

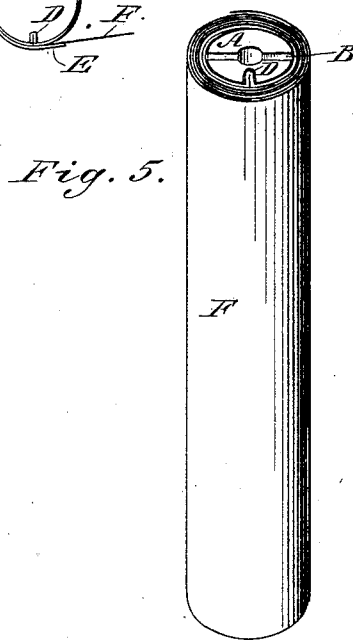
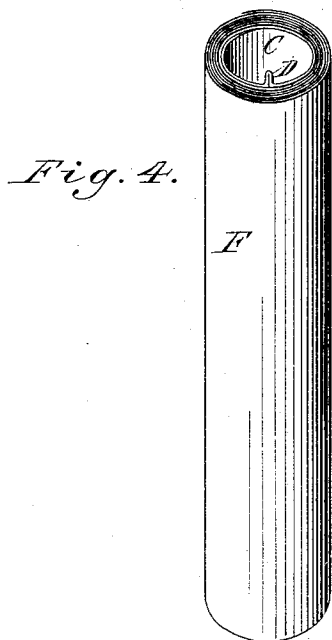
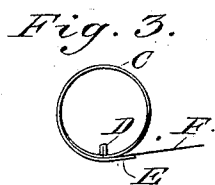
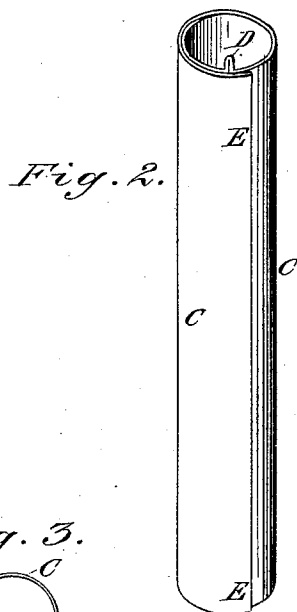
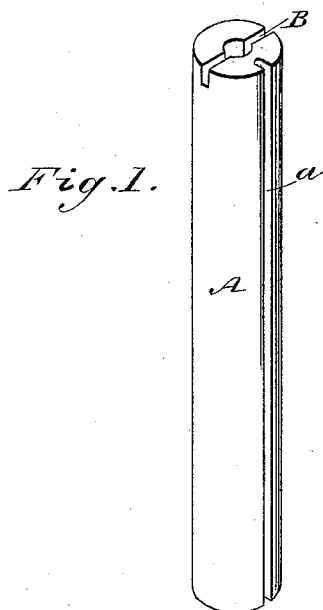
(No Model.)

E. B. BARKER.

ROLLER FOR PHOTOGRAPHIC SENSITIVE PAPER.

No. 341,633.

Patented May 11, 1886.



WITNESSES:

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ROLLER FOR PHOTOGRAPHIC SENSITIVE PAPER.

SPECIFICATION forming part of Letters Patent No. 341,633, dated May 11, 1886.

Application filed November 21, 1885. Serial No. 183,517. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS B. BARKER, of the city, county, and State of New York, have invented a new and useful Improvement in Rollers for Photographic Sensitive Paper, of which the following is a full, clear, and exact description.

This invention relates to rollers used in connection with photographic cameras for making negatives on paper. In such cameras the paper on which the photo-negative is made is stretched between two rollers that are arranged within the camera, the paper sheet or web at the start being rolled upon one of the rollers and then reeled off and rolled upon the other roller by turning the same as fast as the operator proceeds with the picture taking. An example of such rollers may be seen in the patent granted to Walker and Eastman, May 5, 1885, No. 317,050. In using such rollers, when the stock of paper carried thereon becomes exhausted it is necessary to remove the empty roller from the camera and wind upon it a new supply of the sensitive photographic paper. This is a slow and tedious operation, which must be performed in the dark-room.

