(No Model.)

L. F. ADT.

PHOTOGRAPHIC PRINTING FRAME.

No. 376,840. Patented Jan. 24, 1888.

Fig. 1

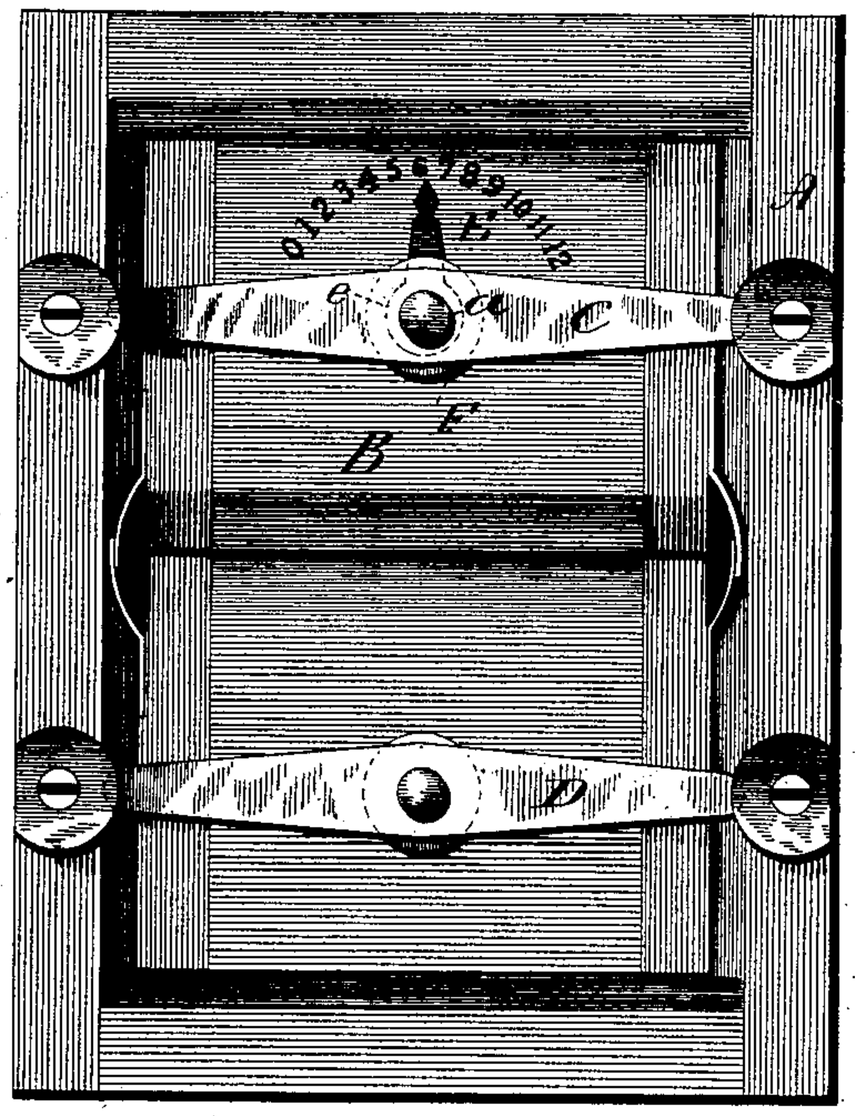


Fig. 2

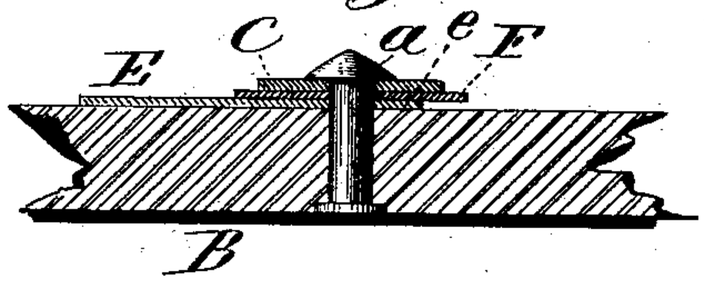
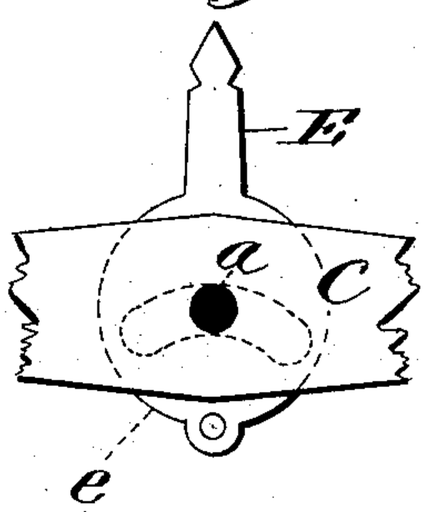


Fig. 3.



