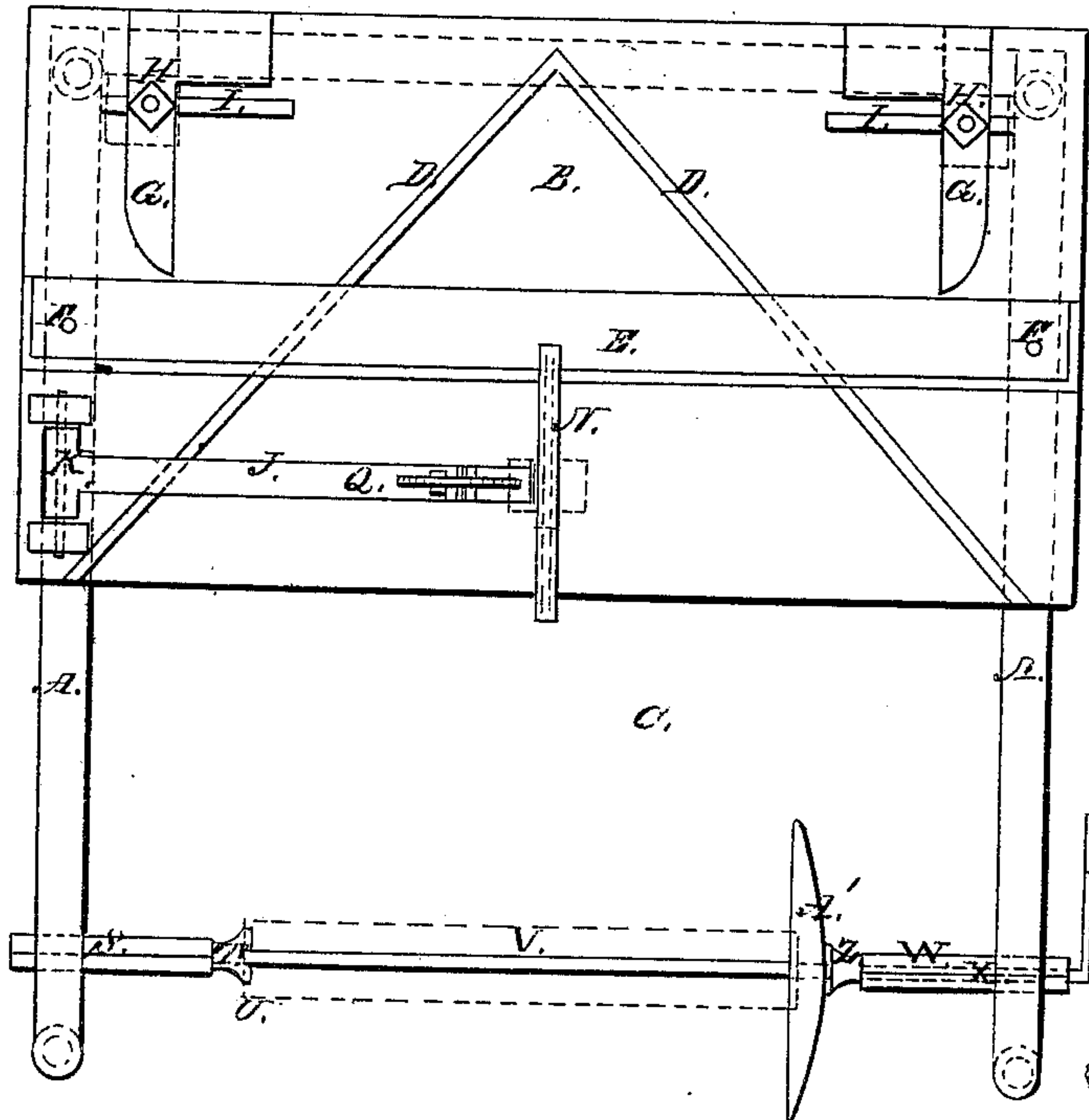


*Race & Whitney.*  
*Mach. for Measuring & Winding Cloth.*  
*N<sup>o</sup> 91,264. Patented Jun. 15, 1869.*

