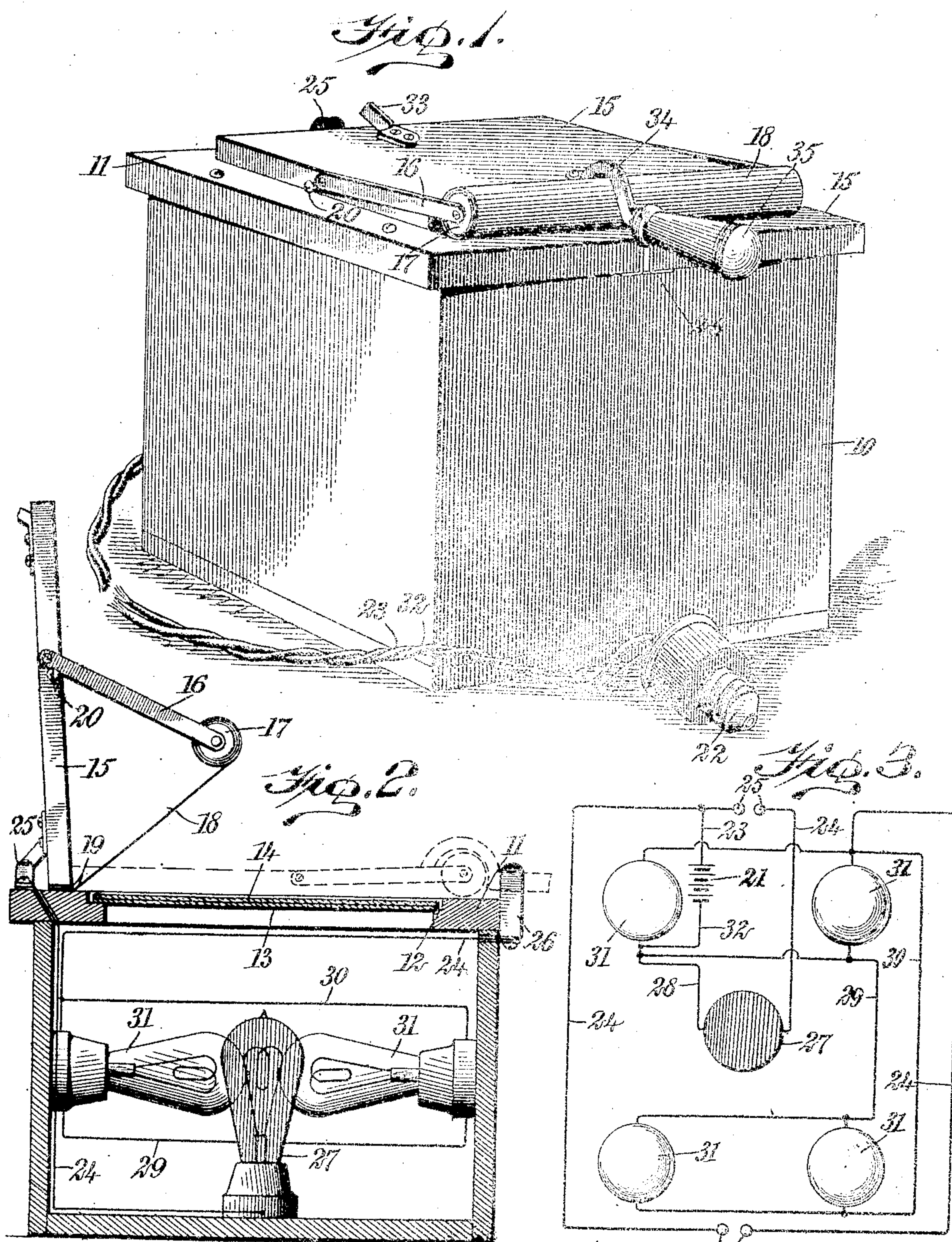


No. 844,135.

PATENTED FEB. 12, 1907.

J. F. JUNGKIND.  
PHOTOGRAPHIC PRINTING MACHINE.

APPLICATION FILED SEPT. 28, 1905.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN FORESTER JUNGKIND, OF LITTLE ROCK, ARKANSAS.

## PHOTOGRAPHIC-PRINTING MACHINE.

No. 844,135.

Specification of Letters Patent.

Patented Feb. 12, 1907.

Application filed September 28, 1905. Serial No. 280,439.

*To all whom it may concern:*

Be it known that I, JOHN FORESTER JUNGKIND, a citizen of the United States, and a resident of Little Rock, in the county of Pulaski and State of Arkansas, have invented a new and Improved Photograph-Printing Machine, of which the following is a full, clear, and exact description.

My invention relates to a device for use in printing photographs by artificial light.

