object of the invention is the provision of an apparatus of this character in which actinic and non-actinic lamps are arranged, the same being disposed in an electric circuit and controlled by a switch for the alternate illumination thereof, thus permitting the printing process to be executed within a darkened room, the actinic lamp being illuminated for printing purposes, and the non-actinic lamp being illuminated on the extinguishing of the actinic lamp for permitting an operator to remove the printing frame from the apparatus, after the printing process.

A further object of the invention is the provision of a printing apparatus in which a printing frame may be held within a runway, the latter being in the nature of a foldable support which can be lowered when the apparatus is not in use, and when in raised position will sustain the printing frame in position to be subjected to the rays of the actinic lamp for the printing of sensitized paper from a negative within the frame.

A still further object of the invention is the provision of a printing apparatus of this character which is simple in construction, capable of being adjusted to accommodate different sized printing frames, and that is thoroughly reliable and efficient in operation, and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will be hereinafter more fully described, illus-

trated in the accompanying drawings, and pointed out in the claims hereunto appended.

In the drawings: Figure 1 is a front elevation of a printing apparatus constructed in accordance with the invention. Fig. 2 is a top plan view thereof. Fig. 3 is a side elevation of the same. Fig. 4 is a sectional view on the line 4—4 of Fig. 2.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, the printing apparatus comprises a base or platform 5, preferably square in shape, although the same may be of any other desirable shape, and is constructed from any suitable non-conducting material, the base or platform being supported by legs 6, so as to elevate the same slightly above a table or other stationary support.

Formed in the base or support are spaced electric light sockets 7, the latter being arranged in a suitable electric circuit (not shown), and in these sockets are detachably inserted actinic and non-actinic lamps or bulbs 8 and 9, respectively, the electric current in the circuit being controlled by means of a current changing switch 10 of the push-button type, the switch being of any ordinary well-known form, so that on depressing one of its push buttons, the actinic lamp will be illuminated, and the non-actinic lamp extinguished, or vice versa, the electric current being cut off by means of a suitable wall switch (not shown) in the ordinary well-known manner.

Adjustably connected with the base or support 5, at the under face thereof, are L-shaped arms 11, the horizontal limbs of which are formed with central elongated slots 12, through which are passed the ordinary binding screws 13, the latter being threaded in the under face of the support or base 5. Thus, it will be seen that the arms may be adjusted to bring the vertical limbs thereof close to or a considerable distance from the adjacent edge of the base or support.

Connected with and rising from the arms 11 is a printing frame supporting runway, comprising vertical uprights 14, the inner ends of which are connected with the vertical limbs of the arms 11 by means of hinges 15, whereby the said supporting runway may be folded inwardly onto the base or

platform 5 when not in use, and also raised into operative position when in use.

The uprights 14 carry parallel horizontally disposed guide tracks or channeled bars 16, in which is adapted to be slid an ordinary photographic printing frame, in which is held a negative and sensitized paper, which latter, when subjected to light rays, is adapted to reproduce the image from the negative in the ordinary well-known manner. The tracks or channeled bars are formed with outturned ears 17, parallel with the uprights 14, and in which are engaged screws 18, which work in elongated guide slots 19 formed in the uprights, the screws 18 being adapted to lock the tracks or channeled bars 16 in adjusted position for accommodating various sizes of printing frames therein, whereby the negative and sensitized paper will be positioned for receiving the light rays from the actinic lamp 8 for the production of photographic copies in the printing process.

It is of course understood that when the actinic lamp is illuminated, the non-actinic lamp is extinguished, the latter lamp being only used for the purpose of permitting the operator to remove the printing frame from the supporting runway, after the print has been made, in a darkened room. In this manner, the sensitized paper may be handled without possibility of premature exposure thereof, while being handled within the room by the operator.

The non-actinic lamp 9 is preferably red, although the same may be any other desirable color, so as to prevent its light rays from affecting the sensitized paper held within the printing frame, or on the removal of the paper in the room after the printing thereof has been accomplished by the use of the actinic lamp.

What is claimed is:

1. A printing apparatus comprising a base, a printing frame runway adjustably connected with the base, electrically operated actinic and non-actinic lamps carried by the base and rising therefrom, said actinic lamp being disposed between said runway and said non-actinic lamp, and means mounted upon the base for alternately illuminating and extinguishing said actinic and non-actinic lamps.

2. A printing apparatus comprising a base, electrically operated actinic and non-actinic lamps carried by said base and rising therefrom, arms longitudinally adjustable upon said base, uprights hinged to said arms, and means vertically adjustable upon said uprights for holding the printing frame.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPHUS W. LIEBENROOD.

Witnesses:

JAMES K. BINGAMAN,
GEORGE H. MASSEY.