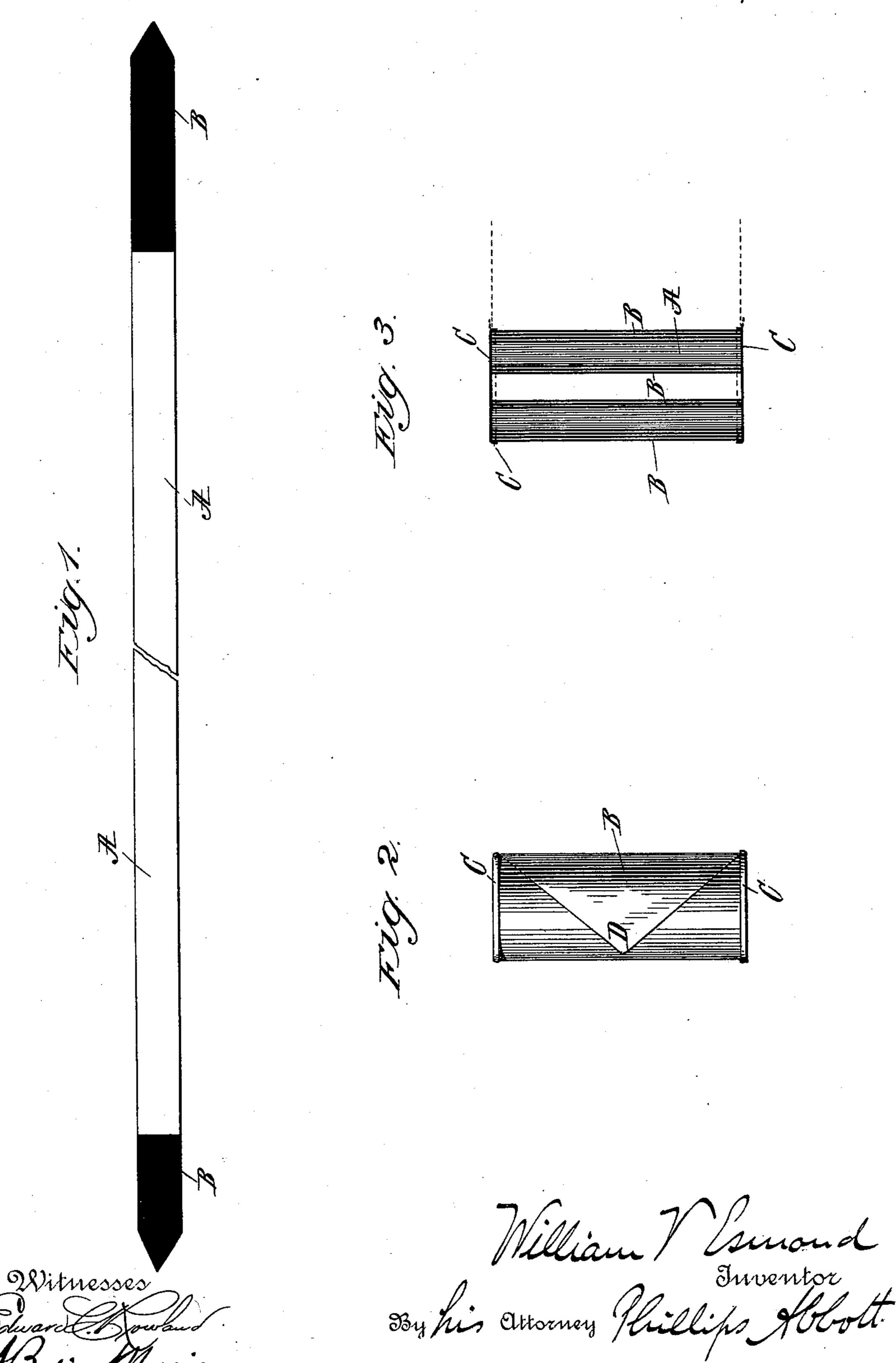
(No Model.)

## W. V. ESMOND. SENSITIZED PHOTOGRAPHIC FILM.

No. 591,346.

Patented Oct. 5, 1897.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

WILLIAM V. ESMOND, OF NEW YORK, N. Y., ASSIGNOR TO THE E. & H. T. ANTHONY & COMPANY, OF NEW YORK.

## SENSITIZED PHOTOGRAPHIC FILM.

SPECIFICATION forming part of Letters Patent No. 591,346, dated October 5, 1897.

Application filed November 25, 1896. Serial No. 613,428. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM V. ESMOND, a citizen of the United States, and a resident of New York, in the county of New York and 5 State of New York, have invented certain new and useful Improvements in Photographic Films, of which the following is a specification.