*Fig. 1.*



*Fig. 2.*

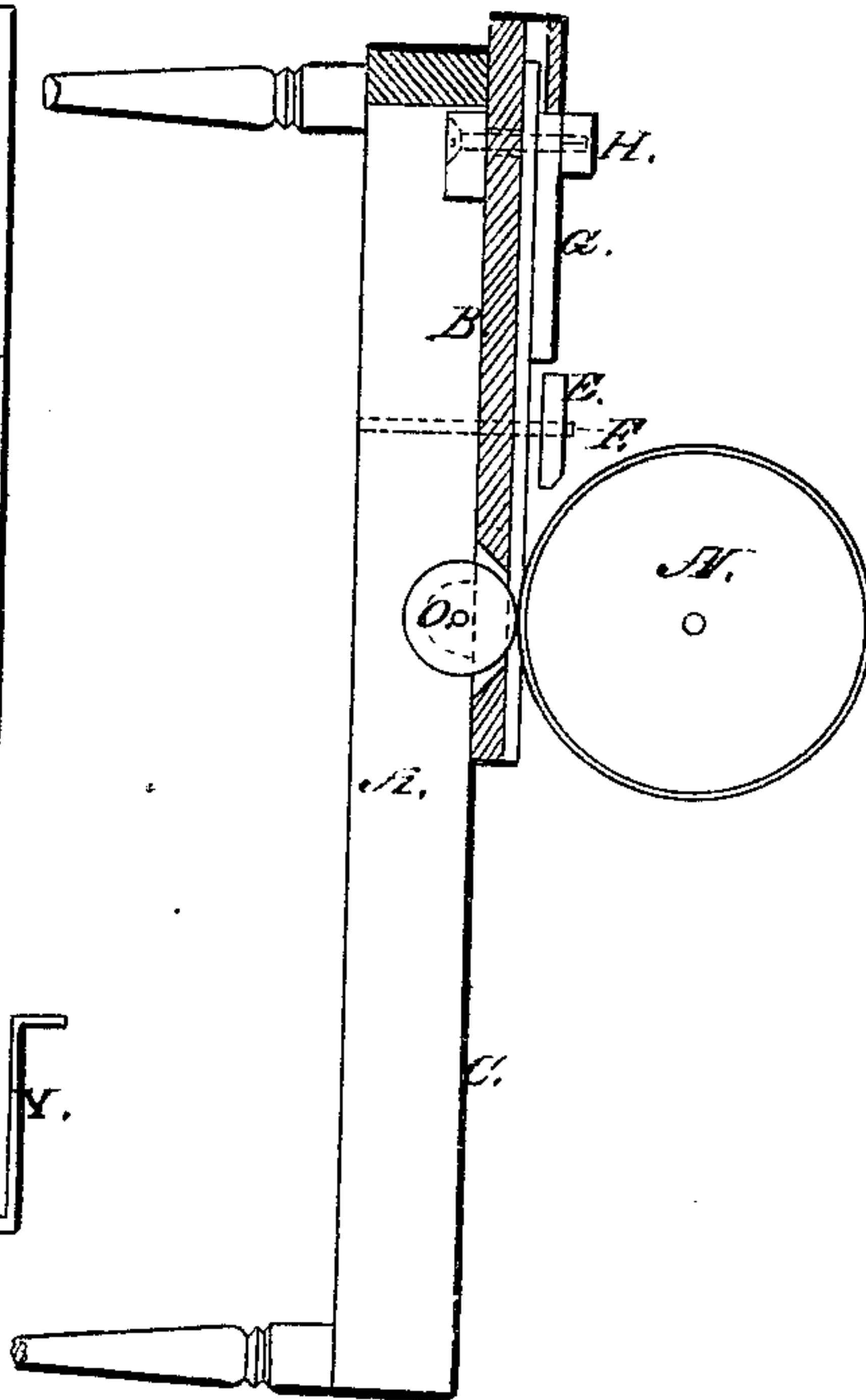
