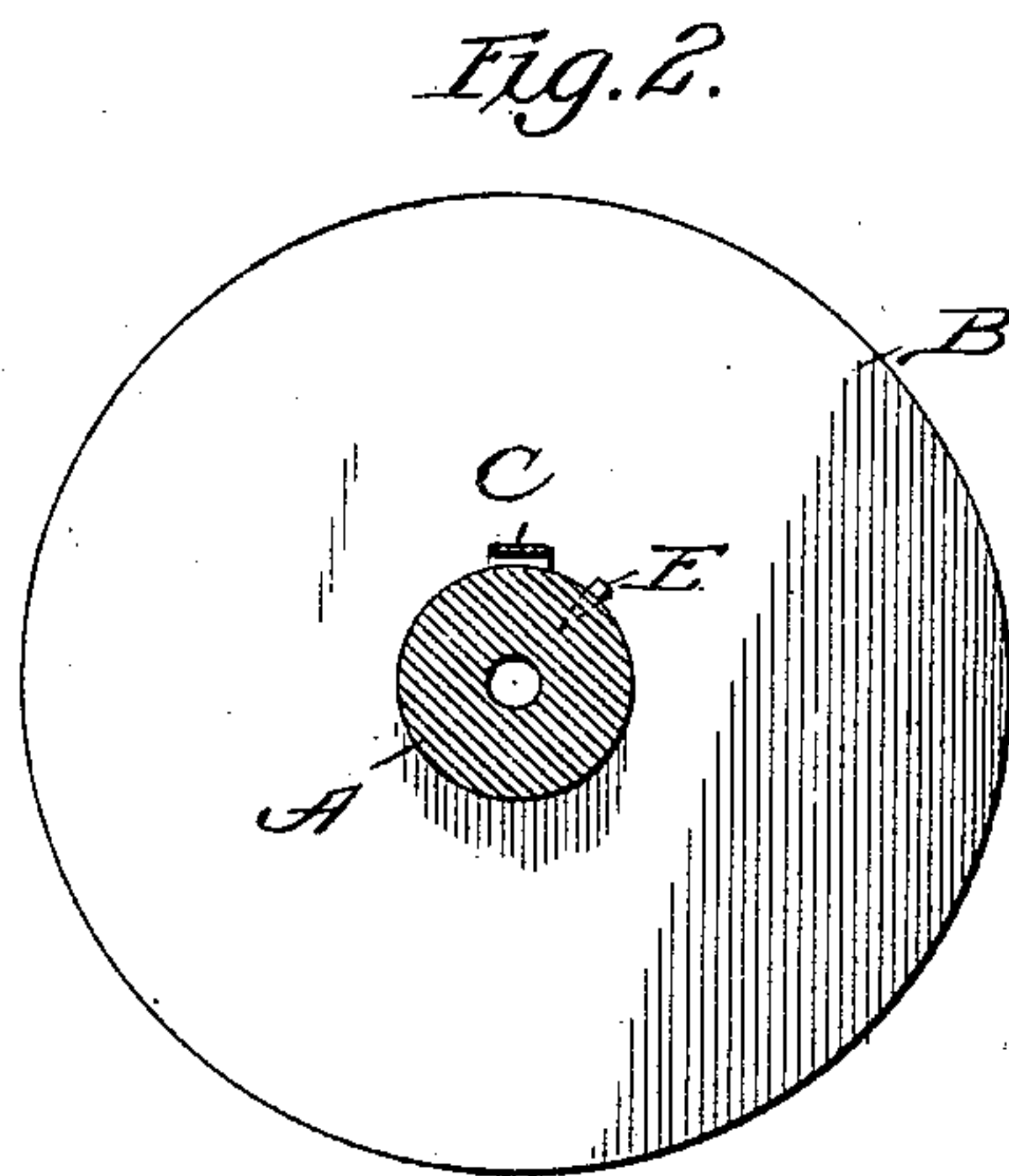
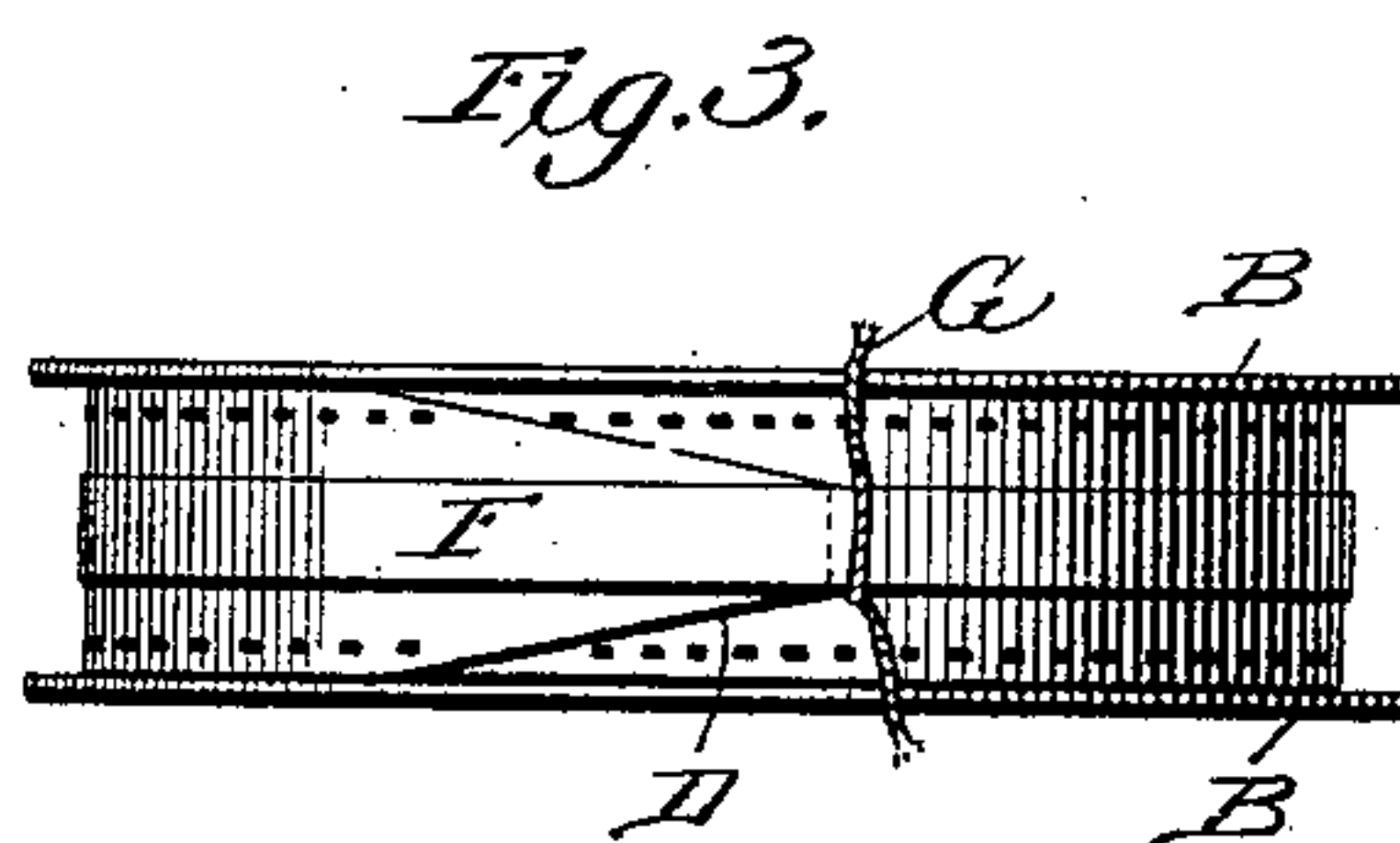
