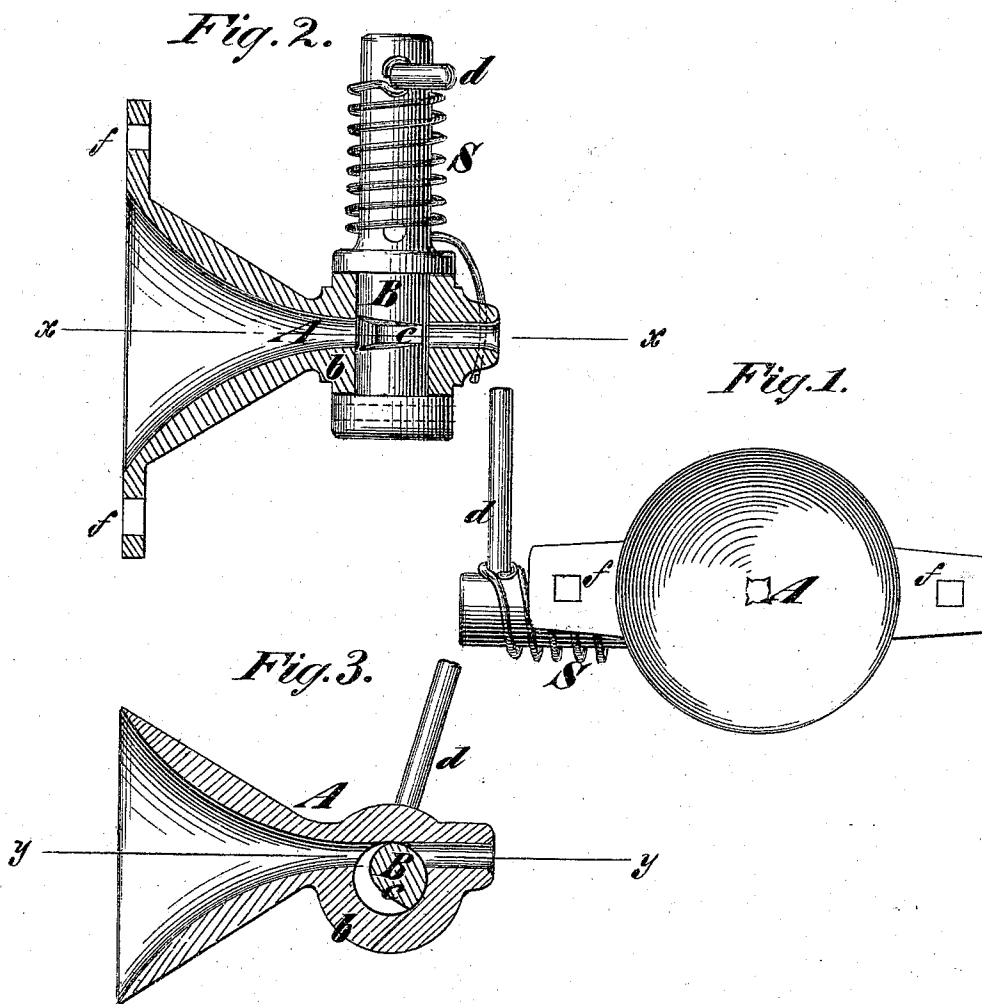


J. GOOD.
Condensing-Tubes for Spinning-Machines, &c.
 No. 143,508. Patented Oct. 7, 1873.



Witnesses.
John Becker.
Fred Haynes

John Good
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

JOHN GOOD, OF WILLIAMSBURG, NEW YORK.

IMPROVEMENT IN CONDENSING-TUBES FOR SPINNING-MACHINES, &c.

Specification forming part of Letters Patent No. **143,508**, dated October 7, 1873; application filed May 23, 1873.

To all whom it may concern:

Be it known that I, JOHN GOOD, of Williamsburg, in the city of Brooklyn, county of Kings and State of New York, have invented a Condenser for Spinning-Machines, of which the following is a specification:

This invention consists in a condenser having its throat provided with a cock or faucet like device, consisting of a spring or equivalently-actuated plug or shaft, having an eccentric surface, which intersects the throat, and contracts its opening according to the size of the sliver passing through it. The strands of the sliver are condensed and compacted together in their passage through this device; and, moreover, as the eccentric plug remains stationary—save when turning to accommodate itself to variant thicknesses—the strands of the sliver are burnished, and a fine gloss is imparted to them, thereby improving their appearance.

In the accompanying drawing, Figure 1 is an end view of the condenser. Fig. 2 is a horizontal section of the same taken at the line *y y* in Fig. 3; and Fig. 3 is a vertical section thereof taken at the line *x x* in Fig. 2.

Similar letters of reference indicate corresponding parts in all three figures.

A is the throat of the condenser. It has a trumpet-mouth to facilitate the introduction of the sliver, and is provided with a transverse cylinder or barrel, *b*, which receives a plug or roller, B. Lugs *ff* on the mouth form a means of securing the device to the frame of the machine to which it is to be applied. This plug B controls the opening of the throat; and for this purpose is provided, opposite the throat, with an eccentric portion, *c*, which is made to contract the throat more or less, according to

the size of the sliver passing through it. The plug is actuated to close the throat by a spring, S, or weight so applied to its shank, or to a lever, *d*, thereon, as to turn the eccentric in the direction requisite to produce that effect.

The drawing shows a spring in use for this purpose; but I prefer to employ a weight, for the reason that a more even pressure will be maintained by it.

The sliver, in passing through the condenser, will open its throat to accommodate the size of the throat to its own size. The spring or weight, whichever be used, will throw the eccentric back on any decrease in the size of the sliver, so that there will always be a pressure on the sliver, and its strands or fibers will be condensed and compacted together, so that it will issue in even and compact form. Moreover, as the plug is stationary, except for the motion it has in adjusting itself to the sliver, the fibers of the sliver are burnished, and a fine gloss is imparted to them, and their appearance is greatly improved.

In a spinning-machine the condenser is arranged between the chains and the fier. It dispenses with calender-rolls, and there is no tendency, as in other arrangements, of the stray fibers getting in to interfere with the working of the condenser.

What I claim as my invention is—

The combination of the throat A, its controlling-plug B, and the spring S, or its equivalent, for controlling the opening in the throat, substantially as and for the purpose herein set forth.

JOHN GOOD.

Witnesses:

FRED. HAYNES,
MICHAEL RYAN.