H. G. EISENHAND.

PHOTOPRINTING DEVICE.

APPLICATION FILED JAN. 22, 1920.

1,392,312.

Patented Oct. 4, 1921.

2 SHEETS—SHEET 1.

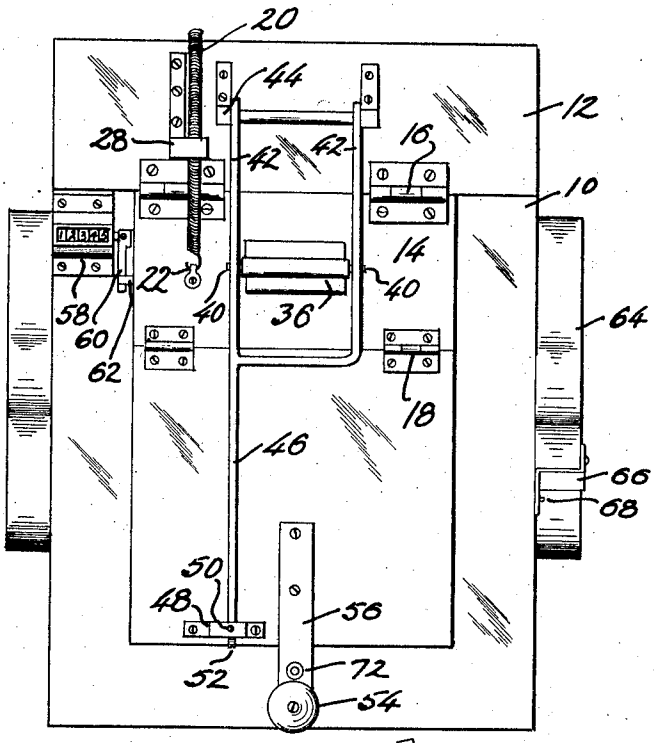


Fig. 1.

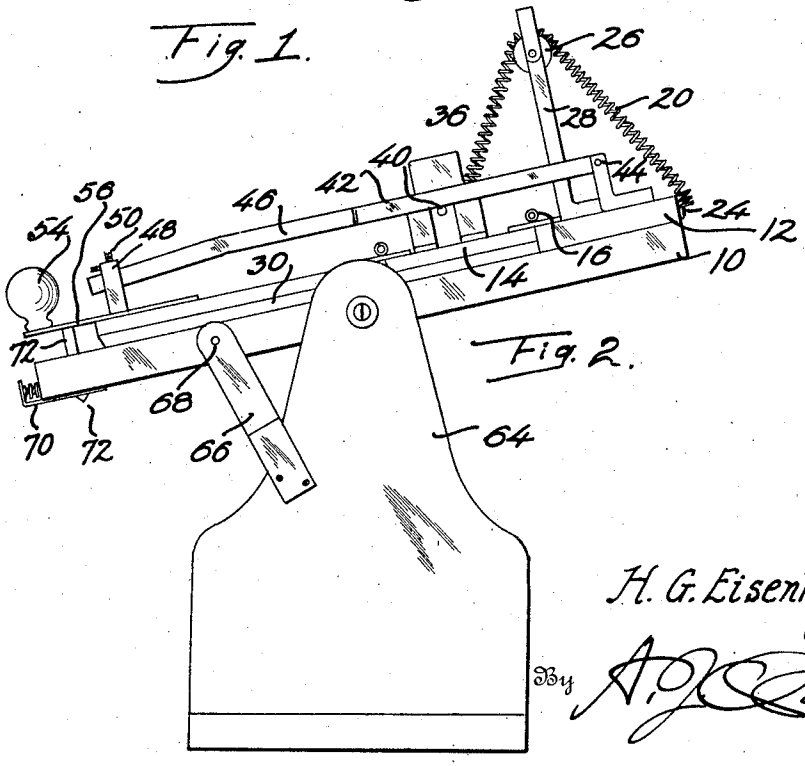


Fig. 2.

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2 SHEETS—SHEET 2.