The principal objects thereof are to provide for conveniently turning on and off the light at the desired times; for also manipulating a red light in a most convenient manner, so that it will always be lighted when desired and extinguished when it is not needed; to provide for printing both from plates and from films, and, furthermore, to provide for conveniently holding the printing-paper in contact with a negative.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a device constructed in accordance with the principle of my invention. Fig. 2 is a transverse sectional view of the same, and Fig. 3 is a diagrammatic view showing the electrical connections.

I provide a casing 10, having a top 11, provided with a ledge 12 for receiving a glass plate 13 and a negative 14, which may be either a plate or a film. The casing is also provided with a cover 15, hinged to the casing at a point beyond the ledge and adapted to be closed down over the plate 11. This cover is provided with a pair of arms 16, pivoted to the cover and carrying a roll 17, upon which is wound an opaque sheet 18, of paper or other material. This roll is provided with a spring such as is ordinarily used in the case of shade-rollers. This spring operates to keep the sheet rolled up upon it unless forced to unroll by some outside agency. One end of the sheet is secured to the plate 11 at a point 19. The cover 15 is provided with a pair of stops 20 for the arms 16. The operation of this part of the device is as follows: When the cover is raised, the parts assume the position shown in Fig. 2 on account of the resiliency of the spring in the roll 17. When the cover is lowered to the position shown in dotted lines, the roll passes along the surface of the negative or glass plate, and

the forcing of the cover down causes the roll to travel along toward the front of the case and the sheet 18 to unwind and spread over the entire surface of the glass plate or negative.

In order to provide for illuminating the device from within, the following connections are shown: In Fig. 3 I have illustrated a source of power 21; but it will be understood that the source of power is ordinarily outside the casing and the power is transmitted to it through a contact plug 22 or the like. This is connected, by means of a wire 23, with a conductor 24 within the casing. This conductor is provided with two bridges 25 and 26. From the former of these bridges the conductor 24 extends to a red lamp 27 and from that through a conductor 28 to a conductor 29. Located in parallelism with the conductor 29 is a conductor 30, with which the other end of the conductor 24 is connected. Located between the two conductors 29 and 30 are a series of white lights 31. The conductor 29 is connected with the source of power by a wire 32. It will be observed that upon closing the bridge 25 by placing a conductor between the two terminals thereof a current will be sent from the source of power through the conductor 23, a portion of the conductor 24, the bridge 25, the red light 27, the conductor 28, and the wire 32 back to the source of power. If the bridge 25 is open and the bridge 26 closed by a conductor, the current will be transmitted through another part of the wire 24 to the bridge 26, to the conductor 30, and from that through the white lights 31, through the conductors 29 and 32 back to the source of power. In order to provide for conveniently operating these bridges and closing and opening them at the proper times, I have located them at the front and rear sides of the casing, as indicated in the drawings, and I have provided the cover 15 with a pair of metal plates 33 and 34, adapted to close the bridges when the cover is in the proper position. These plates are so constructed that when the cover is closed the plate 34 closes the bridge 26 and throws on the white lights and so that when the cover is thrown back to the position shown in Fig. 2 the plate 33 closes the bridge 25 and throws on the red light. This plate 33, acting in connection with the bridge 25, also acts as a stop to hold the cover in opened position, while both of the bridges



25 and 26 may be formed of pairs of resilient plates adapted to clasp the plates 33 and 34 so as to assist in this operation. The plate 34 is provided with a handle 35 for operating 5 the cover.

The way in which the sheet 18 will be manipulated to correspond with the lighting of the lamps will be readily understood, and it will be seen that upon closing the cover the 10 negative will be covered by the sheet 18 and the white lights turned on, while upon opening it the white lights will be extinguished. The negative will then be uncovered, and, finally, the red light will be started so as to 15 throw the non-actinic light through the negative and permit the operator to observe it.

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

20 1. A printing device, comprising a casing having electrical connections, two pairs of resilient plates mounted respectively on the front and rear of the casing near the top thereof, a cover for the casing, said cover 25 having a plate adapted to engage the rear resilient plates when the cover is open, and a plate adapted to engage the front resilient plates when the cover is closed, whereby said

resilient plates assist in holding the cover in either closed or open position. 30

2. A printing device, comprising a casing, a cover therefor, a pair of contact members mounted upon said casing, a pair of contact members mounted upon said cover, each contact member upon said cover mating a contact member upon said casing, the arrangement being such that when said cover is 35 opened the contact member carried by said cover engages one of said contact members mounted upon said casing, and when said cover is closed the other of said contact 40 members mounted upon said cover engages the other of said contact members mounted upon said casing, electric lamps of different colors connected respectively with said contact members upon said casing, and electric 45 connections from said lamps to said contact members upon said casing.

In testimony whereof I have signed my name to this specification in the presence of 50 two subscribing witnesses.

JOHN FORESTER JUNGKIND.

Witnesses:

R. S. KITTING,  
B. F. JUNGKIND.