

No 68,595. **DANA BICKFORD'S.**  
 IMPROVED KNITTING MACHINE

Fig 1

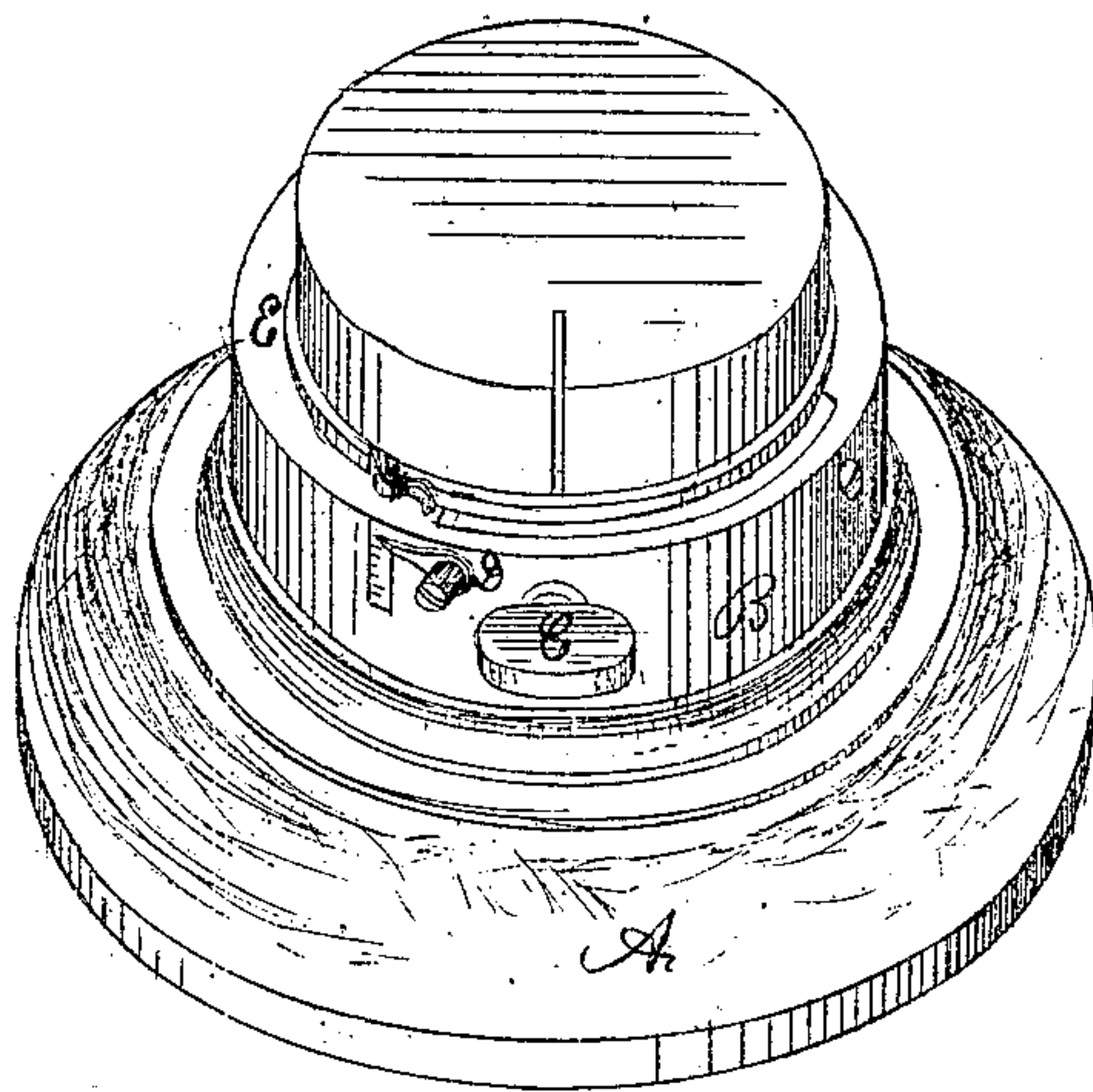