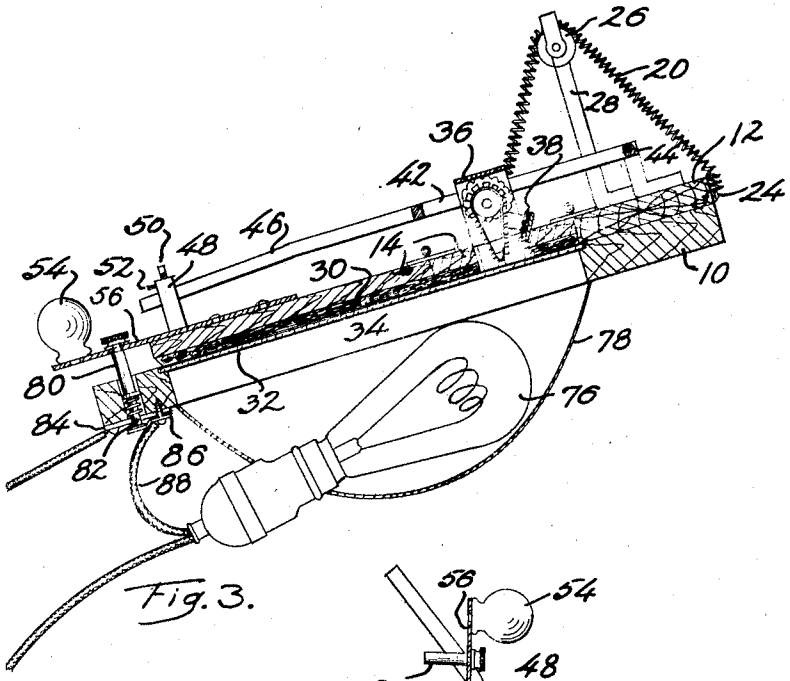


Fig. 3.

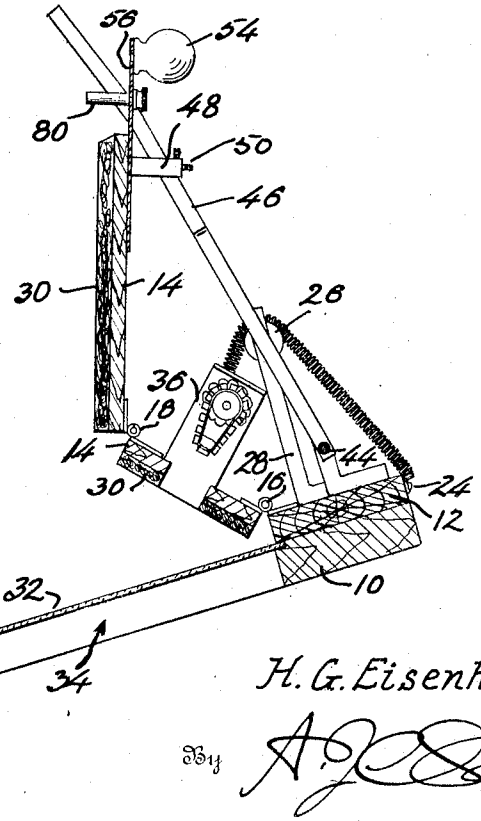


Fig. 4.

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UNITED STATES PATENT OFFICE.

HENRY G. EISENHAND, OF DENVER, COLORADO.

PHOTOPRINTING DEVICE.

1,392,312. Specification of Letters Patent. Patented Oct. 4, 1921.

Application filed January 22, 1920. Serial No. 353,197.

To all whom it may concern:

Be it known that I, HENRY G. EISENHAND, a citizen of the United States, residing at the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Photoprinting Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked threon, which form a part of this specification.

Th object of this invention is to provide a printing device for photographic use, by means of which rapid work may be accomplished and each print will be automatically numbered.

Briefly, the invention comprises a printing frame in which there is fixed a glass plate upon which a negative may be laid and to which frame a cover is pivoted for holding the printing paper in position. A spring is attached to the cover for normally elevating the cover member. A conventional numbering device is fitted in an aperture in the cover in such position that when the cover is moved into printing position the numbering device will automatically stamp a number upon the back of the sheet. The device may also be equipped with a recorder automatically operated. Means is also provided for automatically completing a circuit to light a lamp beneath the printing frame when the cover is moved into closed position.

