I. & A. TOMPKINS.

Knitting-Machine.

No. 166,321. Patented Aug. 3, 1875.

Fig 1.

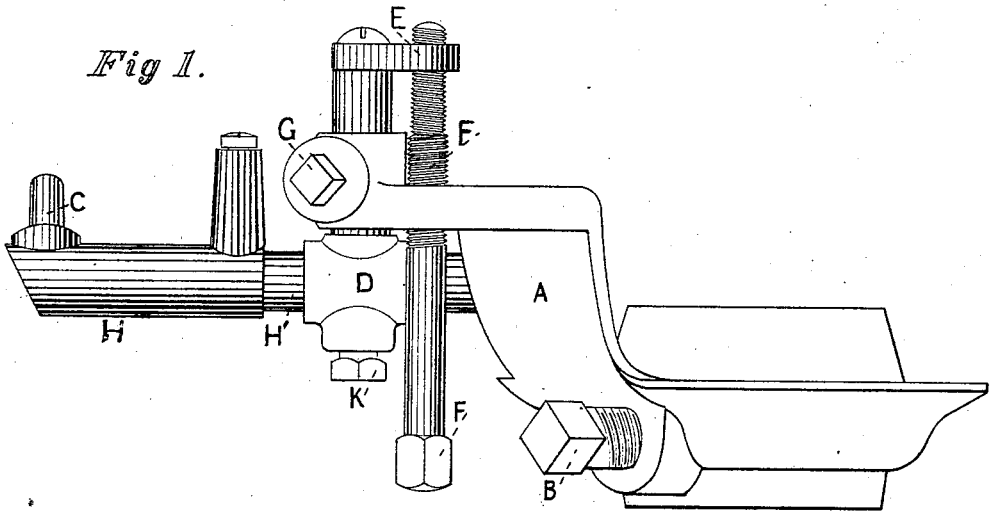
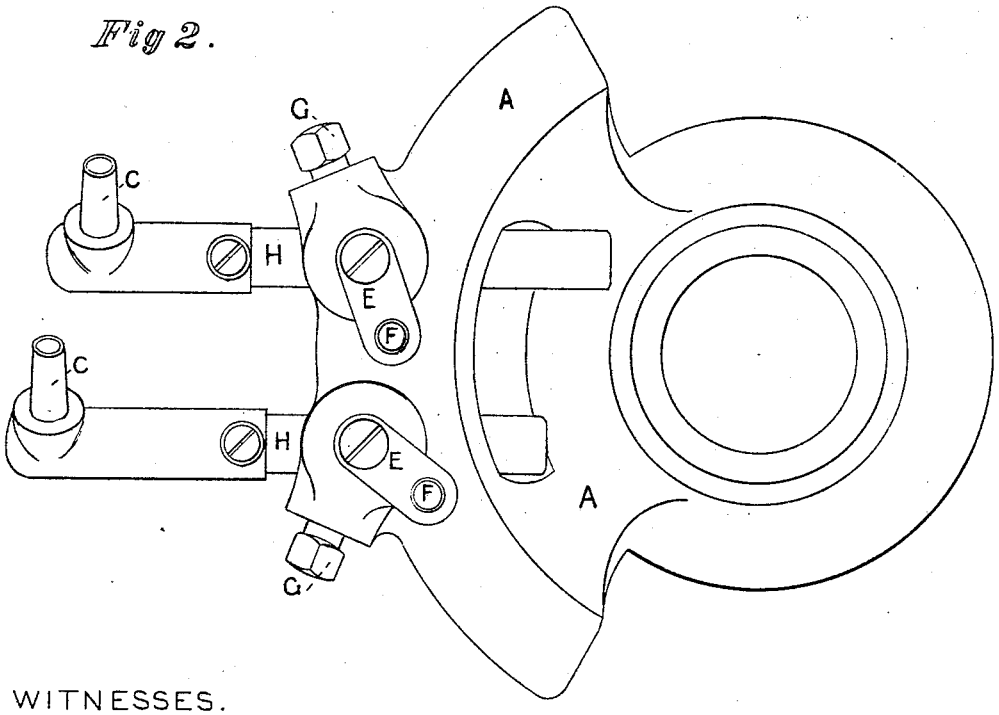


Fig 2.



WITNESSES.

W. C. Tompkins
William Cox

Ira Tompkins
Albert Tompkins

INVENTORS

UNITED STATES PATENT OFFICE.

IRA TOMPKINS AND ALBERT TOMPKINS, OF TROY, NEW YORK.

IMPROVEMENT IN KNITTING-MACHINES.

Specification forming part of Letters Patent No. **166,321**, dated August 3, 1875; application filed March 25, 1875.

To all whom it may concern:

Be it known that we, IRA TOMPKINS and ALBERT TOMPKINS, of the city of Troy, county of Rensselaer and State of New York, have invented certain Improvements in Knitting-Machines, of which the following is a specification:

This invention pertains to that portion of a rotary knitting-machine that supports the burrs; and, as they require the greatest nicety of adjustment relatively to the needles, the object of this invention is to provide an efficient means for such a purpose, and in the simplest possible manner; and the invention consists in a double-threaded screw with right and left hand threads, in combination with the burr-stems and the bracket that supports the burr or burrs, as the case may be, said screw being mounted so that it may be regulated from under the cylinder without opening the cloth, and having no lost motion in its threads, as will hereafter appear, and also by a reference to the accompanying drawings, in which—

Figure 1 represents a side elevation of the burr-supports and the "burr-adjuster," and Fig. 2 a plan or top view of the same.

At A is seen the bracket for supporting the burrs, mounted concentrically with the cylinders, and it is held in proper position upon a central rod by a set-screw, as at B. Upon the outer arc of said bracket A is mounted the burr-support, as at C—one or more, as the case may be. Said support or supports, in the present case, consist of a hollow axis for the burr-disk to revolve upon, and said axis is mounted on a portion of a tube, as at H, which serves as an oil-chamber, from which oil is drawn by capillary attraction to the burr-bearing, as in the Maxwell patent. This, however, is immaterial, as the burr-axis may rest in the oil-chamber, as in the Allardice patent, provided in either case they are attached to an adjustable stud, as shown at D, which works through a hole in the outer arc of the bracket A. Upon said stud D is formed a projection, as at E, through which is tapped a nut to receive the adjusting-screw F, which works through a screw-nut in the bracket A. The threads on said adjusting-screw are cut right and left, and the diameter of one thread may be smaller than the other, so as to readily pass through the first nut, if desired; and said screw extends down sufficiently far below the bracket A to be turned by a key below the cylinder without opening the web, as is now often done to make such adjustments. After the adjustment is made the stud D is held in a fixed position by a set-screw, as at G.

If the shank of the burr-support, as at H′, is made round where it passes through the stud D, the adjustment of the burr, as its "angle" or inclined position, may thereby be easily effected, and it is then held in position by the set-screw K.

By the use of such a combination of parts the angular, radial, and vertical position of the burr may be readily secured before the cloth is put on the needles, and when, as generally is the case, a nicety of adjustment is required, (say to fractional hundredths of an inch,) it may be accomplished by the use of the adjusting-screw F.

We are aware that a screw, having a right and left screw-thread, is not of itself new, but such is not claimed by us.

We therefore claim—

The combination, with the bracket A, the burr-support C, and stud D, having the projection E, provided with the nut, of the adjusting-screw P, provided with the right and left screw-threads and the set-screw G, the whole constructed and arranged to operate as herein shown and described.

IRA TOMPKINS.
ALBERT TOMPKINS.

Witnesses:
W. C. TOMPKINS,
WILLIAM COX.