

G. R. Johnson, Dressing Leather.

N^o 54360.
Fig. 1.

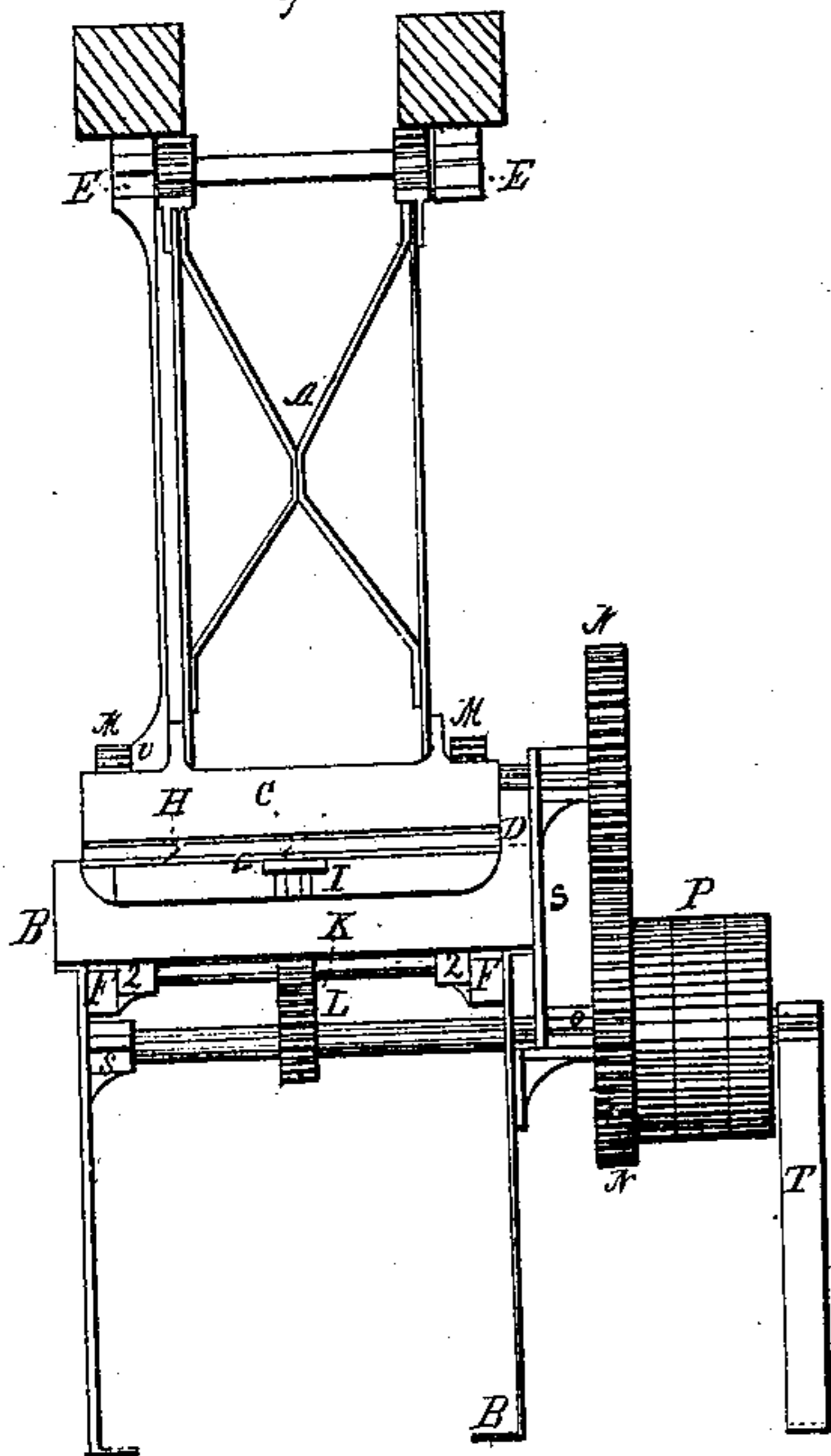
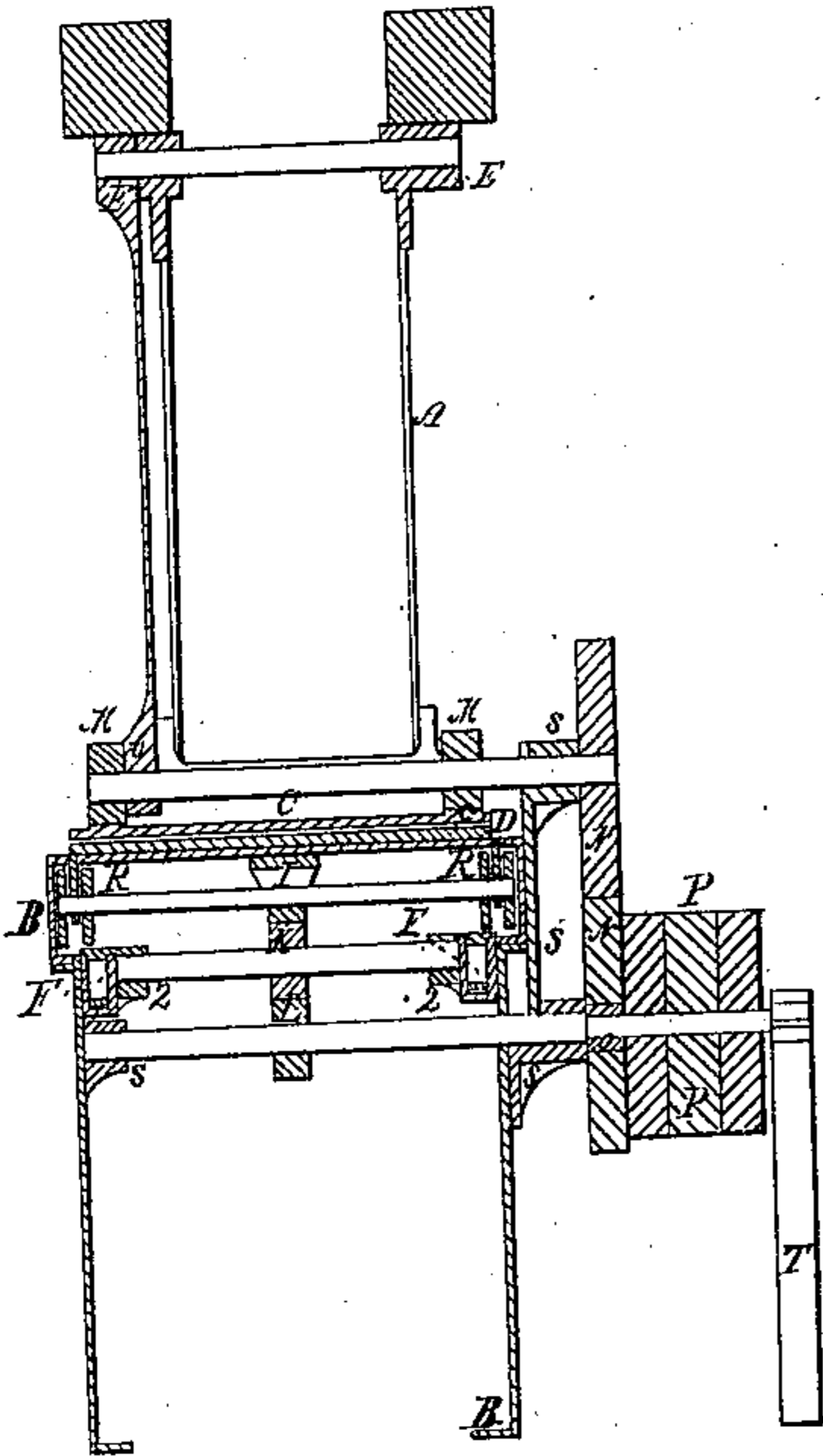


Fig. 3.



