

Sheet 1, 2 Sheets.

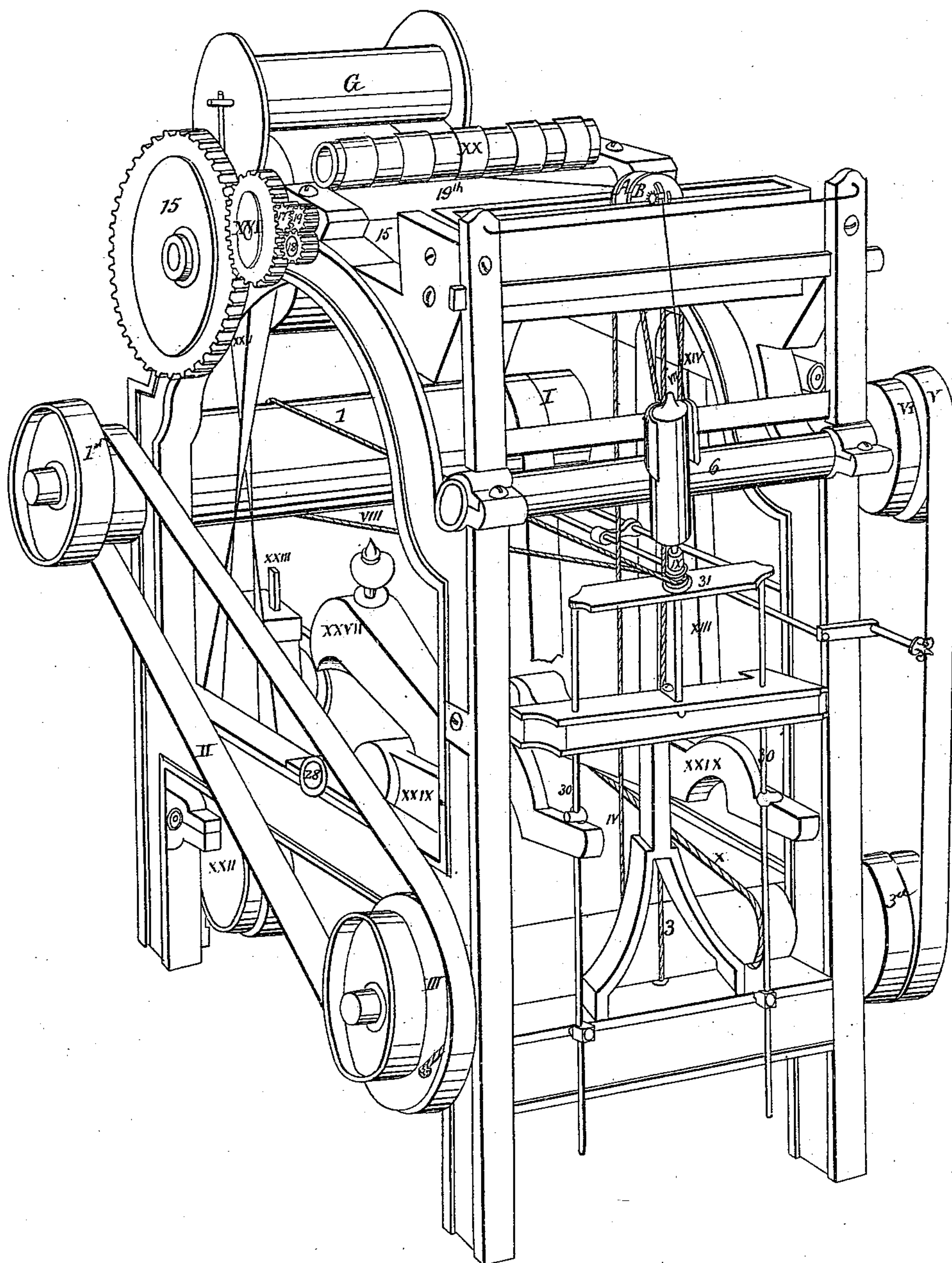
A. N. Wilcox.

Spinning Mach.

Nº 3,075.

Patented May 8, 1843.

Fig: 1.



A. N. Wilcox.

Sheet 2, of 2 Sheets.

Spinning Mach.

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Fig. 4.

