THOMAS F. WYNN.

Improvement in Stop-Motions for Knitting-Machines.

No. 127,539. Patented June 4, 1872.

Fig: 1.

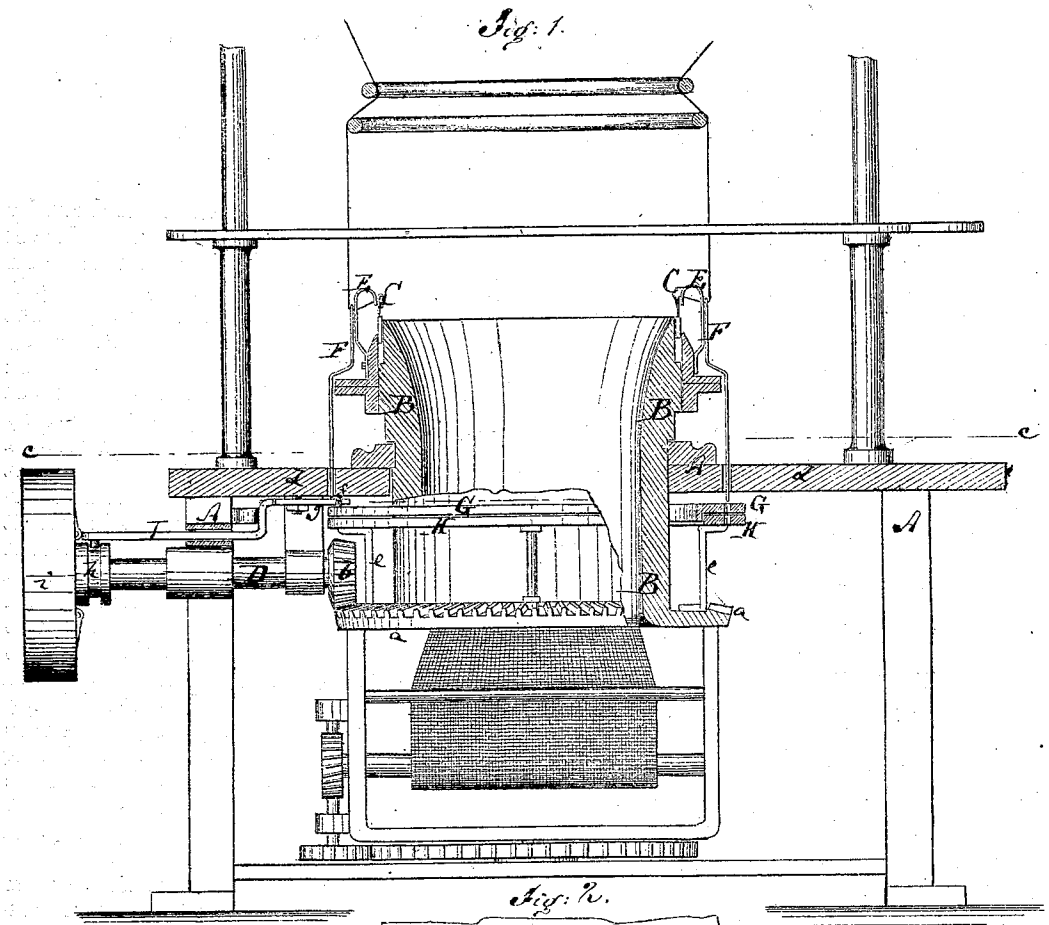
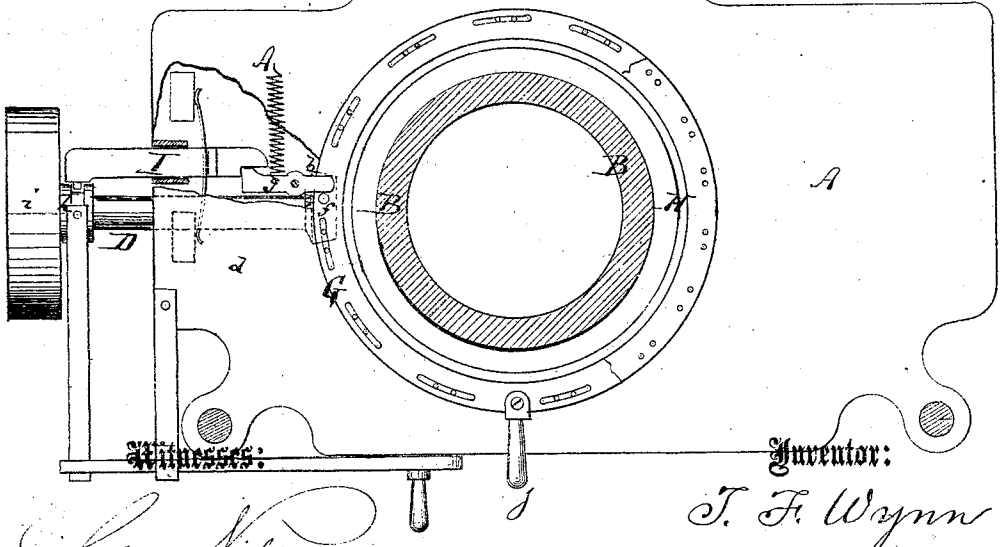


