(No Model.)

# P. J. CONNELLY.

## METHOD OF FEEDING A CARD.

No. 390,947. Patented Oct. 9, 1888.

*Fig. 1.*

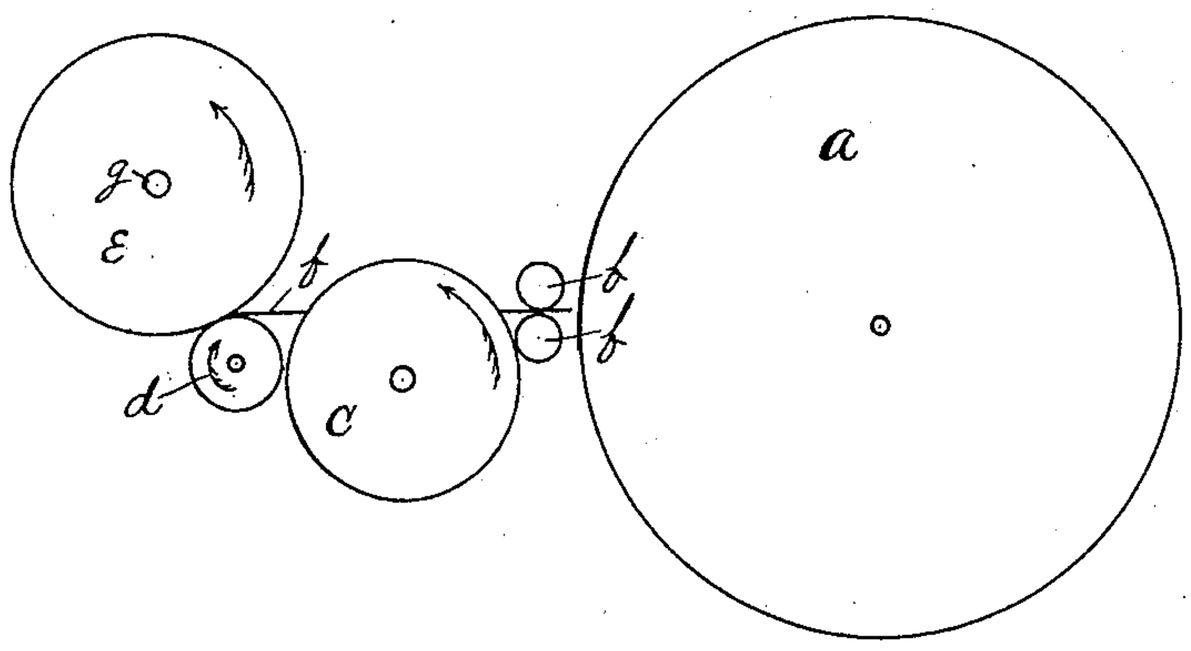
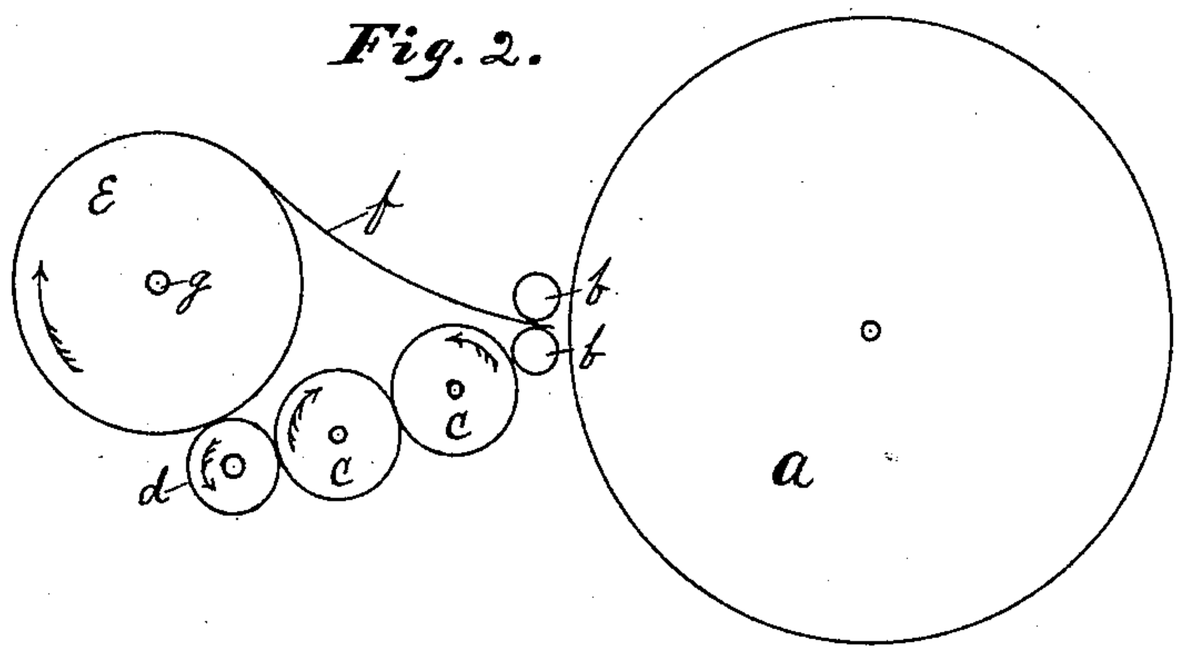



*Fig. 2.*




Witnesses.
Fred. A. Mason
A. B. Fuller.