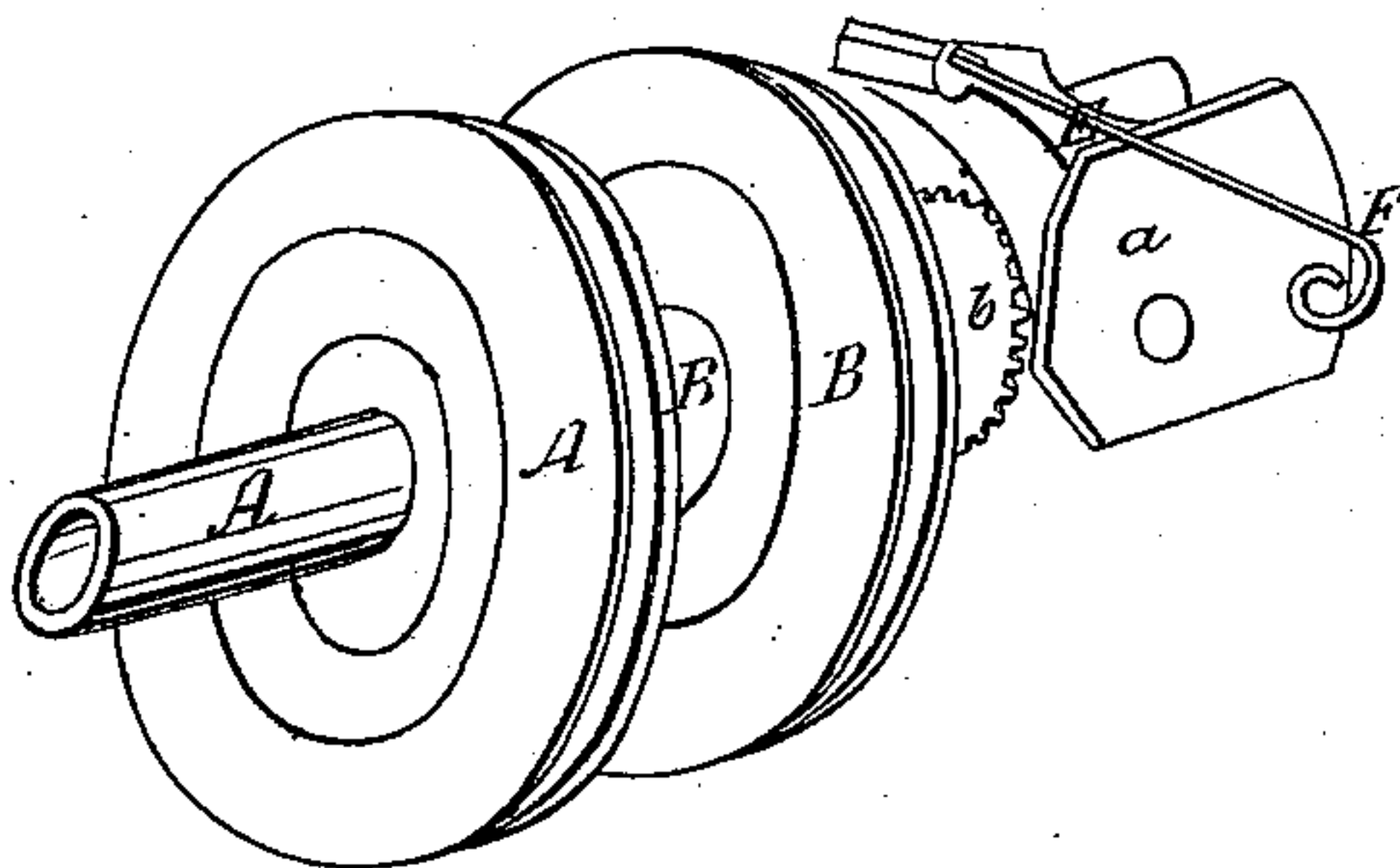
