

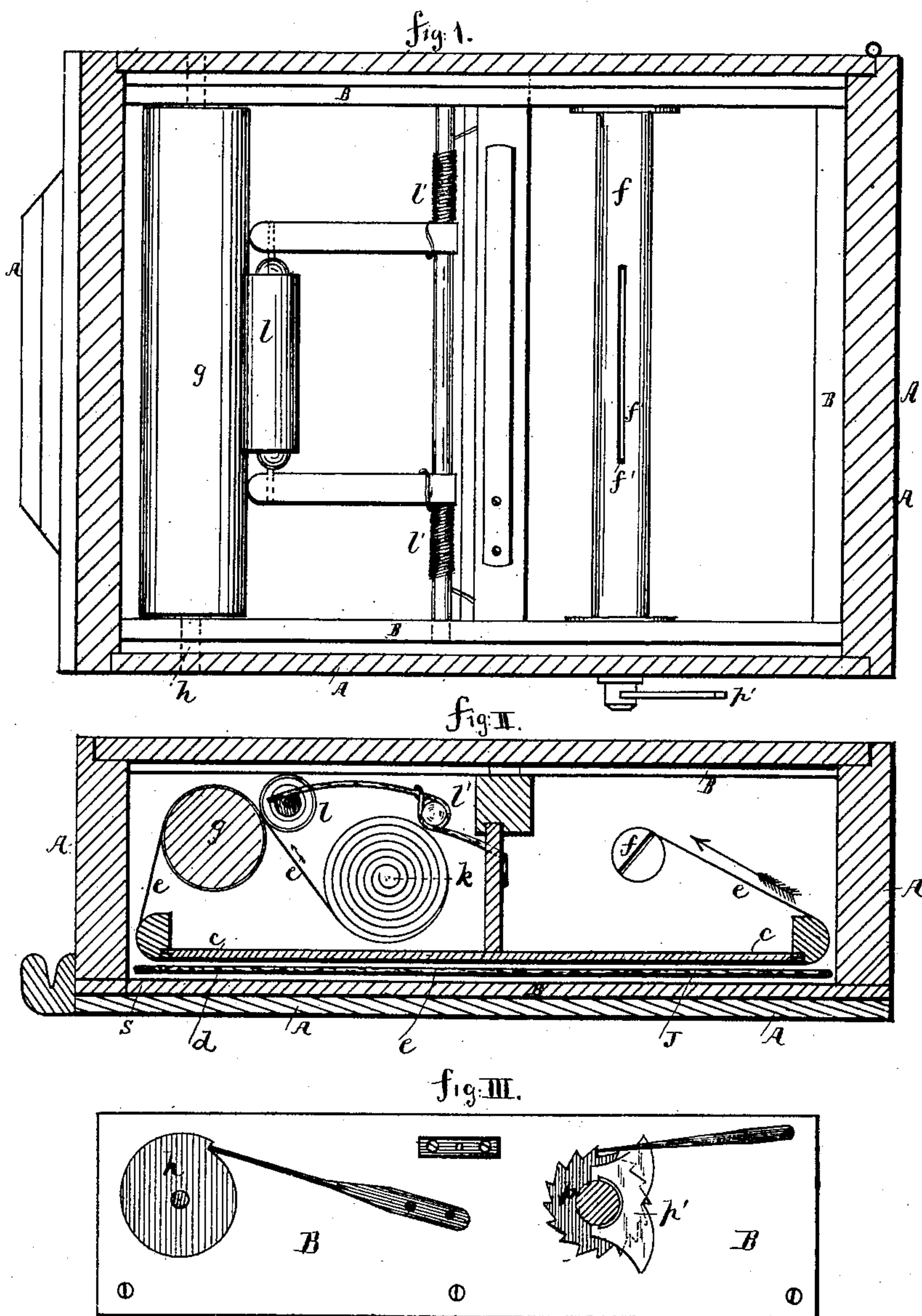
(No Model.)

A. P. SHARP.

PHOTOGRAPHIC CAMERA SLIDE.

No. 358,893.

Patented Mar. 8, 1887.



Witnesses:
T. D. Bunce Jr.
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Atty.-

UNITED STATES PATENT OFFICE.