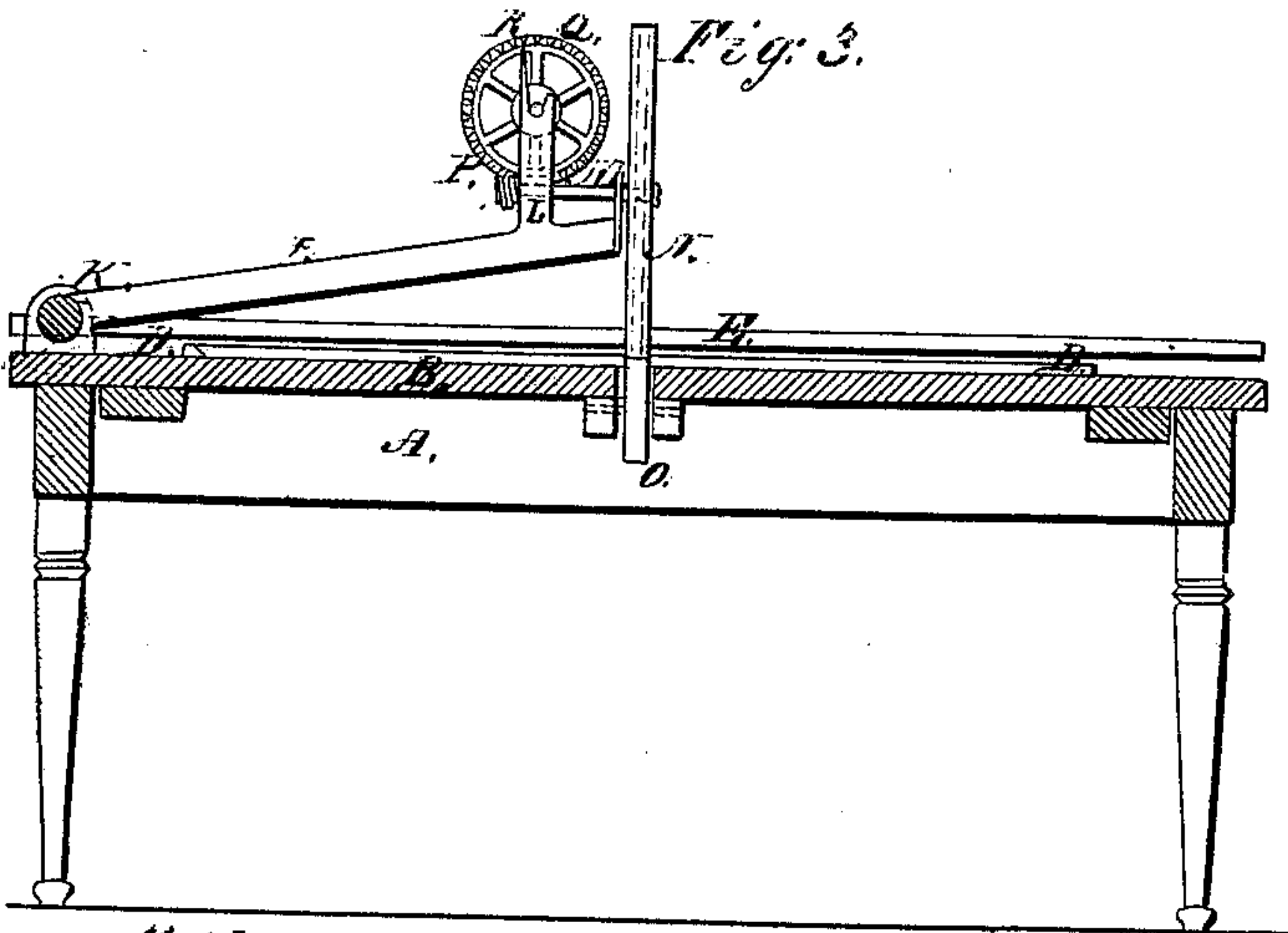
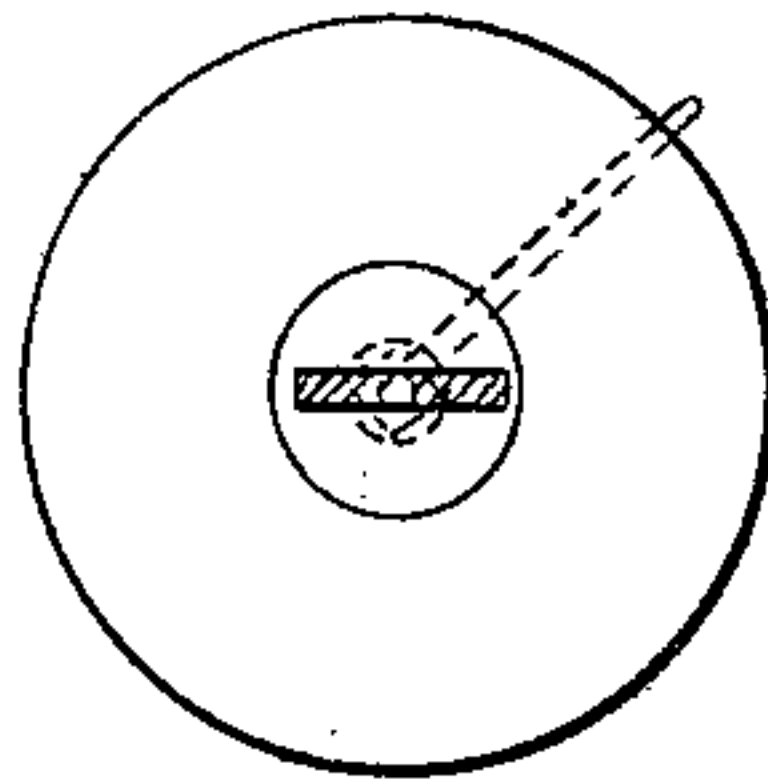