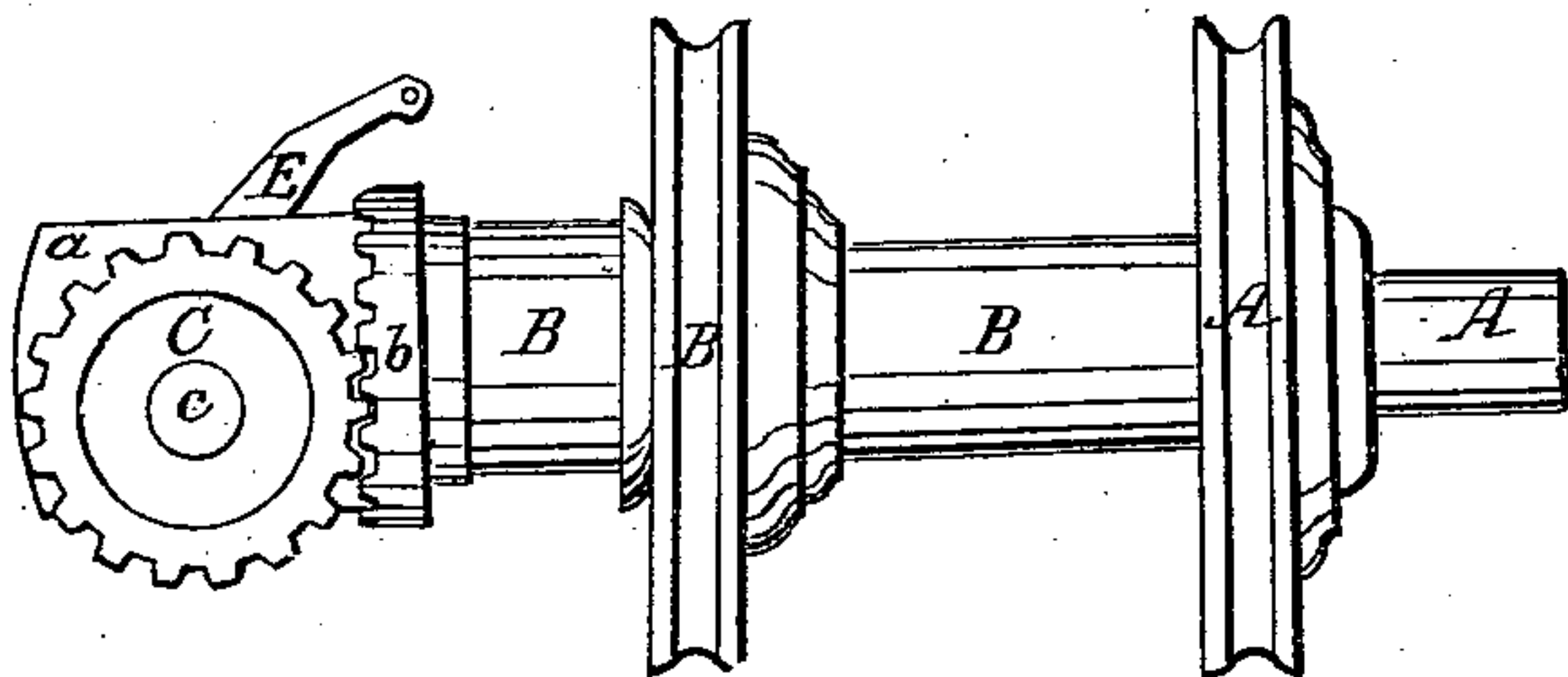