Fig 2

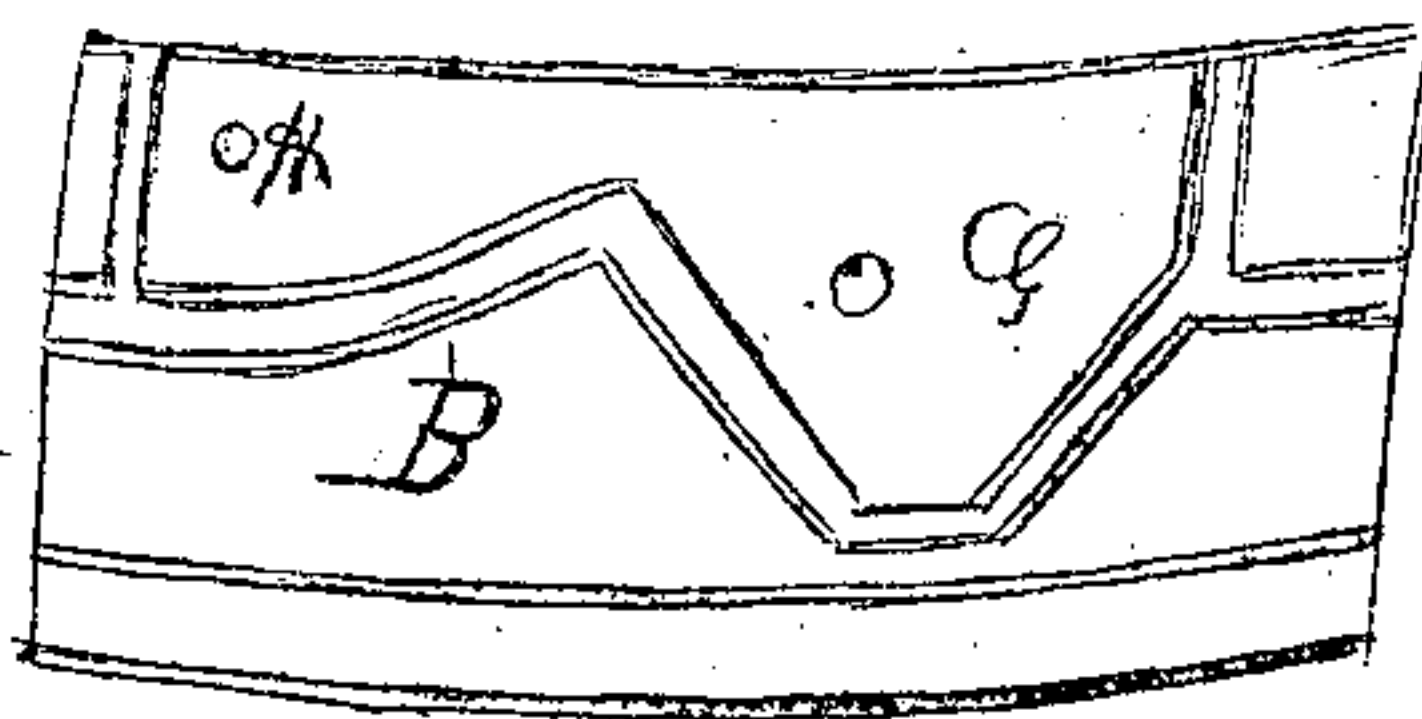
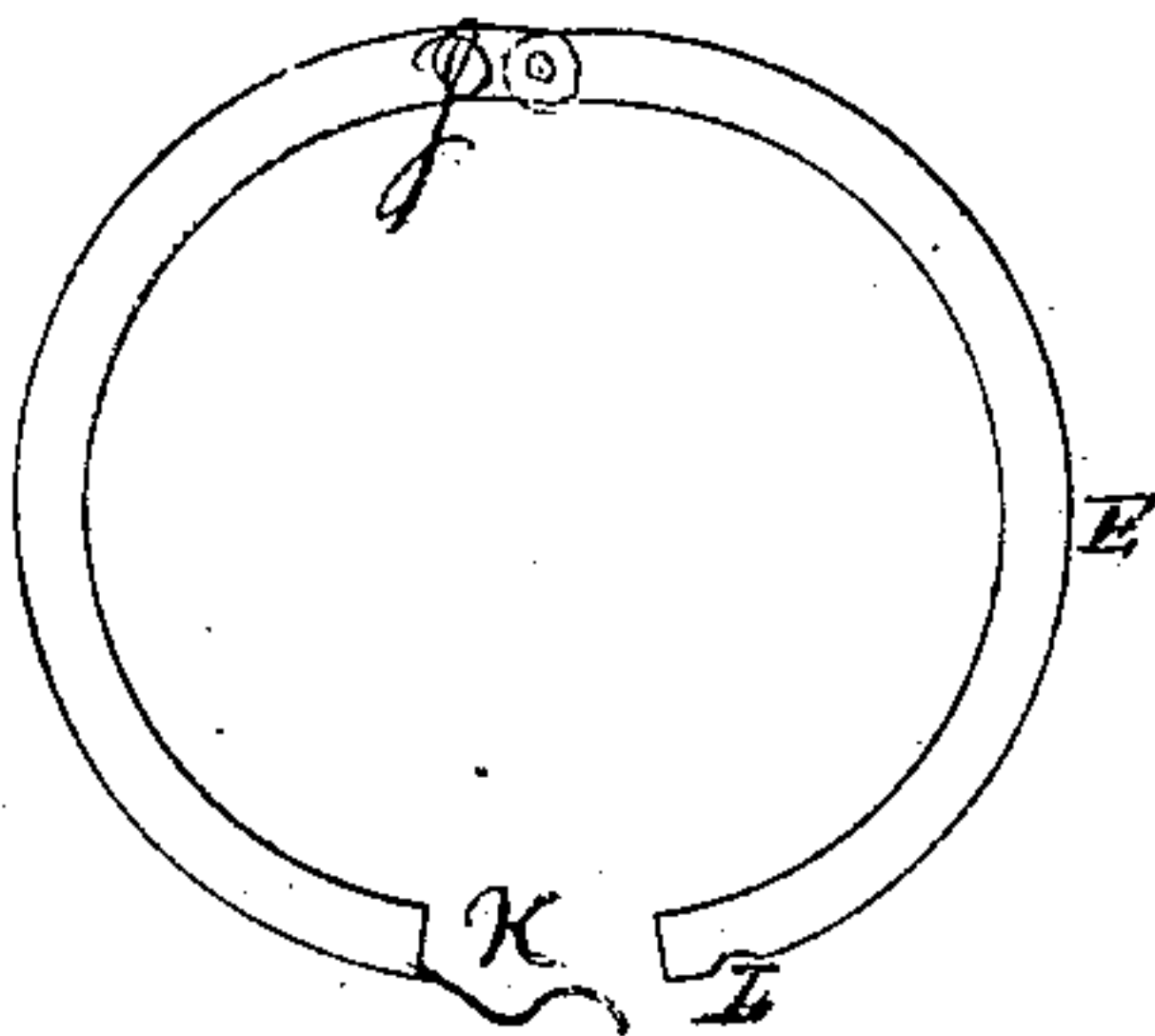