Witnesses:

Wm. G. Gibbons
J. L. Pursey

Patented May 1, 1866.
Fig. 2.

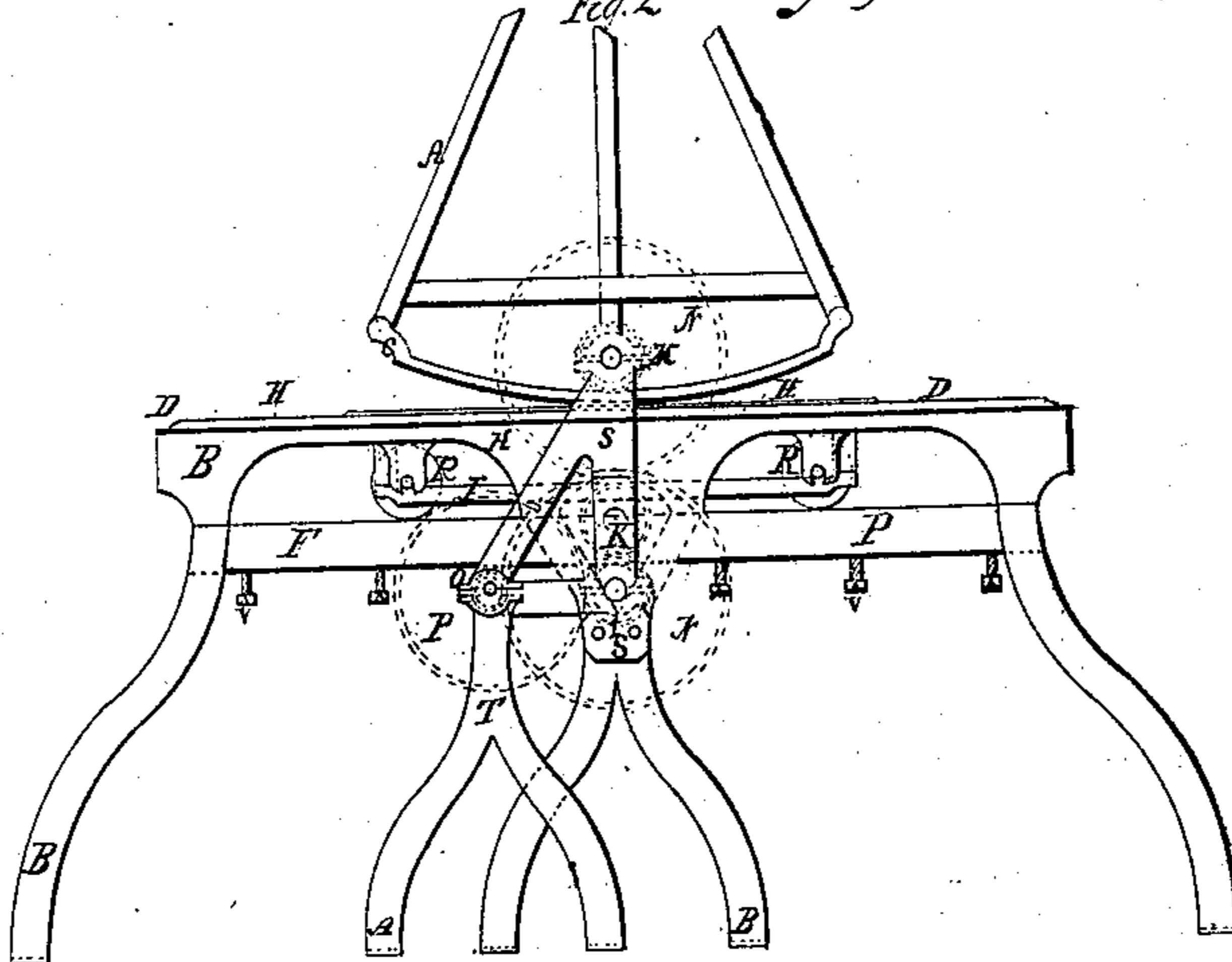


Fig. 5.