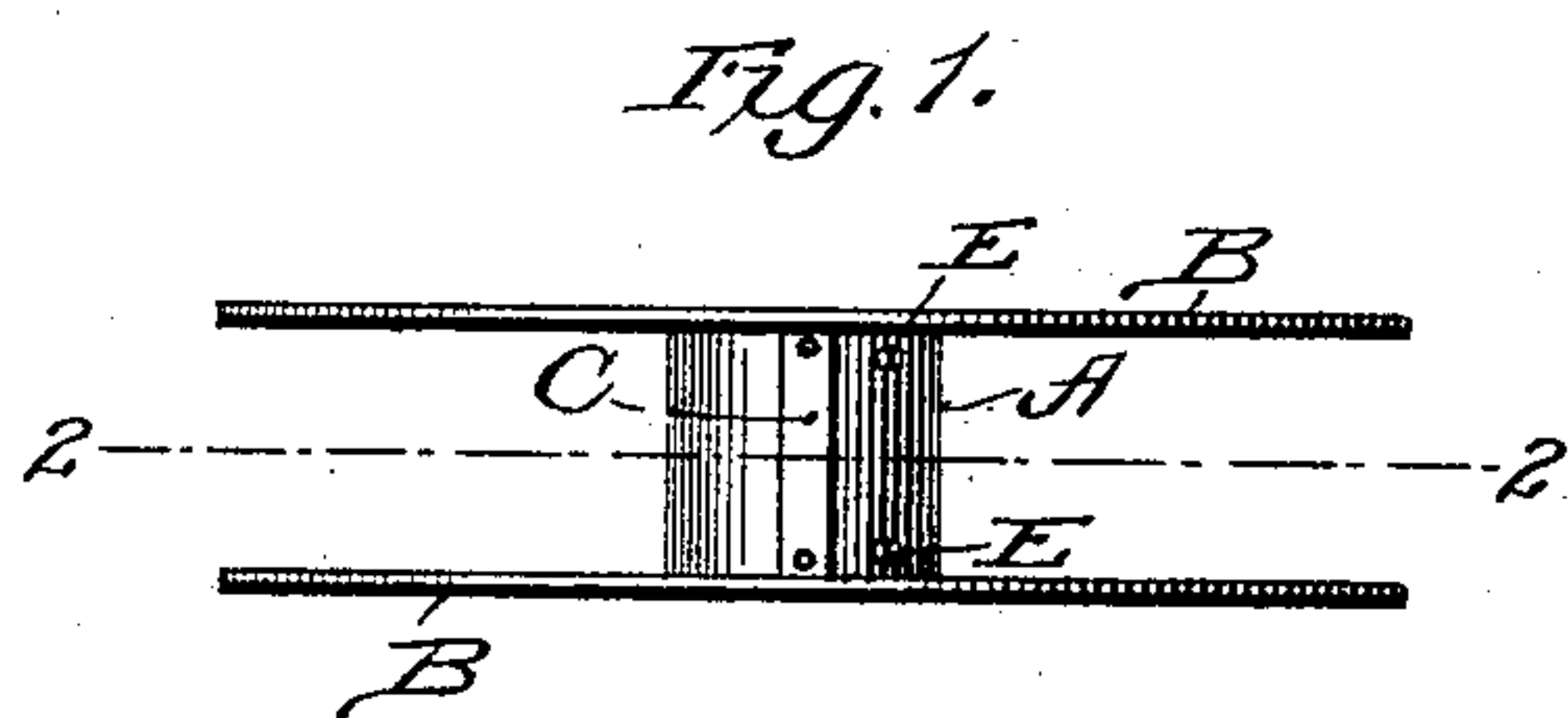