Fig. 6.

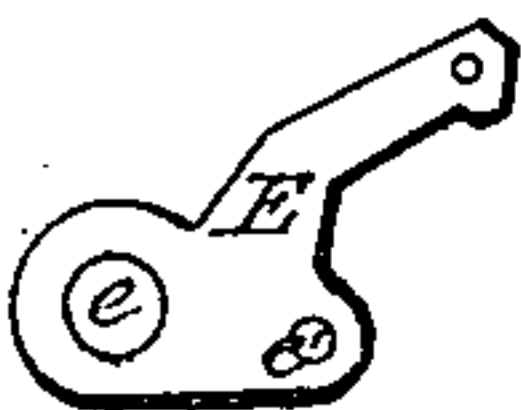


Fig. 2.

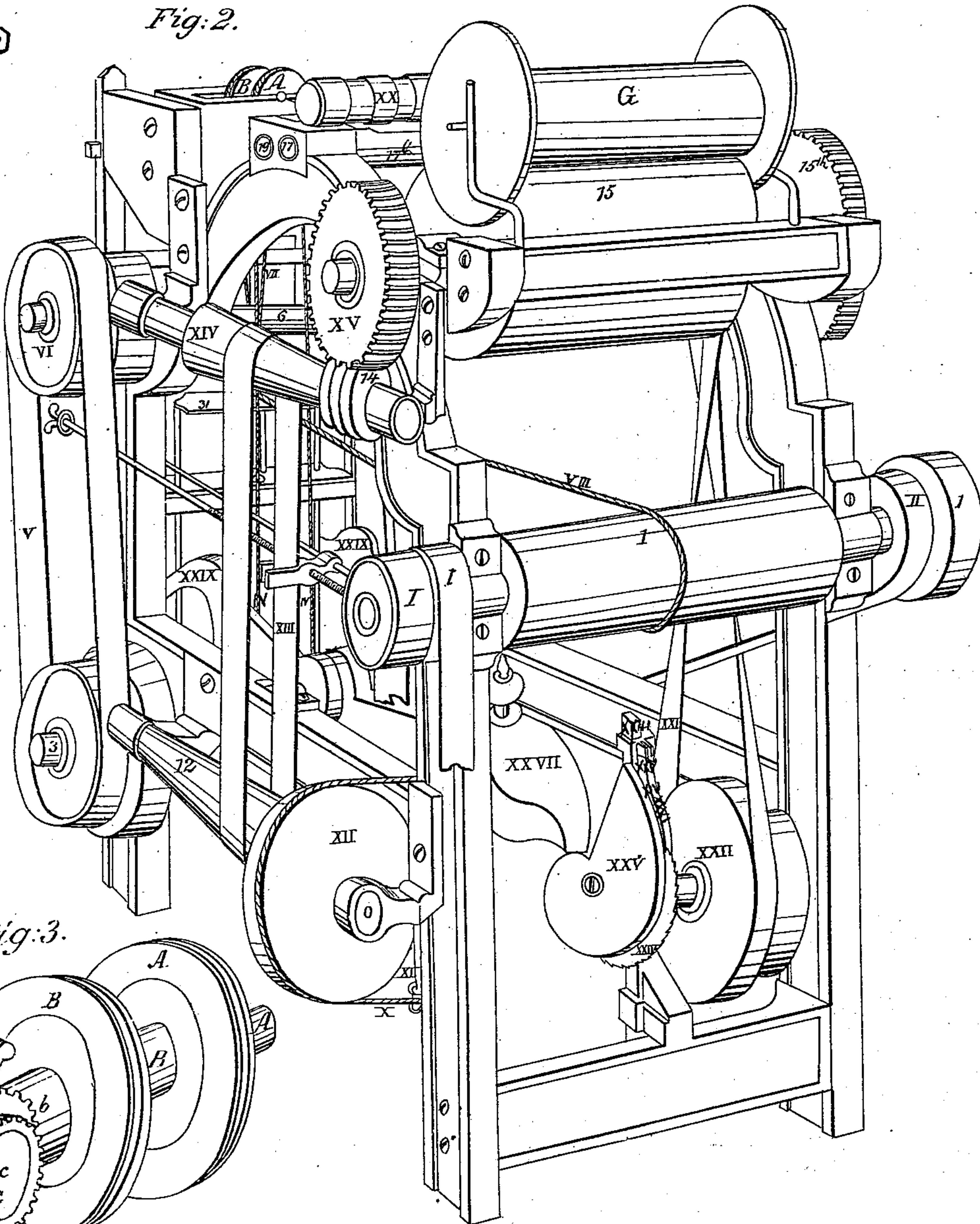
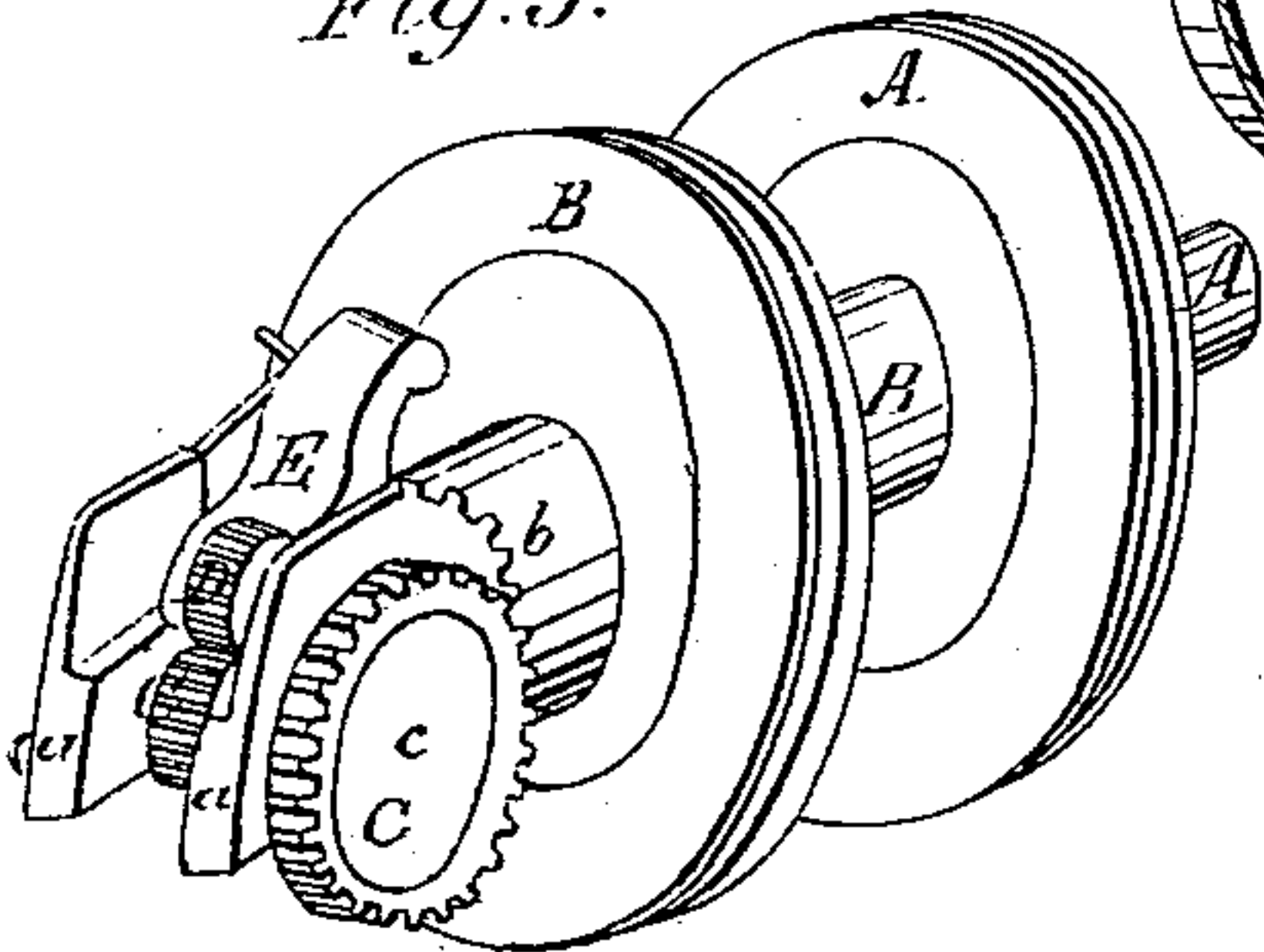