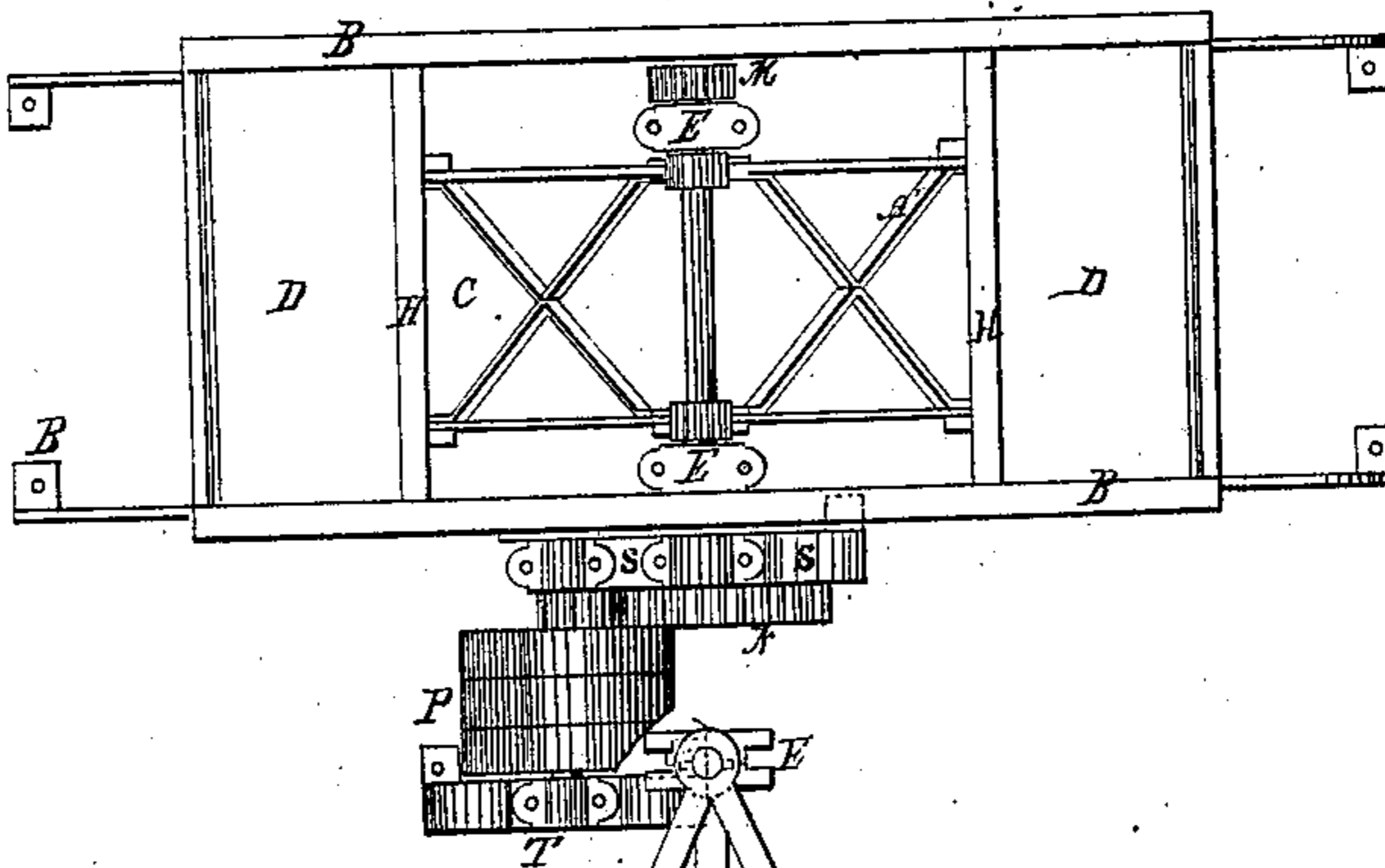
