June 25, 1940. F. BUSSE 2,205,516

APPARATUS FOR NUMBERING OR MARKING LIGHT-SENSITIVE PHOTOGRAPHIC PAPERS

Filed July 30, 1938 2 Sheets-Sheet 1

Fig. 1

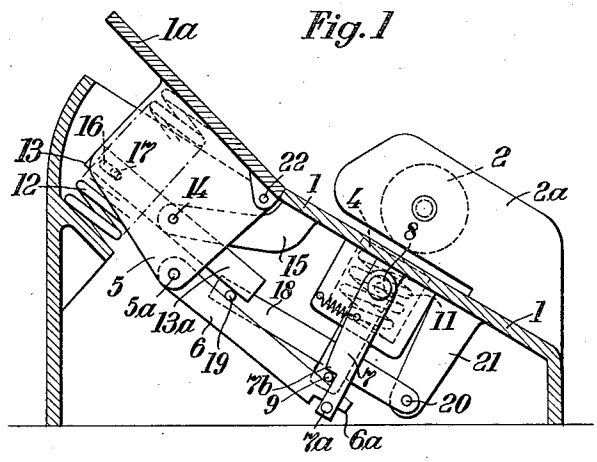
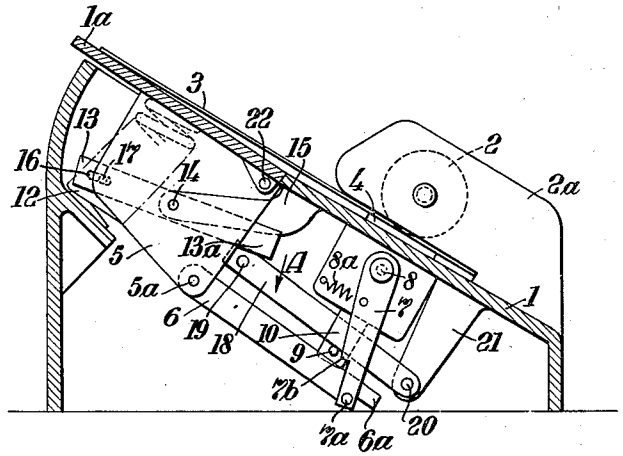


Fig. 2



Ferdinand Busse Inventor

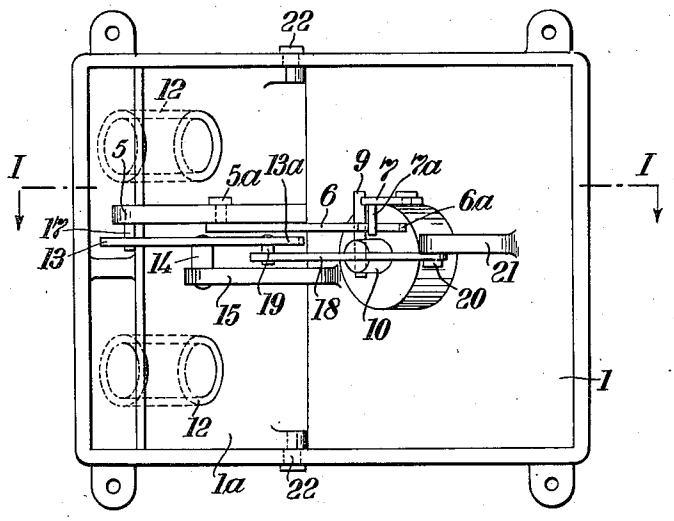
By His Attorney Philip S. Hopkins

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Fig. 3



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UNITED STATES PATENT OFFICE

2,205,516

APPARATUS FOR NUMBERING OR MARKING LIGHT-SENSITIVE PHOTOGRAPHIC PAPERS

Ferdinand Busse, Munich, Germany, assignor, by mesne assignments, to General Aniline & Film Corporation, New York, N. Y., a corporation of Delaware

Application July 30, 1938, Serial No. 222,305
In Germany August 4, 1937

3 Claims. (Cl. 101—316)

This invention relates to a process and apparatus for marking or numbering photographic light-sensitive paper.

In the production of photographic prints on a large scale, the sorting of the prints after the exposure, development and washing presents difficulties. It has been proposed to mark or number by hand the several copies before the copying and developing operations. As the papers must be marked in the darkroom, it is essential that the introduction of the paper into the marking device should be an operation as simple as possible.

This invention relates to a method and apparatus for numbering papers, wherein the paper is laid upon a flat surface and, by actuating a lever placed suitably in reach of the hand that holds the paper, the latter is pressed against a stationary marking element or number stamp. Since the stamp may also carry marks for the different kinds of treatment of the paper, for instance lustrous prints or matt prints, smooth or serrated edged prints, as well as the names of the firm or the like, this new kind of stamping involves a considerable simplification in the production of the photographic copies.

An especially simple form of the apparatus for applying the method consists in constructing a part of the support for the paper as a lever for actuating the imprinting device. The paper is moved against the stationary number stamp by a press plate arranged within the paper support. By actuating the lever for releasing this press plate, a spring is tightened which, on releasing the said lever, automatically compresses again the spring actuating the press plate. The paper support is advantageously inclined towards the stamping device, so that the paper to be marked may slide automatically into the stamping device between the stationary stamp and the press plate.