Fig. 3.



UNITED STATES PATENT OFFICE.

A. N. WILCOX, OF BALLSTON SPA, NEW YORK.

MACHINE FOR SPINNING COTTON, WOOL, &c.

Specification of Letters Patent No. 3,075, dated May 8, 1843.

To all whom it may concern:

Be it known that I, AMANDER N. WILCOX, of Ballston Spa, county of Saratoga, and State of New York, have invented a new and useful Improvement in Spinning Wool, Flax, Cotton, or Silk, which I denominate the "Independent Spinner"; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which made a part of this specification, in which—

Figure 1, is a perspective view of the whole machine, showing the front of it. Fig. 2 is a perspective view showing the back. Figs. 3, 4, 5 and 6 are front, side, and back views of the revolving drawing head and the lever E detached.

The nature of my invention consists in constructing a spinning machine with the front rollers so arranged that they will revolve around a common center and at the same time turn on their own axes so as to draw forward the material to be spun and adjust the proper twist for the article to be manufactured, the proportionable relative motions of one to the other being adjustable as hereafter described.

The frame of my spinner is of the common construction of cap spinners which I use in converting the fiber into yarn, in conjunction with my improvements. The driving cylinder 1, has its bearings on the back uprights of the frame; on one of the journals of this cylinder outside of the frame the fast and loose pulleys I, Fig. 2, which connect it with the prime mover are affixed there is a double pulley (1st) one part of which is of larger diameter than the other. Over this pulley a belt II passes which connects it with a similar pulley III on the outer end of the journal of a cylinder 3, the bearings of which are in the front uprights near the floor; on the journal at the opposite end of this cylinder outside the frame a pulley 3^d is affixed connecting by means of an endless belt V, with a pulley VI which is on a cylinder 6, at the top of the front uprights. Over this cylinder there are two parallel bars, on a level with each other which form the bearings of the drawing heads now to be described and which are more clearly represented in the enlarged Figs. 3, 4, 5 and 6. On the front end of a tube A which extends over the bars above named there are two

flat plates (a) projecting beyond the end parallel with its axis, one half of these plates is thinner than the other half leaving a shoulder on their inner faces, which is represented in Fig. 3, the thickest part of the plates have a fluted roller C, between them at right angles to the tube A the periphery of which is on a line with the axis of the tube, the journals of this roller pass through the plates (a) and are denoted by letter (c) one of these journals bears on its end, a beveled pinion C, of a proper diameter for the motion required. Between the thin parts of the plates (a) there is a lever E put which is as broad as the space between the plates (a side view of this lever is shown detached at Fig. 6) the front part of the lever is forked to admit a roller D the journal being marked (e), there is a little projection on the lever backward on a level with the roller (the other part standing at an angle of about 45°) through which a fulcrum (e') passes; at the upper end of the lever which projects beyond the plates a stud stands out on one side, against which a spring F attached to the outside of one of the plates, presses, and holds the roller D against the roller G, near the back end of tube A a pulley A, is affixed by which it is turned, being connected by an endless band IV with the cylinder 3, above described between the pulley A, and the plates (a) this tube is inclosed in another tube B, on the front end of which there is a bevel pinion (b) which meshes into the pinion C on one of the drawing rollers: just behind this pinion there is a pulley B connected with the cylinder 6, the relative proportion of these cylinders, pulleys, and pinions, must correspond to the purpose to which they are applied. Around the cylinder 3 a band X passes, which extends back horizontally nearly to the uprights behind it then turns at right angles round two friction pulleys (one of which is shown at XI Fig. 2, and over a pulley XII that is outside the frame; this pulley is attached to a conical drum 12, from which an endless band XIII extends up around another cone near the top of the machine of similar dimensions the base of which is turned the reverse of that below; on this upper cone over the pulley XII there is an endless screw or worm wheel 14 which meshes into a spur wheel XV on the axis of the cylinder 15 on which the roping spool G

rests. The endless band XIII is made to shift from end to end of the cones around which it passes, by means of a shipper, moved by a screw which runs through it and
5 extends from front to back of the machine, parallel with the cones, and about halfway between them the shipper slides on a rod along side the screw that prevents it from turning.
10 When the roping is unwound from the spool G it passes between the drawing rollers 17, 19, XX, of the usual construction; these are moved by gearing connected with cylinder 15; the roping then runs through the
15 tube A, between the draw rollers D, C, and from thence down to the cap spinner above named. It will be perceived by the arrangement of parts above described that the cones 12 and XIV and band XIII regulate the

twist of the yarn; the stretch is governed by 20 band V and pulleys 3^a and VI.

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

1. The combination of the pulleys A and B, and the pinions (*c* and *b*,) with the drawing 25 rollers in the revolving drawing head constructed and arranged substantially as herein set forth.

2. I also claim the combination of the lever E, which holds the roller D, and spring 30 F, with the revolving tube A arranged and constructed in the manner and for the purpose above described.

AMANDER N. WILCOX.

Witnesses:

DAVID MAXWELL,
GEO. G. SCOTT.