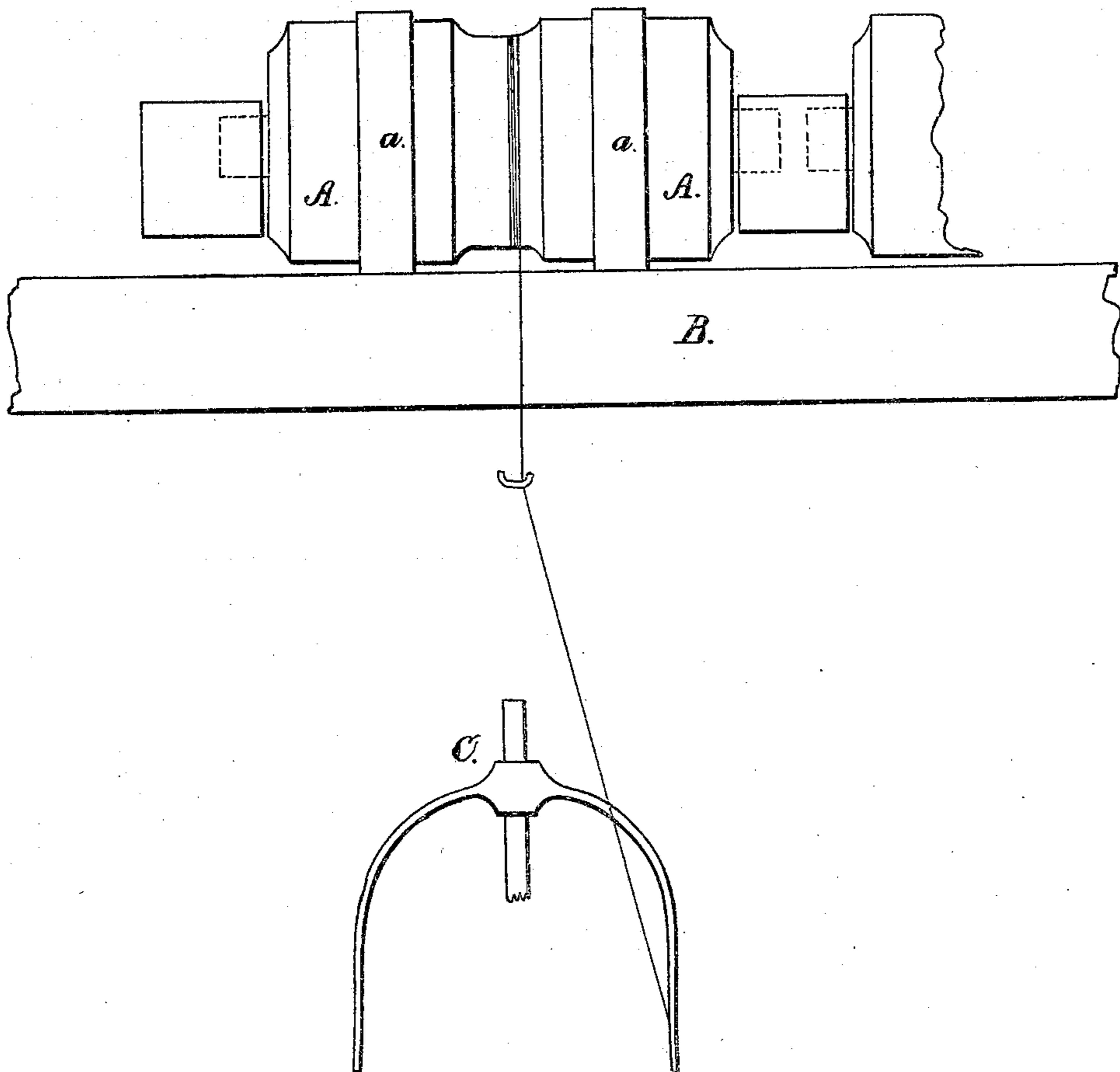


G. Gay
Silk Mach.

Nº 1,169.

Patented Jun. 7, 1839.



UNITED STATES PATENT OFFICE.

GAMALIEL GAY, OF PHILADELPHIA, PENNSYLVANIA.

MACHINE FOR TWISTING SILK.

Specification of Letters Patent No. 1,169, dated June 7, 1839.

To all whom it may concern:

Be it known that I, GAMALIEL GAY, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful improvement in the construction of machinery for twisting silk by the employment of a roller of a particular construction, which I denominate a "delivering roller"; and I do hereby declare that the following is a full and exact description thereof.

The delivering roller, which is shown at A, in the accompanying drawing, may be about two inches and a half long, and one and a half inch in diameter.

A has around it two friction bands of leather, *a, a*, which, when the machinery is in operation, rest upon a revolving roller B, to which motion is communicated by a whirl and band in the ordinary way, and this latter roller communicates motion to the delivering roller, by the friction of the band *a, a*.

In the middle of the delivering roller, which is usually made of iron, a groove, or hollow, *b*, is turned; the silk to be twisted is passed around this hollow so as to take two or three turns, in its way to the spindle C, by which the twisting is effected.

The gudgeons of the delivering rollers have no bearings below them, but merely drop in between cheeks which embrace them laterally, and allow them to rest with their whole weight upon the driving roller B.

The number of delivering rollers employed in any such machine will be governed by the number of spindles which it contains. By raising either of these rollers from its bearing upon the driving roller, when the thread passing to its corresponding spindle requires adjustment, the passing of the thread is instantaneously stopped, and recommences when the delivering roller is made to resume its place.

I am well aware that spools, and rollers, have been driven by friction in a manner analogous to that above described, in machinery for spinning and roping, and for other purposes; I do not, therefore, make any claim to this mode of driving the delivering roller by friction; but

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

The combination of a roller, such as is above described, with the machinery for twisting silk, said roller being constructed with a hollow, or groove, around which the thread, or fiber, is to be wound, in its passage to the spindle, and the whole being constructed, combined, and operated substantially as above fully set forth.

G. GAY.

Witnesses:

THOS. P. JONES,
LURTON THORN.