

(No Model.)

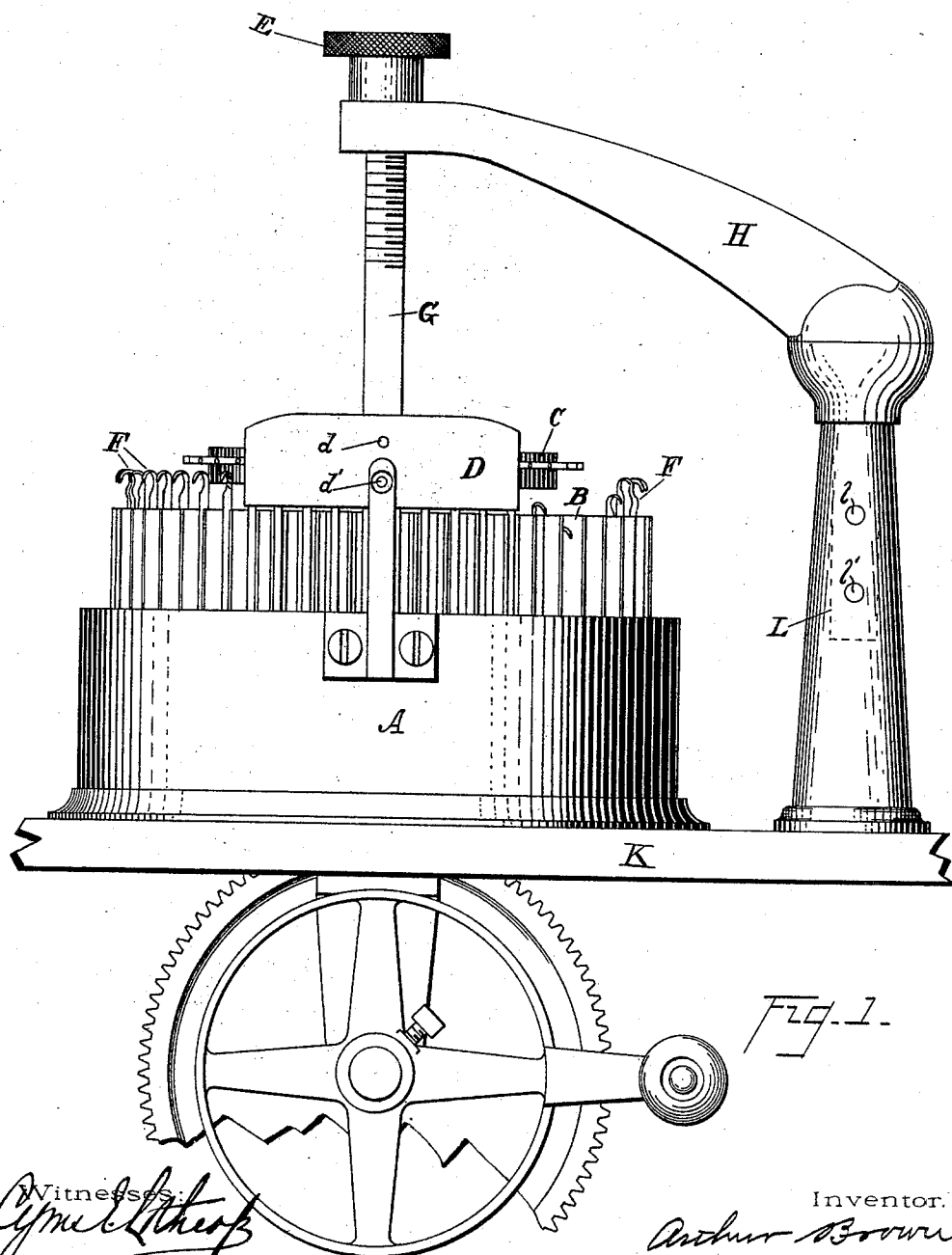
2 Sheets—Sheet 1.

A. BROWN.

LOOPING ATTACHMENT FOR KNITTING MACHINES.

No. 537,747.

Patented Apr. 16, 1895.



Witnesses:
Cymel Phelps
Amelia J. Williams

Inventor.
Arthur Brown

(No Model.)