In the drawings:

Figure 1 is a plan showing the frame swingingly mounted in a support.

Fig. 2 is a side elevation thereof.

Fig. 3 is a vertical longitudinal section showing the device equipped with a lamp, this form being adapted to be permanently mounted, as in a table.

Fig. 4 is a similar section with the cover in elevated position.

The device comprises a frame proper upon the rear end of which a crosspiece is mounted to which the cover 14 is hinged at 16, the cover being divided and the parts thereof hinged at 18. A spring 20 is secured to the cover at 22 and to the frame at 24, this spring passing over a roller 26 supported on a standard 28, mounted on the back of the frame. The under side of the cover is provided with a layer of padding 30, as is usual for the purpose of firmly pressing the printing paper into contact with a negative lying upon the glass plate 30, mounted in the frame to cover an opening 34 therein. A numbering machine 36, of any suitable type, having a self-inking mechanism, as indicated at 38 in Fig. 3, is mounted in an aperture in the cover 14. Pins 40 project from the side of the stamping device 36, for operation of the same, and these are adapted to be engaged by means of the arms 42, which are pivoted at their rear ends to the printing frame, as indicated at 44, and may merge into a single arm 46, which passes through a loop 48, fixed at the front edge of the cover 14. This loop 48 may be provided with a screw 50, for adjusting the pressure of the arms 42, 46, upon the pins 40 of the stamping device, in order that a good impression may be had upon the back of each sheet of printing paper. If desired, a set screw 52 for the adjusting screw 50 may be employed.

A knob 54 is mounted upon a metal strap 56, secured to the forward end of the cover 14 for the purpose of operating the latter. A recording device 58 may also be mounted on the printing frame, the lever 60 thereof being operated by a projection 62 on the cover.

For some uses it is desirable to have the frame swingingly mounted on a support, as indicated at 64, in Figs. 1 and 2. A spring clip 66 is secured to this support and adapted to engage a pin 68, projecting from the side of the frame. This is to hold the frame in position for placing negatives and paper, and in order to hold the cover 14 in closed position a stud 72, fixed to the strap 56, is arranged to project into engagement with a spring-pressed catch 70 on the frame 10. The clip 66 is then to be released from the frame to permit the same to swing to present the under side uppermost. In this position the light may be applied as desired and the picture shaded if required.

For rapid work, where shading is not necessary, the light 76 is permanently positioned in a parabolic reflector 78, fixed beneath the opening 34. This light is to be controlled by the movement of the cover 14 through the medium of a post 80, which projects into an aperture in the frame 10 and

bears upon a contact-producing plug 82 in engagement with an electrical contact 84, connected with a conductor. This plug is controlled by a spring 85, and is adapted to engage a contact 86 insulated from the contact 84. The contact 86 is connected with a conductor 88, leading to the lamp 76. Thus, when the cover 14 is pressed into printing position the post 80 automatically closes the circuit to the light 76, the light being maintained so long as pressure upon the knob 54 is continued. In this manner, with a strong light in connection with a reflector 78, a print may be properly exposed in a very short time. As soon as pressure is released, the spring 22 elevates the cover 14 and the spring 85 breaks the contact between the plug 82 and the contact 86.

As above indicated, when the arms 42, 46, are drawn down with the cover 14, the stamping device 36 is actuated by engagement of said arms with the projecting pins 40. This is necessary in commercial printing because each job has a job number, and this number must appear upon the back of each print for a given job.

I claim:

1. A photo printing device comprising a frame, a cover hinged thereto, a stamping member set in said cover, and means to operate said stamp as the cover is moved to closed position, comprising a rigid lever mounted on the frame having sliding connection with the cover and adapted to engage a portion of the stamp to depress the latter.

2. A photo printing device comprising a frame, a cover hinged thereto, a stamping member set in said cover, means to operate said stamp as the cover is moved to closed position, comprising a rigid lever mounted on the frame having sliding connection with the cover and adapted to engage a portion of the stamp to depress the latter, and means on the cover to operate the same, whereby said lever is actuated through operation of the cover for depression of the stamp.

In testimony whereof I affix my signature.

HENRY G. EISENHAND.