ALFRED P. SHARP, OF DUBLIN, COUNTY OF DUBLIN, IRELAND.

PHOTOGRAPHIC-CAMERA SLIDE.

SPECIFICATION forming part of Letters Patent No. 358,893, dated March 8, 1887.

Application filed July 3, 1886. Serial No. 207,121. (No model.) Patented in England March 20, 1885, No. 3,581.

To all whom it may concern:

Be it known that I, ALFRED P. SHARP, a subject of the Queen of Great Britain, a resident of Dublin, in the county of Dublin, Ireland, have invented certain new and useful Improvements in Photographic-Camera Slides, (for which I have obtained Letters Patent in England dated March 20, 1885, No. 3,581;) and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention has reference to photographic dark slides, and has for its object the carrying and charging of sensitized paper, film, tissue, or other suitable material for taking photographs.

The invention consists of an outer case or shell made to fit the photographic camera in the same manner as the ordinary dark slide, made of wood and ebonite or other suitable material, and constructed as follows:

On a suitable frame a flat piece of ebonite with curved ends is arranged, over which the sensitive paper slides, and in front of this plate of ebonite is also arranged a plate of glass of same dimensions, so that the paper will pass between it and the ebonite plate, thereby insuring a perfectly flat surface. At one end of the frame and at the back of the ebonite plate a receiving-roller is provided with a square screw-center to take a key applied from outside the case for the purpose of turning the roller. The measuring-roller is also provided with an indicator—preferably one to indicate by sound—whereby the quantity of paper uncoiled will be readily indicated to the photographer. A spring-roller is arranged to act in conjunction with the measuring-roller for the purpose of keeping the paper in contact with the latter.

In order that my said invention may be more readily understood and carried into practice, I will describe the accompanying drawings.

Figure I is a plan, partly in section, of my improved dark slide, viewing same from the rear or inner side. Fig. II is a longitudinal section on line *x x*, Fig. I, and Fig. III is a side view.

Similar letters indicate corresponding parts in each of the views.

A A and B B show the frame.

c c, Fig. 2, show the flat piece of ebonite with curved ends, and *d d* the plate of glass between which and the ebonite the sensitized paper *e* slides.

f is the receiving-roller, provided with a slot, *f'*, for the reception of free end of paper.

g is the measuring-roller, over which the paper passes, and by means of which, through the intervention of the indicator *h*, the length of paper paid out is indicated. Two revolutions of this roller register a length of paper for each exposure.

k represents the loose coil of paper or other suitable material, which may be inserted in the frame with or without a loose roller.

l is the spring-roller, which is caused to impinge against the roller *g* by the springs *l'*, for the purpose of insuring the proper paying out of the paper and its contact during such paying out with the measuring-roller.

p shows the ratchet-wheel and pawl attached to the spindle of the receiving-roller, to which a key, *p'*, is applied from the outside for the purpose of turning the receiving-roller. This roller is turned until the indicator *h* announces two revolutions of the measuring-roller, when it will be obvious the proper length of paper is drawn between the plates of glass and ebonite for an exposure.

Any suitable device can be used to enable the operator to see where to separate the paper for development. It may consist of an arrangement for piercing the paper, indenting or notching the same, arranged on the back of the cover and made to act when the cover is drawn out.

It is obvious that the arrangement herein described may be used either longitudinally or transversely as may suit the photographer's convenience.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In a photographic-camera slide, the frame A B, containing the flat piece of ebonite *c*, with curved ends, the plate of glass *d*, and the sensitized paper *e*, attached to roller *k* and pass

ing under pressure-roller *l*, over measuring
roller *g*, with indicator *h*, thence between the
ebonite *c* and glass *d*, to receiving-roller *f*,
with slot *f'*, said roller *f* having attached to
5 it, outside the frame A B, the ratchet *p* and
key *p'*, all in combination with each other, and
substantially for the purpose set forth.

In testimony that I claim the foregoing I

have hereunto set my hand this 21st day of
June, 1886.

ALFRED P. SHARP.

Witnesses:

HENRY EMERY,
D. LAURENCE HOGARTY,
Both of Dublin.