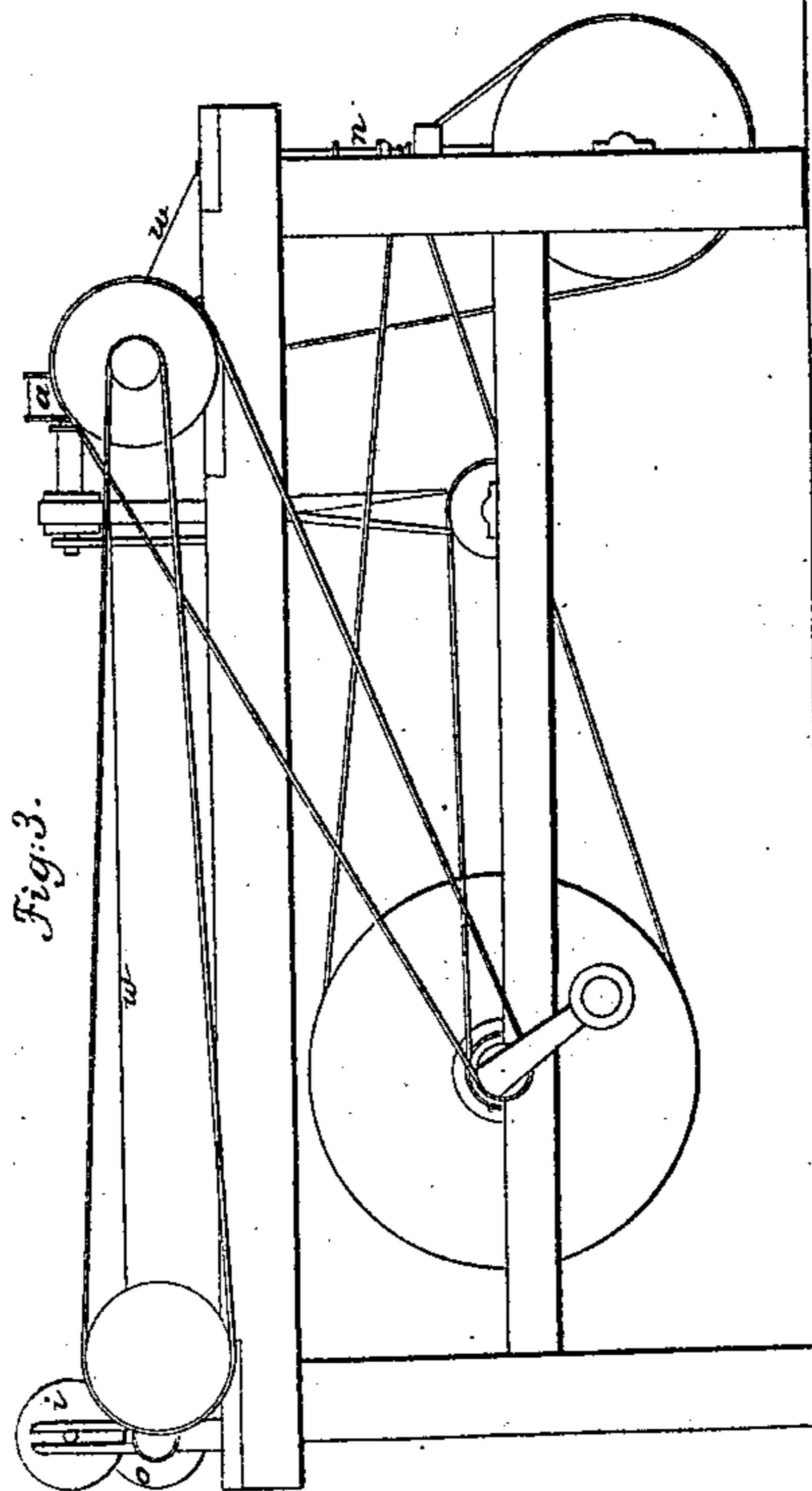