(No Model.)

J. CARBUTT.
FILM SPOOL.

No. 594,458.

Patented Nov. 30, 1897.



Witnesses
Henry S. Rohrer.
Edwin T. Yealmer.

Inventor
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UNITED STATES PATENT OFFICE.

JOHN CARBUTT, OF PHILADELPHIA, PENNSYLVANIA.

FILM-SPOOL.

SPECIFICATION forming part of Letters Patent No. 594,458, dated November 30, 1897.

Application filed May 7, 1897. Serial No. 635,551. (No model.)

To all whom it may concern:

Be it known that I, JOHN CARBUTT, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Film-Spools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of the invention is to provide more convenient spools for the ribbon films used for series pictures.

In the drawings, Figure 1 is a side view of an empty spool. Fig. 2 is a section on the line 2 2, Fig. 1. Fig. 3 shows the spool when filled.

The spool consists of a light axially-perforated drum A, provided with opaque end plates or flanges B B and bearing a thin bar C substantially parallel to the axis of the drum and having at least its middle portion at a slight distance from the drum, so that one of the preferably-narrowed ends D of a film-ribbon may be laid upon the drum and pushed beneath the bar. The drum is further provided with one or more spurs E, projecting from its surface at a short distance from the bar and in position to enter the

usual perforations in the end portion of a film-ribbon. Now if the end of the ribbon be slipped beneath the bar to the proper distance and if the ribbon be then swung toward the drum until the spurs pass through the perforations the ribbon is secured against slipping upon the spool; yet if the ribbon be drawn from the spool in the usual way the last turn in unwinding automatically rises off the spurs, leaving the ribbon entirely free. When the ribbon is wholly wound upon the spool, it is prevented from unwinding by a thin strip F, of paper or the like, encircling the filled spool, and when desired this strip is readily torn across by drawing the free end of a cord G, which passes beneath it.

What I claim is—

The combination with the film-spool consisting of a drum and opaque flanges at the ends of the drum, of a bar fixed to the spool parallel to its axis and having its central portion slightly separated from the drum's surface, and spurs projecting from the drum at one side of the bar, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN CARBUTT.

Witnesses:

JOSEPH CAHILL,
EDITH BIRKETT.