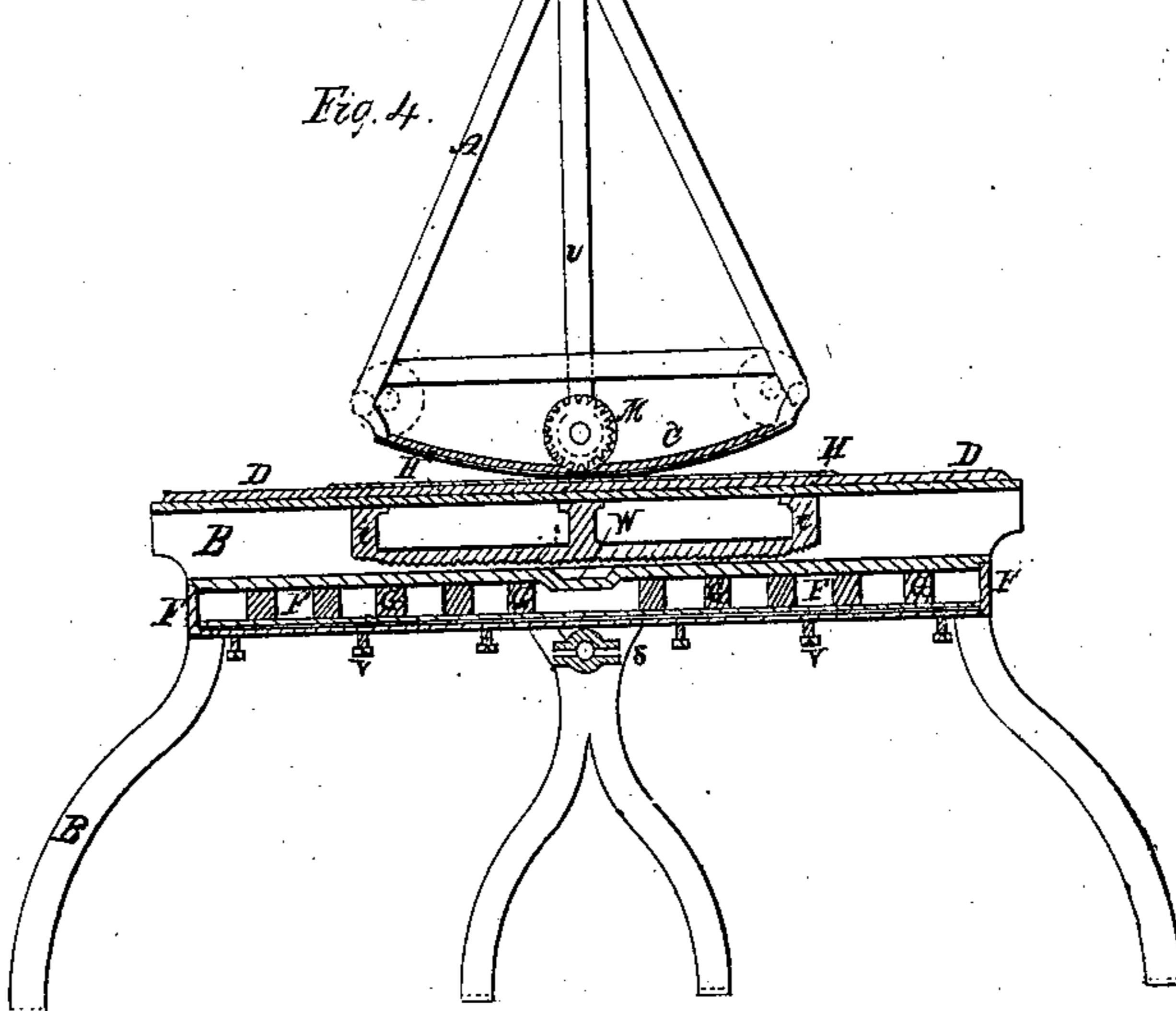