Inventor,
Patrick J. Connelly.
by F. M. Mason atty.

# UNITED STATES PATENT OFFICE.

PATRICK J. CONNELLY, OF NEW BEDFORD, MASSACHUSETTS.

## METHOD OF FEEDING A CARD.

SPECIFICATION forming part of Letters Patent No. 390,947, dated October 9, 1888.

Application filed October 27, 1887. Serial No. 253,552. (No model.) Patented in England September 20, 1887, No. 12,770.

*To all whom it may concern:*

Be it known that I, PATRICK J. CONNELLY, a citizen of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented a new and useful Method of Feeding a Card, or, in other words, a machine for carding cotton, (for which Letters Patent in Great Britain were obtained on the 20th day of September, 1887, No. 12,770,) of which the following is a specification.

Heretofore the card has been operated by placing the lap—*i. e.*, the roll of cotton as it comes from the picker—on the card in such a position that the lap was fed to the carding mechanism from the bottom of said roll; or, in other words, at the point of contact of the lap and the lap feed-roll; and great trouble and waste have been experienced from the lap becoming broken or bunched while it was being unrolled by the action of the lap feed-roll, thus occasioning considerable extra labor and serious waste. The breaking or splitting of the lap has been caused by the lap being delivered from the lap-roll so near to the lap feed-roll. The lap feed-roll is journaled in such a position that the lap rests partially or wholly upon it and the lap is unrolled; or, in in other words, the sheet of cotton which composes the lap is delivered from it at the point immediately after being acted upon by the lap feed-roll. The action of the lap feed-roll on the lap has a tendency to mat the lap together somewhat, and this causes it to break or split as it is fed off, especially in warm damp weather, and thus extra labor and serious waste are caused.

In order to prevent the fleecing, breaking, or splitting of the lap, and the consequent loss in extra labor and waste, I place the lap in such a position that the sheet of cotton composing it is delivered from the top of the lap, or at a point some distance from the point of contact of the lap and the lap feed-roll; and in practice I find that the best method of attaining the end desired on most styles of cards is to reverse the motion of the lap feed-roll. This method of feeding a card allows the lap an opportunity to loosen itself somewhat after being acted on by the lap feed-roll, and causes the lap to be delivered with evenness and regularity without danger of splitting, breaking, or bunching, even in the most unfavorable weather.

The method of feeding a card which has heretofore been used is illustrated in Figure 1 of the accompanying drawings, in which *a* represents the drum or cylinder of the card. *b b* are the rolls between which the sheet of cotton passes to the card-cylinder. *c* is an intermediate gear connecting one of these rolls *b* with the lap feed-roll *d*. *e* represents the lap, and *g* the stick on which the lap is wound, and *f* represents the sheet of cotton which composes the lap, being fed to the carding mechanism between the rolls *b b*. As will be seen from the diagram, the sheet of cotton *f* is delivered from the lap just at the point of contact of the lap *e* and the lap feed-roll *d*. This method of feeding a card—which heretofore has been the only one—causes the lap to fleece or split and break and bunch for the reasons above given.

My method of feeding a card is illustrated in Fig. 2, in which is shown two intermediate gears, *c c*, connecting one of the rolls *b* and the lap feed-roll *d*. This reverses the motion of the lap feed-roll and allows the sheet of cotton *f* to be delivered from the top of the lap *e*, or at a considerable distance from the point of contact of the lap and the lap feed-roll, thus giving it an opportunity to loosen itself somewhat after being acted on by the lap feed-roll, and causing it to be delivered with evenness and regularity without fleecing, splitting, or bunching.

It is obvious that the sheet of cotton composing the lap might be delivered from it at any other point than that illustrated in Fig. 1—*i. e.*, at any other point than at the point of contact of the lap and the lap feed-roll—without departing from my method; but I consider it best to deliver it at a point as far as possible from where it is acted on by the lap feed-roll.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The improved method of feeding a card from a sheet of material wound into a lap,

which consists in unwinding from the roll the sheet of material composing it at a point removed from the point of contact of the lap and the feed-roll upon which it rests, whereby the lap is afforded an opportunity to loosen itself after being acted on by the feed-roll and caused to unwind with regularity and without fleecing, splitting, or bunching, as described.

PATRICK J. CONNELLY.

Witnesses:
H. W. MASON,
MICHAEL E. SULLIVAN.