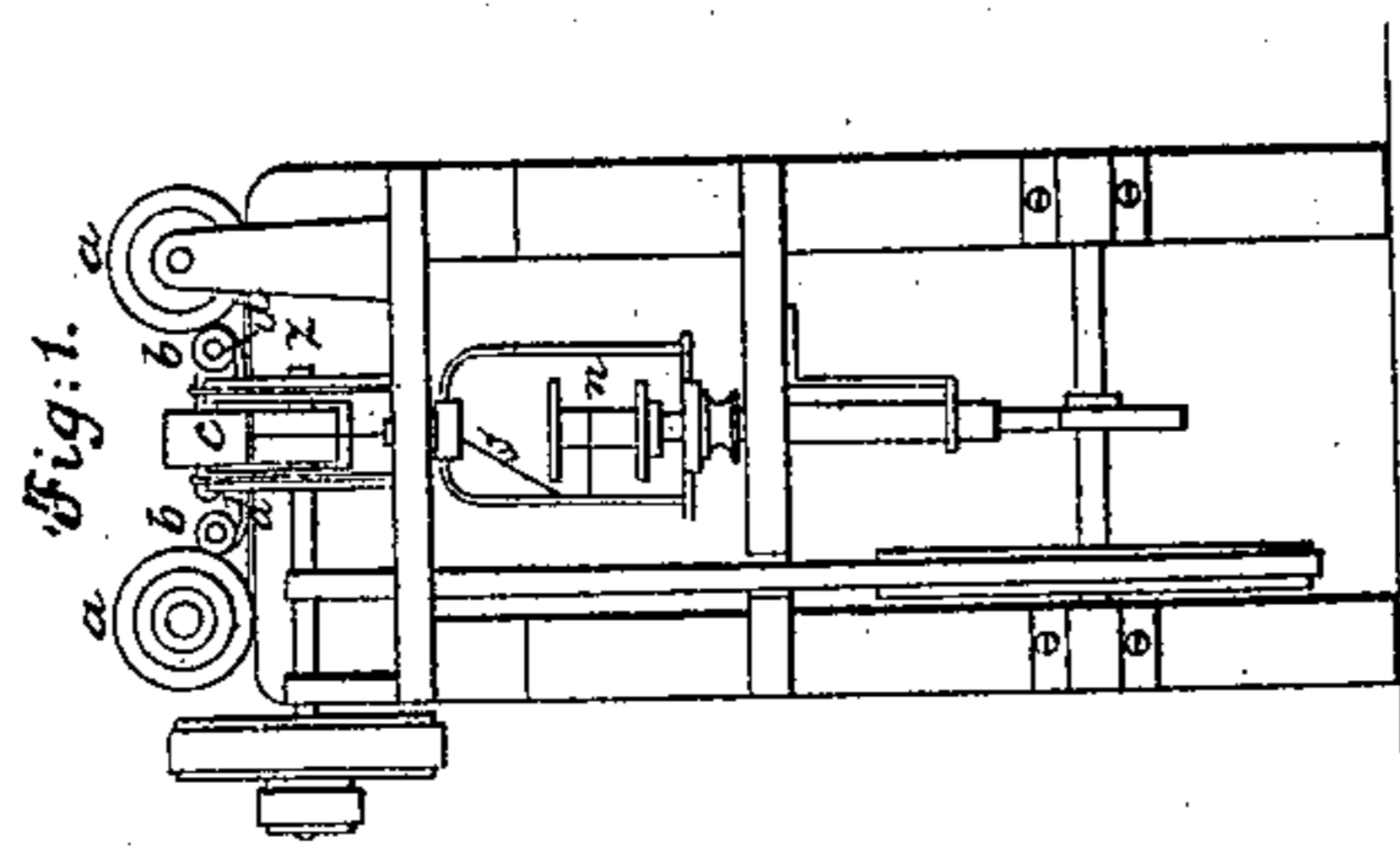
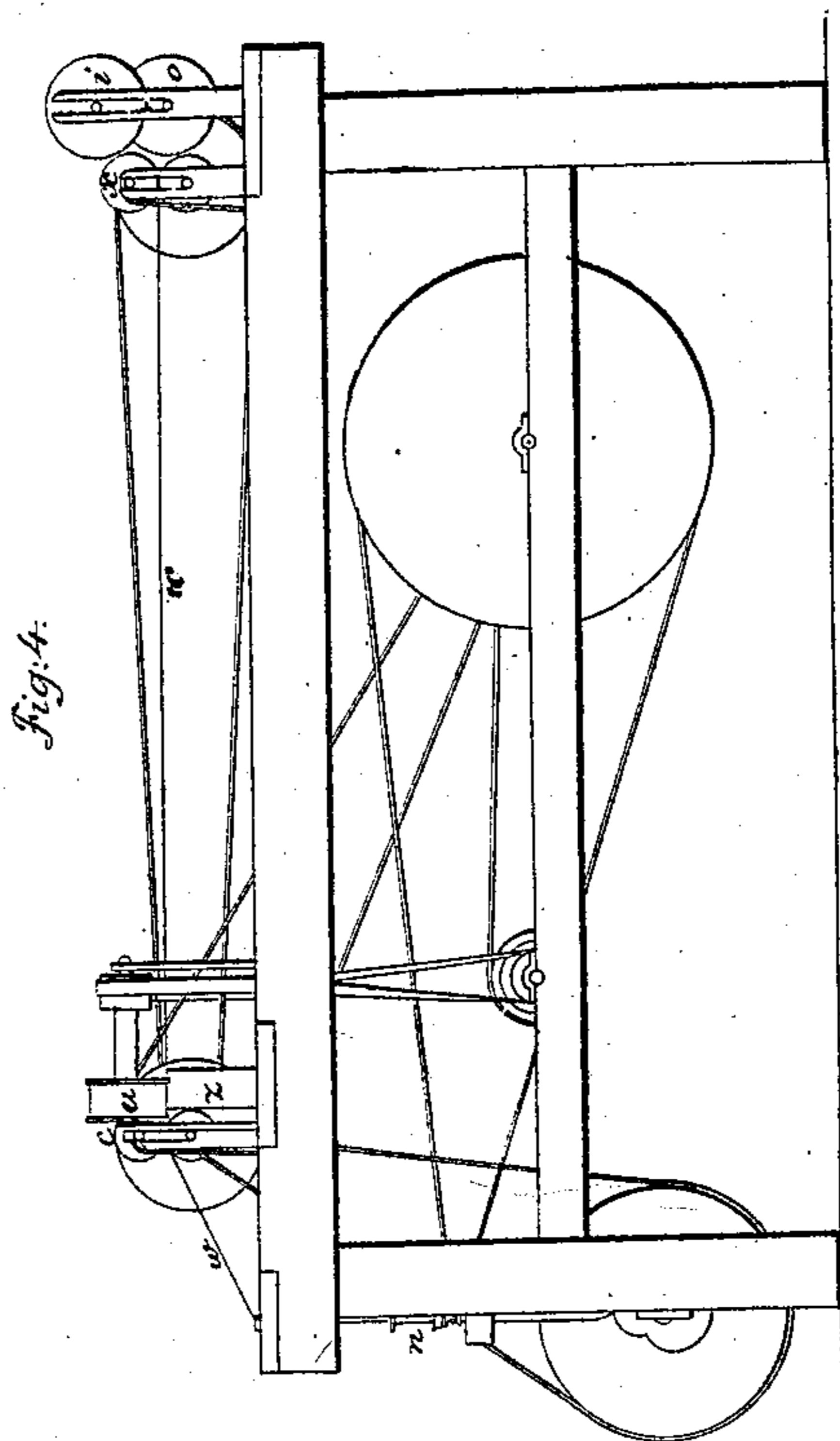