Witnesses
J. H. Shumway
Fred C. Earle

Leo. F. Adt
Inventor.
By atty
Wm. D. Earle

UNITED STATES PATENT OFFICE.

LEO F. ADT, OF WATERBURY, CONNECTICUT.

PHOTOGRAPHIC-PRINTING FRAME.

SPECIFICATION forming part of Letters Patent No. 376,840, dated January 24, 1888.

Application filed November 21, 1887. Serial No. 255,709. (No model.)

To all whom it may concern:

Be it known that I, LEO F. ADT, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Photographic-Printing Frames; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a plan view of the back of the photographic-printing frame, illustrating the invention; Fig. 2, a section through the bar and hub of the pointer; Fig. 3, a modification.

This invention relates to an improvement in photographic-printing frames.

In photographic printing many prints are usually made from each negative, and it is desirable on the part of the printer to keep a record of the work done by each frame, that he may know the number which have been printed from the negative therein. The frames have been provided with a pointer and a series of figures, so that the pointer can be turned to the figure indicating the number printed; but this pointer has been made as an attachment independent of other parts of the frame, and is held in place only by friction, which is constant to the pointer; but after a little use, with such construction, the pointer becomes so loose upon its pivot as to be easily turned from its indicating position, and consequently makes the record uncertain.

The object of my invention is to combine the pointer with the spring-bar by which the back is secured in the frame, and so that the spring or elasticity of the said bar serves to produce the friction upon the pointer, and whereby the pointer is held with so considerable force as to insure its position when once set; and the invention consists in combining, with the elastic bar by which the back is secured in the frame, a pointer hung upon a pivot on the back of the frame and between the bar and back, whereby the pressure of the elastic bar is brought to bear upon the pointer, to produce a friction thereon tending to retain it in any position to which it may be set.

A represents the frame of common construction; B, the back, which is usually made in two parts hinged together.

C represents one of the bars, and D the other, by which the back is secured. These bars are made of elastic sheet metal, and are hung upon a pivot, *a*, in the back, centrally between the two sides, and so that the bar may rotate on the pivot, as indicated in broken lines.

The frame is constructed or provided with lugs or recesses, with which the two ends of the bars are adapted to engage in the usual manner; but this engagement is made by depressing the ends of the bars toward the back and passing them beneath the shoulders, so as to produce a very considerable pressure upon the back to force it against the negative. This is a common and well-known construction.

E represents a pointer, which is made of any suitable or desirable shape, and is constructed with a hub, *e*. It is pivoted to the back, and so as to swing thereon in a plane parallel with the back, and is arranged between one of the bars—say C—and the back. The pivot *a*, which secures the said bar to the back, preferably passes through the hub, as represented in Fig. 2, and serves as the pivot on which the pointer will turn. Preferably between the bar and the pointer a washer, F, is introduced, so that the spring-bar may bear upon the outer side of the washer and force the washer against the hub of the pointer. This is desirable in order to prevent the turning of the bar to open and close the back, from at the same time turning the pointer. Concentric with the pivot a series of figures are arranged, and so that the pointer set to certain figures may indicate the number of prints which have been made.

Under this construction the friction upon the pointer is increased in the act of closing the frame, the pressure of the spring-bar being much greater upon the hub when the frame is in the closed position than when the bar is turned to open or remove the back. This increased friction is applied every time the back is closed, and its increase or decrease is not effected by turning the pivot, as is liable to be the case where the friction upon the pivot is independent of the holding-bar, as in the common construction. Again, the bar, being over the pointer, covers it to such an extent as to make it a protector for the pointer, to prevent accidental displacement.

While I prefer to hang the pointer on the same pivot as the elastic bar, the pointer may

be hung on its own pivot, as seen in Fig. 3, the hub or projection therefrom extending beneath the bar, so that the bar practically bears on the pointer to exert its force to hold the pointer.

From the foregoing it will be understood that I do not claim, broadly, a photographic-printing frame having a pointer hung upon a pivot as an indicator for the number of prints which have been made; but

What I do claim is—

1. In a photographic-printing frame, the combination of the back, the spring-bar C, pivoted upon the back and adapted to engage the sides of the frame, with a pointer, also pivoted upon the back and between the bar and the back, substantially as described, and whereby the pointer is secured by the elastic force of the bar when it engages with the lugs on the frame.

2. The combination, in a photographic-printing frame, of a back, a spring-bar hung upon a pivot on the back and adapted to engage the sides of the frame, a pointer hung upon the same pivot as the bar and between the bar and back, with a washer between the bar and pointer, through which washer the pressure of the spring-bar is communicated to the pointer when the bar engages with the lugs on the frame, and the back provided with a series of figures concentric with the axis of the pointer, substantially as described.

L. F. ADT.

Witnesses:
NATHL. R. BRONSON,
ALFRED A. ADT.