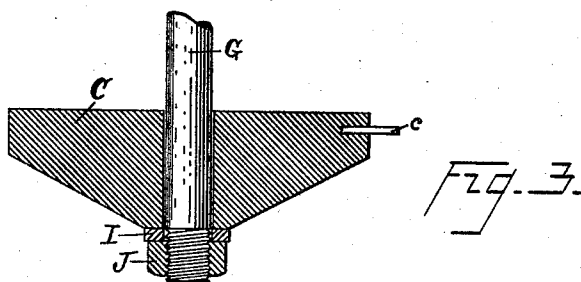
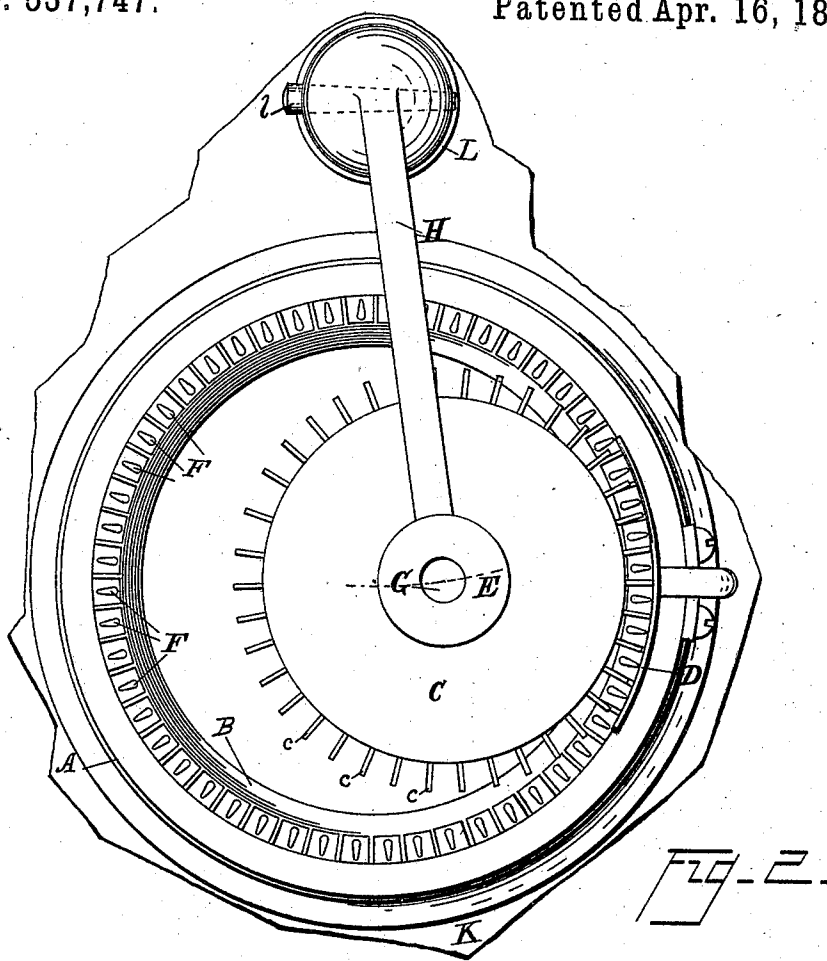
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LOOPING ATTACHMENT FOR KNITTING MACHINES.

No. 537,747.

Patented Apr. 16, 1895.



Witnesses:

Cyril Lathrop
Ansel J. Williams

Inventor.

Arthur Brown

UNITED STATES PATENT OFFICE.

ARTHUR BROWN, OF DETROIT, MICHIGAN, ASSIGNOR TO THE DETROIT ALASKA KNITTING COMPANY, OF MICHIGAN.

LOOPING ATTACHMENT FOR KNITTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 537,747, dated April 16, 1895.

Application filed August 9, 1894. Serial No. 519,825. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR BROWN, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Looping Attachments for Knitting-Machines, of which the following is a specification.

My invention consists in an improvement in looping attachments for knitting machines, hereinafter fully described and claimed.

Figure 1 is a side elevation of the machine. Fig. 2 is a top plan view, and Fig. 3 is a vertical central section through the looping attachment.

K represents the base of a knitting machine, having an outside stationary cam cylinder A, carrying a yarn guide D, and provided with a rotary cylinder B, carrying needles F, none of which is new, and needs no description.

L represents a standard on base K, provided with an adjustable arm H, which may be fastened against rotation, and held at a determined position by means of a pin inserted in holes *l* or *l'*.

C represents a disk smaller than the internal diameter of the needle cylinder, in which is fixed a number of short points *c*, which may be the same distance apart as the needles F, or any multiple of said distance.

Disk C is pivoted on a shaft G, being held thereon by a washer I and nut J, and the upper end of the shaft G passes through the end of arm H, and may be adapted for vertical adjustment by being screw threaded and engaging with a nut E. The disk C is so attached vertically that the points *c* lie between the levels of the two openings *d d'* in the yarn guide D, through which two yarns pass, so that the yarn passing through opening *d* will be fed into the machine above points *c*, and that passing through the opening *d'* will be fed into the machine below the points *c*.

The operation of my invention is as follows: A web being started on the needles, and the machine being put in operation, with two yarns passing through openings *d d'*, the upper yarn will be grasped by the raised needles above the points *c* which are, by reason of the eccentric position of the disk C, between the needles at that side of the machine where the needles are raised, and will be drawn down between said points *c* which hold up part of the upper yarn, thus forming it into loops. As the needle cylinder B rotates, disk C is also rotated, either by the pressure of the needles against said points *c*, or by motion communicated in any other way, and as the cylinder B and disk C rotate, owing to their eccentric axes, the points *c* would be withdrawn from the loops, as clearly shown in Fig. 2.

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

1. In a knitting machine, the combination of a cam cylinder, a needle cylinder, two yarn guides arranged at different levels, and a rotary disk arranged within an eccentric to the needle cylinder and carrying projecting points adapted to be successively projected between the needles, substantially as described.

2. In combination with a knitting machine having a double yarn guide, the vertically adjustable disk C provided with projecting points *c* and rotating eccentrically to the needle cylinder to cause the points to successively engage and disengage the needles, substantially as described.

ARTHUR BROWN.

Witnesses:

CYRUS E. LOTHROP,
AMELIA J. WILLIAMS.