Fig. 4.



Inventor:

Geo. R. Johnson.

UNITED STATES PATENT OFFICE.

GEORGE R. JOHNSON, OF WILMINGTON, DELAWARE.

MACHINE FOR GRAINING MOROCCO.

Specification forming part of Letters Patent No. 54,360, dated May 1, 1866.

To all whom it may concern:

Be it known that I, GEORGE R. JOHNSON, of the city of Wilmington, in the county of New Castle, in the State of Delaware, have invented a new and useful Machine for Graining Morocco; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is an end elevation; Fig. 2, a longitudinal elevation; Fig. 3, a transverse section; Fig. 4, a longitudinal section; and Fig. 5, a plan. The drawings are three-fourths of an inch, equal to one foot.

A represents frame for swinging arc; B, frame for table; C, swinging arc; D, table; E, bearings for arc to swing from; F, box under table containing rubber springs; G, rubber springs; H, wood and sheet-rubber covering for table; I, rack under table for pinion K to work in; L, pinion working into pinion K; M, pinions working into racks on arc; N, gear-wheels to transmit motion from pulleys P and pinion O to table and arc through pinions K and L; Q, bearings for shaft of pinion K; R, wheels under table, four of which rest on strip of metal placed over rubber springs, and four (on same shaft) to prevent table from being raised too high. They bear on a projection cast on table-stand or frame. S, bearings for shafts of pinions, pulleys, and gear-wheels; T, outside bearing for pulley-shaft; U, bearing for end of shaft for pinions M. This bearing is cast solid with bearing E, and is to support end of shaft. V, set-screws tapped into bottom of box F to adjust pressure between arc and table; W, recess in metal covering for springs to allow table to drop half an inch, to facilitate putting skin fairly under arc.

This machine is intended to grain morocco, which is now only done by hand. I have had one in operation in this city for several days, and it works well. The morocco is doubled over, polished-side in, and is placed under arc at the bend or break, while the arc is at its

extreme throw. When the arc begins to move it rolls the skin over itself in such a manner as to break the grain of the skin, giving it the crimped appearance which morocco has when ready for market. It is passed over by the machine twice for each side, then again at right angles with the first work, which gives the creases or crimping a square shape on the surface. The skin is placed under the arc with a strip of metal in the hands of the operator, and is arranged for two persons to operate at the same time, one at each end of the machine. As soon as one skin has been passed over, the person at the other end of the machine places a skin under, and the arc passes over it as well. The table and arc move in opposite directions, and when the table is at either end of the stroke it drops, or the end immediately under arc drops one-half an inch, as explained above. The motion of arc and table is changed from going ahead to back by means of a cross and straight belt on three pulleys, one of which is secured to the shaft and two loose, similar to a machine-shop planing-machine. The arc and table should make about forty strokes a minute—twenty each way.

The arc is of cast iron, supported by wrought-iron bars, secured as shown in drawings, and on the face is riveted a composition (of brass) plate thirty-four inches long, thirty inches wide, and one-fourth or three-eighths of an inch thick, grooved across, with grooves one-sixteenth of an inch deep, and one-thirteenth of an inch apart. The table is of cast iron, covered with wood one inch thick, and the wood covered (immediately under arc) with sheet rubber one-fourth or one-eighth of an inch thick.

I claim—

For graining morocco, a moving table and swinging arc, operating together, substantially as described.

GEO. R. JOHNSON.

Witnesses:

F. G. WILMANS,
W. W. PUSEY.