The accompanying drawings serve to illustrate a possible form of the apparatus according to the invention:

Figure 1 is a vertical section through the apparatus on line I—I of Figure 3, showing the apparatus in the position which it has before the paper has been inserted,

Figure 2 is a side view of the apparatus after the paper has been inserted and the release lever for the press plate has been depressed,

Figure 3 is an underside plan view of the apparatus.

The apparatus consists essentially of a paper supporting surface 1, 1a and numbering and marking roller 2 arranged thereabove. The light-sensitive paper 3 is laid upon the surface 1, 1a, and owing to the inclination of the surface, slides automatically into position beneath the carrier 2a of the number roller 2. By depressing the plate-like extension or front part 1a of the paper support, the paper 3 is pressed against the stationary number stamp 2 by the press plate 4. This happens as follows:

On the underside of the part 1a of the paper support there is arranged a bracket 5 to which is linked at point 5a a rod 6. This latter is offset at its free end 6a so that it can engage a pin 7a carried at the free end of a lever 7 turning on the pivot 8, as soon as the part 1a has been depressed (compare Figure 2). By this engagement of rod-end 6a with the pin 7a the lever 7 is pushed counter to the pull of spring 8a so that the offset 7b of the lever 7 sets free the pin 9. The pin 9 is carried by a slide 10 carrying the plate and actuated by a spring 11. The pin 9 and lever 7 normally keep the spring 11 compressed and therewith the press plate 4 retracted. As soon as the plate-like extension 1a is moved into the position shown in Figure 2, the plate 4 is rapidly moved against the number stamp 2 since, as already stated, the offset 7b of the lever 7 has been disengaged from the pin 9 and has released the slide 10 and the spring 11. When the paper support 1a was depressed, two springs 12 were compressed which, when pressure is removed from the paper support 1a, expand to return the latter into the position shown in Figure 1 and at the same time compresses the spring 11. The springs 12 are stronger than the spring 11 so that they can compress the latter. The compression of spring 11 happens in the following manner:

When pressure is removed from the paper support 1a a two-armed lever 13, 13a is turned on its pivot 14; this pivot is carried by an arm 15 projecting from the underside of the paper support 1. The arm 13 of the lever 13, 13a has a slot 16 in which pin 17 is guided. The pin 17 is fixed on the bracket 5 of the paper support 1a. When the paper support 1a is moved from the position shown in Figure 2 to that shown in Figure 1, the end 13a of the double armed lever 13, 13a moves in the direction of the arrow A and thus strikes the pin 19 on the lever 18 and turns the latter on its pivot 20. The pin 9 on the slide 10 is in the path of this movement of lever 18 and therefore also moves in the direction of the arrow A, whereby the spring 11 is compressed. In this position of the parts the spring 8a retracts the lever 7, so that its offset

7b engages the pin 9. The pivot 20 is carried by a bracket 21 on the underside of the paper support 1. The hinge pivots connecting the movable part 1a of the paper support and the stationary part 1 are indicated at 22.

I claim:

1. A marking device comprising a fixed supporting surface for the material to be marked, a marking element disposed in spaced relation thereto, whereby the material may be inserted therebetween, a press plate movable through an opening in said surface for pressing the material to be marked against said marking element, means for actuating said press plate to marking position and for returning the same to non-marking position, and means for controlling said actuating and returning means, said controlling means comprising a manually depressible plate-like extension hinged to said supporting surface and forming a part thereof and spring means normally holding said extension in a position wherein the press plate is held in non-marking position and the material to be marked is readily guided into position.

2. A marking device comprising a fixed supporting surface for the material to be marked, a plate-like extension hinged to said surface and forming a part thereof, a marking element disposed in spaced relation to said fixed surface whereby the material to be marked may be inserted therebetween, a press plate movably mounted with respect to said fixed surface for pressing the material to be marked against said marking element, spring means normally urging said press plate toward said marking element, additional spring means normally holding said plate-like extension in one position, means for releasably locking said press plate in non-marking position when said extension is in said first position, means operable by manual movement of said extension to a second position for releasing said press plate locking means, and means operable on the return movement of said extension for withdrawing said press plate and resetting the press plate locking means.

3. A marking device comprising a fixed inclined supporting surface for the material to be marked, a plate like extension hinged to the upper edge of said surface and forming a part thereof, a marking element disposed in spaced relation to the lower portion of said fixed surface whereby the material to be marked may be inserted downwardly therebetween, a press plate movably mounted with respect to said fixed surface for pressing the material to be marked against said marking element, means operable on movement of said extension for actuating said press plate to marking position and for returning the same to non-marking position, and spring means normally holding said extension in a position more inclined than said fixed surface whereby the press plate is held in non-marking position, the material to be marked is readily guided into position and the device is operable by downward manual movement of said extension while holding said material in place.

FERDINAND BUSSE.