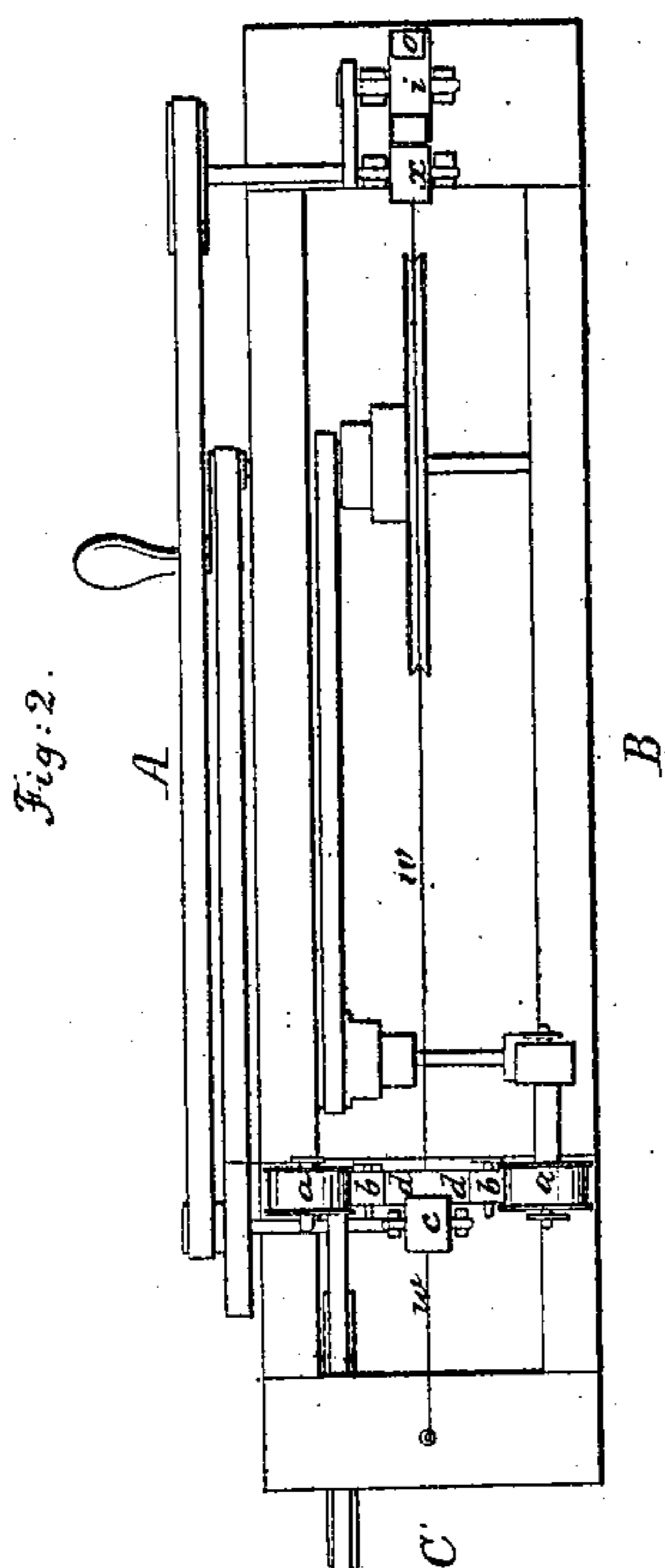