The object of my invention is to provide hollow rollers or cylinders on which the photographic paper is wound or stored, said cylinders being so made as to fit and readily slide upon the camera-rollers, thus obviating the inconvenience of winding the paper upon the photo-roller itself and saving much time.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the ordinary Eastman camera-roller for photographic paper. Fig. 2 is a perspective view of my improved cylindrical roller intended to fit and slide upon the Eastman roller. Fig. 3 is a cross-section of the same. Fig. 4 is a perspective view of my improved roller, upon which a web of paper is wound ready for use. Fig. 5 is a perspective view of my improvement as applied upon an ordinary Eastman photographic-camera roller.

A is one of the ordinary photographic-paper rollers, which are usually constructed of solid

wood and have a groove, *a*, on one side, which receives the end of the paper when it is wound upon said roller.

B is the usual cross cut or groove in one end of the roller, which receives a blade by which the roller is turned.

The foregoing parts are made and operated in the manner well known to photographers and shown in said Eastman patent, and therefore no further description of them is required.

My invention consists of a hollow cylindrical roller, C, constructed upon its interior surface in such a manner as to fit upon the exterior surface of the ordinary photographic-camera roller.

I construct the interior surface of my improved roller C with an inwardly-projecting feather, D, which projects into and fits within the groove *a* of the solid roller A, so that when the solid roller is turned it will carry with it my improved cylindrical roller. Instead of a continuous feather, D, one or more inward projections may be used and made to fit into the groove *a*.

The exterior surface of my improved roller is made smooth, but is provided with a longitudinal flexible flap, E, to permit the insertion underneath the flap and between it and the surface of the roller of the end of the web or sheet of photographic paper that is to be rolled upon my roller, as shown in Fig. 3, in which F is the paper web.

In rolling the web of photographic paper upon my roller C the end of the sheet of paper is placed underneath the flap E and pressure is applied to the exterior of the flap. The roller is then turned, which causes the paper to be wound upon my roller, and when a sufficient quantity has been wound my roller, with its supply of photographic paper, is ready for use, all that is required being to slip my roller C and its stock of paper upon the solid roller A, as shown in Fig. 5.

The material which I find best adapted to the construction of my roller C is paper, and I make or prepare the roller in the following manner: I provide a solid cylindrical former or roller having in its surface a longitudinal groove corresponding to the groove *a*, hereinbefore described, in the ordinary wooden roller, A. I

then take a strip of ordinary card-board paper, which I suitably moisten with cement or other material, and I apply the paper to the outside of said roller and press a portion of the paper into the groove thereof. I then wind one or two folds of the card-board paper upon the roller, using cement between the folds, and then allow the paper to dry upon the roller, leaving a free end or flap, E, uncemented, as shown in Figs. 2 and 3. As soon as the paper roll is dry, it may be removed from its former, and it will be found that a strong and substantial hollow roller, suitable for carrying photographic paper and for use upon the ordinary photographic-paper roller, has been produced, the inward projection or feather being thus made in one piece with my roller.

Instead of being made of paper, my improved hollow roller may be made of metal or any other suitable material, and the inwardly-projecting feather may be applied thereto in any suitable manner.

By the use of my invention all rewinding of the paper upon the ordinary photographic roller is obviated, because the paper may be put up in rolls ready for use upon my improved hollow cylinder, which may be quickly slipped upon the ordinary roller, and when the supply of photographic paper thereon is consumed my empty roller or casing may be removed from the solid roller and a new hollow cylinder with a new supply of photographic paper may be slipped upon said ordinary roller, thereby preventing loss of time and avoiding the labor and trouble of rewinding the solid roller with paper.

Having fully described my invention, I claim as new and desire to secure by Letters Patent--

1. As an improved article of manufacture, a tubular roller for carrying photographic sensitive paper, constructed with an inwardly-projecting feather and adapted to fit upon the exterior of the ordinary photographic-paper roller, as set forth.

2. In a tubular photographic-paper roller, the flap E, made integral with the surface of the roller by leaving the free end of the same uncemented, substantially as shown and described.

3. In a tubular photographic-paper roller, the combination, with the interior surface of such roller, of one or more inwardly-projecting feathers and one or more exterior flaps, substantially as shown and described.

4. The combination, with the ordinary photographic-paper roller, of a hollow cylindrical roller provided with an interior feather or projection to fit a groove or grooves in the ordinary roller, and with a flexible flap upon the exterior surface to receive and hold the end of the photographic-paper web, substantially as described.

5. The combination, with a tubular roller having an inwardly-projecting feather and an exterior flexible flap, of a sheet or web of photographic sensitive paper, substantially as described.

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Witnesses:

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