Fig 3



Witnesses  
 H. M. Lawson  
 J. A. Wood

Dana Bickford.

# UNITED STATES PATENT OFFICE.

DANA BICKFORD, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN KNITTING-MACHINES.

Specification forming part of Letters Patent No. 68,595, dated September 10, 1867.

*To all whom it may concern:*

Be it known that I, DANA BICKFORD, of Boston, in the county of Suffolk, in the State of Massachusetts, have invented an Improved Knitting-Machine; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to letters of reference marked thereon.

The nature of my invention consists in a cam, pivoted at one end, and provided with a thumb set-screw to tighten it, in order to change the length of stitch; and, also, an indicator to show the exact distance moved; also, a spring-clasp to hold down the revolving cylinder and keep the needles in place.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1, in the drawings, represents a machine complete. Fig. 2 is a section of the revolving cylinder, showing the pivoted cam. Fig. 3 shows the clasp that holds down the cylinder and keeps the needles in place.

In Fig. 1, A is the stationary frame, and cylinder B is the revolving cylinder that carries the cam for driving the needles. C is the

thumb set-screw for moving the cam in order to vary the stitch. D is the indicator attached to the cam, and indicates on the scale the length of the stitch. E is the clasp or ring that keeps the needles and cam-cylinder in place. In Fig. 2, B represents a section of the revolving cylinder, showing the cam G pivoted at H. In Fig. 3 E represents the clasp hinged at J, and provided at one end with a spring, K, and at the other with a notch, L, (or its equivalent,) which act together when the ends meet, and secure the cylinder, and retain the needles in place. These improvements can be applied to almost any knitting-machine, whether old or new.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the pivoted cam G, indicator D, and set-screw C, as and for the purposes set forth.

2. I claim the clasp E, in combination with the cylinder A, as and for the purposes set forth.

DANA BICKFORD.

Witnesses:

A. ATWOOD,  
A. M. LAWSON.