Fig. 3.



*Fig. 4.*



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# United States Patent Office.

JOHN EDWIN RACE AND HIRAM WHITNEY, OF CHICAGO, ILLINOIS.

Letters Patent No. 91,264, dated June 15, 1869.

## IMPROVEMENT IN MACHINES FOR MEASURING AND WINDING CLOTH, &c.

The Schedule referred to in these Letters Patent and making part of the same.

### To whom it may concern.

Be it known that we, JOHN EDWIN RACE and HIRAM WHITNEY, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Cloth-Measuring and Winding Apparatus; and we do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

Figure 1 is a plan view of our invention from the top.

Figure 2 is a side elevation.

Figure 3 is a rear elevation.

Figure 4 is a face view of the circular disk.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improvement in the construction of an apparatus for measuring and winding cloths, carpets, and like fabrics, upon rolls or boards in dry-goods, cloth, and carpet stores and factories; and consists in a suitable table, provided with a reel, feeding-rollers, index, and guides, as more fully hereinafter described.

In the drawings—

A represents a frame, the rear portion of which is provided with a top, B, while the front part thereof is left without top, as at C.

Upon the top of the table are secured the ribs D, in the form shown in the drawings, and

E is a smoothing-board, adjustable and secured by the pins F upon the table, above the ribs.

Suitable guides G, adjustable to the width of the fabric to be rolled, by means of the bolts H, working in the slots I in the top, B, hold and guide the fabrics over the ribs and under the smoothing-board, by means of which the fabric is kept smooth while being operated upon.

J is an arm, pivoted at K to the table-top, and is provided with a vertical standard, L, into which is properly journaled the shaft M, upon which rotates the wheel N.

A smaller wheel, O, whose face is of equal width to the face of the wheel N, is journaled to the under side of the top, B, in such a manner that the periphery of the wheel, in its revolution, will barely project above the plane of said top, immediately under the wheel N.

The outer end of the shaft M is provided with a worm-thread, P, which engages with the cogs of the index-wheel Q, the worm and wheel Q and wheel N being so constructed and arranged, relatively to each other, that each revolution of the wheel N will mark one yard upon the index-wheel, and be shown by the finger R.

S is a stud, passing through an aperture in the frame A, in such a manner as to be susceptible only

of a lateral movement, and has its inner end provided with a suitable orifice to receive, and within which will revolve the socket-T, the outer end of this socket being provided with a slot, U, to receive and hold the end of the board or roller V, upon which it is desired to wind the fabric.

W is a hollow stud, passing through an aperture in the opposite side of the frame, and like the stud S, is only susceptible of a lateral movement.

Passing through, and rotating within this stud, is the shaft X, whose outer end is provided with a proper crank, Y, and its opposite or inner end is secured to the slotted chuck Z, which is designed to engage with and give motion to the board or roller V.

A circular disk or frame, A', may be secured to the chuck Z, to guide the fabric in the process of being wound upon the board or roller.

The legs of the frame may be so hinged or otherwise secured, that they may be entirely removed or folded up, so that the apparatus may be packed into a small compass for transportation, or when not in use; and the various parts of the apparatus may be made of wood or metal, as is desired.

The end of the fabric to be measured having been passed over the ribs and under the smoothing-boards, is inserted between the faces of the rollers or wheels N and O, drawn forward, and secured to the board or roller V, whose length should be equal to the width of the fabric, and which should be secured in the chucks T and Z, as heretofore described.

The guides G having been secured so as to guide the cloth so that an edge thereof will be on a line with the face of the wheel A', a forward motion of the crank Y will wind up the fabric on the board or roller. Said fabric, in its passage between the wheels N and O, rotates the wheel N, which should be just one yard in circumference. This motion is communicated to the index-wheel Q, and the number of revolutions of the wheel N, each one of which measures a yard, is indicated upon the index-wheel Q by the finger R.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination, with the frame A B C, provided with the ribs D, the adjustable smoothing-board E, and guides G, of the measuring-wheel N, the feed-wheel O, the arm J, the index-wheel Q, and the roller V, with the hollow studs S and W, and disk A', when constructed and operating as and for the purpose above described.

JOHN E. RACE.  
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Witnesses:

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