*E. M. Titcomb.*  
*Spinning Mach.*

*N<sup>o</sup> 300.*

*Patented Jul. 29, 1837.*



*Witnesses*

*Lewis F. Titcomb*  
*Edna Fuller.*

*Inventor.*

*Edgar M. Titcomb*

# UNITED STATES PATENT OFFICE.

EDGAR M. TITCOMB, OF ANDOVER, MASSACHUSETTS.

MACHINE FOR SPINNING WOOLEN ROVING.

Specification of Letters Patent No. 300, dated July 29, 1837.

*To all whom it may concern:*

Be it known that I, EDGAR M. TITCOMB, of Andover, in the county of Essex and Commonwealth of Massachusetts, machinist, have invented a new and Improved Machine for Spinning Woolen Roving, (vulgarly called roping;) and I do hereby declare the following is a full and exact description.

10 The nature of my invention consists in passing the woolen roving between the opposite sides of an endless belt *d, d*, while the sides of the belt are pressed into contact with the thread of the roving. While this thread  
15 passes between the opposite sides of the endless belt at right angles to those sides, the belt is in rapid motion over and under two rollers, and these opposite sides of the belt moving necessarily in opposite directions and being in contact with the thread,  
20 twist the roving and prevent its being broken as it is drawn out to greater length and fineness.

25 To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

30 I construct a machine in the form now used. The roving is wound on a spool (marked *i*, see Figure 4,) this spool rests on a drum, (marked *o*, see Fig. 4;) from the spool the roving passes between a pair of rollers placed near the spool, (I call this pair, the back rollers, the upper one where-  
35 of I mark *x*, see Fig. 4;) from these back rollers the roving runs a considerable distance in the direction of the line, *w*, (see Fig. 4,) and then passes between the sides of an endless belt; this belt I place immedi-

ately in the rear of another pair of rollers. (This pair I call the front rollers, marked *c*, see Fig. 4;) having passed between the opposite sides of my endless belt and between the front rollers, the roving runs onward in the line, *w*, to the flyer which twists it and winds it on the bobbin. Immediately  
45 in the rear of the front rollers, I place two rollers, (marked *d, x*, see Fig. 1,) which rollers I add to the machine, over and under these rollers, *a, a*, the endless belt passes; the upper side of this endless belt passes  
50 under two smaller rollers by me also added, *b, b*, (see Fig. 1;) these smaller rollers placed between the rollers *a, a*, are designed to press down the upper side of the belt, till it comes almost in contact with the lower  
55 side; in this position the woolen roving, *w*, on its way from the back rollers, *x*, passes between the opposite sides of this endless belt; these opposite sides move in opposite directions, and by their contact with the  
60 thread of the roving twist this roving, which twist can be made greater or less at pleasure. By thus twisting the roving as it passes from the back rollers to the front, I prevent the thread from breaking as it is  
65 drawn out to greater length.

What I claim as my invention is this—

The application of this endless belt so as to twist the thread of the woolen roving on its passage from the back rollers to the front  
70 rollers, as before described.

EDGAR M. TITCOMB.

Witnesses:

LEWIS F. TITCOMB,  
ELISHA FULLER.