My invention relates to a new and improved 10 method or way of preparing and putting up sensitized photographic film for the market and the article so produced; and it consists, generally stated, in cutting the film in long strips of the desired width, attaching black 15 paper at both ends of the strip, then rolling first the black paper, then the film, then the black paper at the other end upon itself, without the presence of any spool or equivalent core or axis, with the result that the black 20 paper at one end being rolled up in the center protects that portion of the film from injury by light, and the black paper at the other end being wrapped a number of times about the film protects it exteriorly, and in order to pro-25 tect the ends of the roll, or, in other words, the edges of the strip of film, from becoming light-struck, I cover each end of the roll with a label or cap of black paper or equivalent light-obstructing material, preferably 30 somewhat larger in diameter, so that the edges will lap upon the sides of the roll. These labels are gummed on one side, so that they can be easily and effectively attached in the same manner as a postage-stamp is. 35 They serve also an added purpose—that is to say, upon them can be printed advertising matter, also the grade or quality, time limit, and other desirable information pertaining to the film.

Referring to the drawings hereof, Figure 1 illustrates a plan view of a strip of my improved film broken away centrally. Fig. 2 illustrates a view in elevation of a roll or package of the film ready for presentation upon the market. Fig. 3 illustrates a vertical sectional view of the invention as shown in Fig. 2.

A represents a strip of sensitized film; B
B the pieces of black paper attached to either
one end of the film in any suitable manner. I
prefer to make the strip of black paper at

one end somewhat longer than at the other, because more is required for the outside of the package than for the central portion.

C C represent the labels or cap-pieces, 55 which are pasted over the ends of the roll, and preferably lapped somewhat upon its sides.

D represents the end of the outside black paper B, and I prefer to cut it to a point, as 60 shown, and to gum the under side of it, so that being attached to the preceding ply of the paper it will securely hold the roll in the proper shape. I also prefer to gum the black paper at the other end of the film, so that 65 after exposure the roll may be confined by sticking the end of this piece of black paper to the roll, this method being more convenient than by tying it or using a rubber band, as is now the custom.

It will be readily understood that at the time of use the pasted end of the outside black paper is loosened or broken and the film placed in a suitable roll-holder and used in any of the known ways, and that as it is 75 unwound during use the labels or cap-pieces C C are torn away, so that the diameter of the caps or labels is reduced as the paper is consumed. Consequently the diameter of the label at all times is equal to that of the end 80 of the roll and it serves as a means to confine the film and to prevent it unwinding by reason of its elasticity.

My improvement possesses many advantages not heretofore realized, so far as I am 85 aware—that is to say, great simplicity, inexpensiveness, lightness in weight, and compactness.

It will be obvious to those who are familiar with this art that modifications may be made 90 in the details of arrangement or construction without departing from the essentials of the invention—as, for instance, it is not necessary that the labels or caps should be of greater diameter than the ends of the roll; 95 nor is it essential that advertising or other matters should be printed thereon; nor is it essential that the external black paper should have adhesive material upon it. The roll may be confined in any other preferred manner. I therefore do not limit myself to the specific details shown; nor is it essential that

the black paper should be upon both ends of the film, because the labels if made of black paper, as they preferably are, will protect the inner portion of the film. I prefer, how-5 ever, to use the black paper upon both ends, because it serves a useful purpose when in the plate-holder during use and after exposure.

I claim—

1. The above-described article of manufacture, comprising a strip of sensitized film, a piece of black paper attached at one end thereof, the whole rolled upon itself into a spoolless coil, with the black paper outwardly, 15 and a label or cap of light-obstructing material attached at the edges of the strip at each end of the coil, for the purposes set forth.

2. The above-described article of manufacture, comprising a strip of sensitized film, a 20 piece of black paper attached at each end thereof, the whole being rolled upon itself into a spoolless coil, and a label or cap of lightobstructing material attached to the edges of the strip at each end of the coil, for the pur-25 poses set forth.

3. The above-described article of manufacture, to wit: a strip of sensitized film, a piece of black paper attached at one end thereof, the whole being rolled upon itself into a spool-

30 less coil, with the black paper outwardly, and a label or cap of light-obstructing material, adapted to be torn by the paper as it un-

winds, attached to the edges of the strip at each end of the coil, for the purposes set forth.

4. The above-described article of manufacture, to wit: a strip of sensitized film, a piece of black paper attached at each end thereof, one of said pieces having adhesive material upon it, the whole being rolled upon itself into 40 a spoolless coil, with said last-named piece of black paper outwardly, and a label or cap of light-obstructing material, attached to the edges of the strip at each end of the coil, the said labels and the end of the external piece 45 of black paper being confined in place by adhesive material, for the purposes set forth.

5. The above-described article of manufacture, to wit: a strip of sensitized film, a piece of black paper attached at each end thereof, 50 adhesive material applied to the ends of said black paper, the whole rolled upon itself into a spoolless coil, and a label or cap of lightobstructing material attached at the edges of the strip at each end of the coil, for the 55

purposes set forth.

Signed at New York, in the county of New York and State of New York, this 23d day of November, A. D. 1896.

WILLIAM V. ESMOND.

Witnesses:

PHILLIPS ABBOTT, A. Bodine Morrison.