Fig: 2.



Witnesses:

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A.W. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

THOMAS F. WYNN, OF ATLANTA, GEORGIA.

IMPROVEMENT IN STOP-MOTIONS FOR KNITTING-MACHINES.

Specification forming part of Letters Patent No. 127,539, dated June 4, 1872.

Specification describing a new and Improved Stop-Motion for Circular Knitting-Machines and Combination Looms, invented by THOMAS FRED. WYNN, of Atlanta, in the county of Fulton and State of Georgia.

Figure 1 represents a vertical section of a circular knitting-machine or combination loom provided with my improved stop-motion. Fig. 2 is a horizontal section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention has for its object to provide an improved stop-motion for looms and knitting-machines of the class in which the motion of the machine is arrested, immediately on the breaking of a thread, by means of a drop-weight or its equivalent, operating, by aid of suitable intermediate mechanism, to disconnect the driving-wheel or shaft. The invention consists in the arrangement of wires, rotary rings, and other connected parts, as herein specified, whereby a simple, inexpensive, but efficient mechanism is produced.

A in the drawing represents the fixed frame of the machine. B is the needle-cylinder of the same, carrying a circular series of needles, C C, and provided at its lower end with a bevel-gear wheel, *a*, that gears into a pinion, *b*, of the driving-shaft D. Whenever the shaft D is revolved it will cause the rotation of the cylinder B, and consequently the necessary up-and-down motion of the needles. E E are the thread-guides, affixed to a stationary part of the machine. F F are the drop-wires, suspended from the threads near to the thread-guides, respectively. The lower ends of the wires F protrude through apertures in the stationary table *d* of the machine, and are, by the threads, suspended close above the face of a ring, G. This ring has a slot or hole under each wire, the slots being indicated in Fig. 2. H is a ring about as large as the ring G, but connected with the rotary cylinder B by braces *e e*, so that it is revolved with the same. There are a series of apertures cut through the rotary ring H. Whenever, by the breaking or termination of a thread, a wire, F, is dropped, it falls through the slot or hole of the ring G, and as soon as an aperture of the revolving ring arrives under it it falls also through it, thereby connecting the ring G with H, and causing it to be revolved by the latter. By such revolution of the ring G a projecting pin, *f*, thereon is made to strike a lever, *g*, and swing it aside, so as to disengage a spring-slide, I, whose motion will disengage the sliding clutch *h* on the driving-shaft from the driving-pulley *i*, and thus stop the motion of the machine. The upper ring may have a handle, *j*, so that the machine can be arrested by hand whenever desired. A spring or weight holds the lever *g* in place before the pin *f* strikes it, as shown.

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

The combination of the slotted ring G, pin *f*, rotary ring H, needle-cylinder B *a*, wires F, driving-shaft D, pulley *i*, clutch *h*, lever *g*, and spring-slide I, all constructed and arranged as shown and described.

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Witnesses:

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