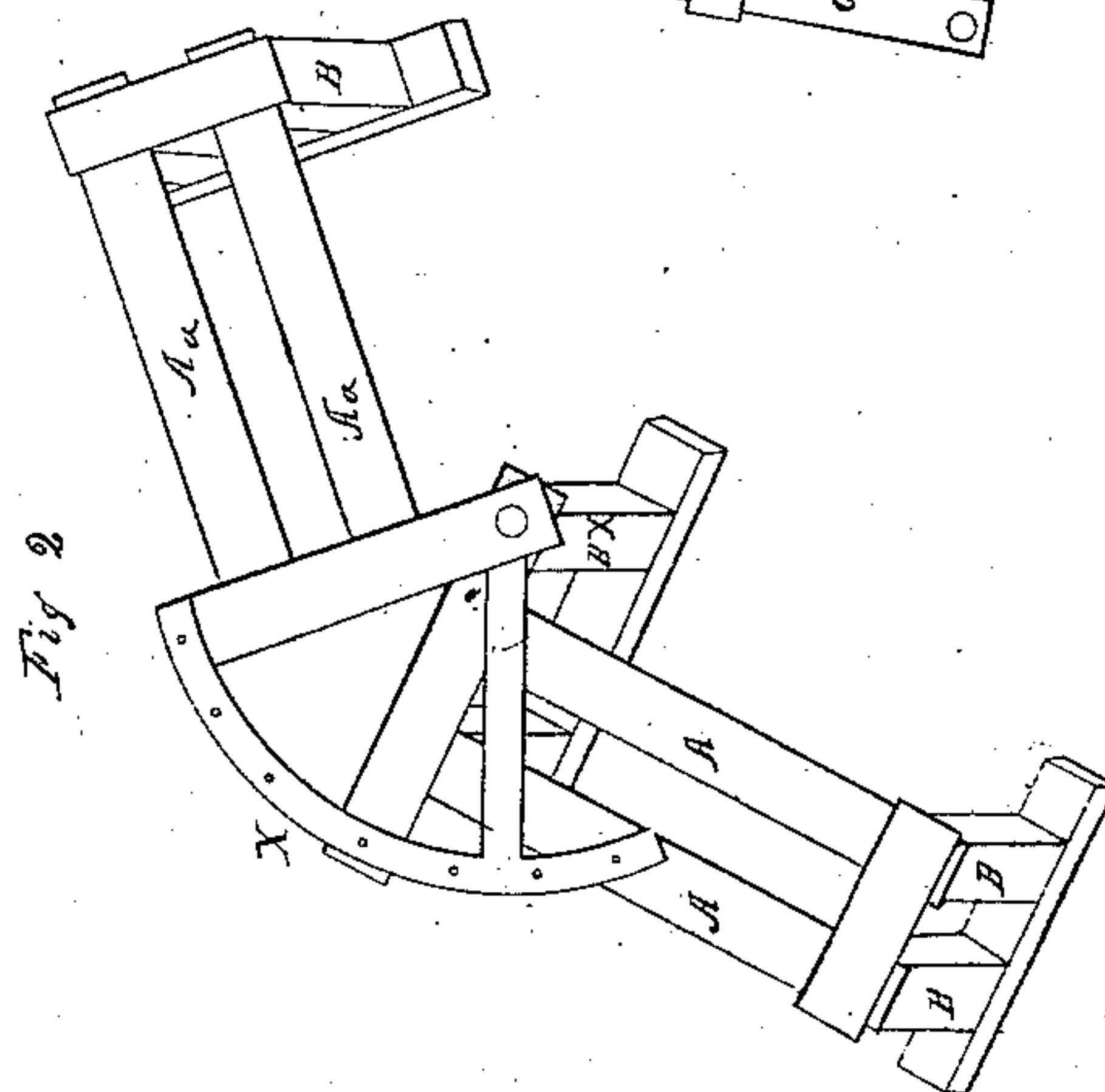
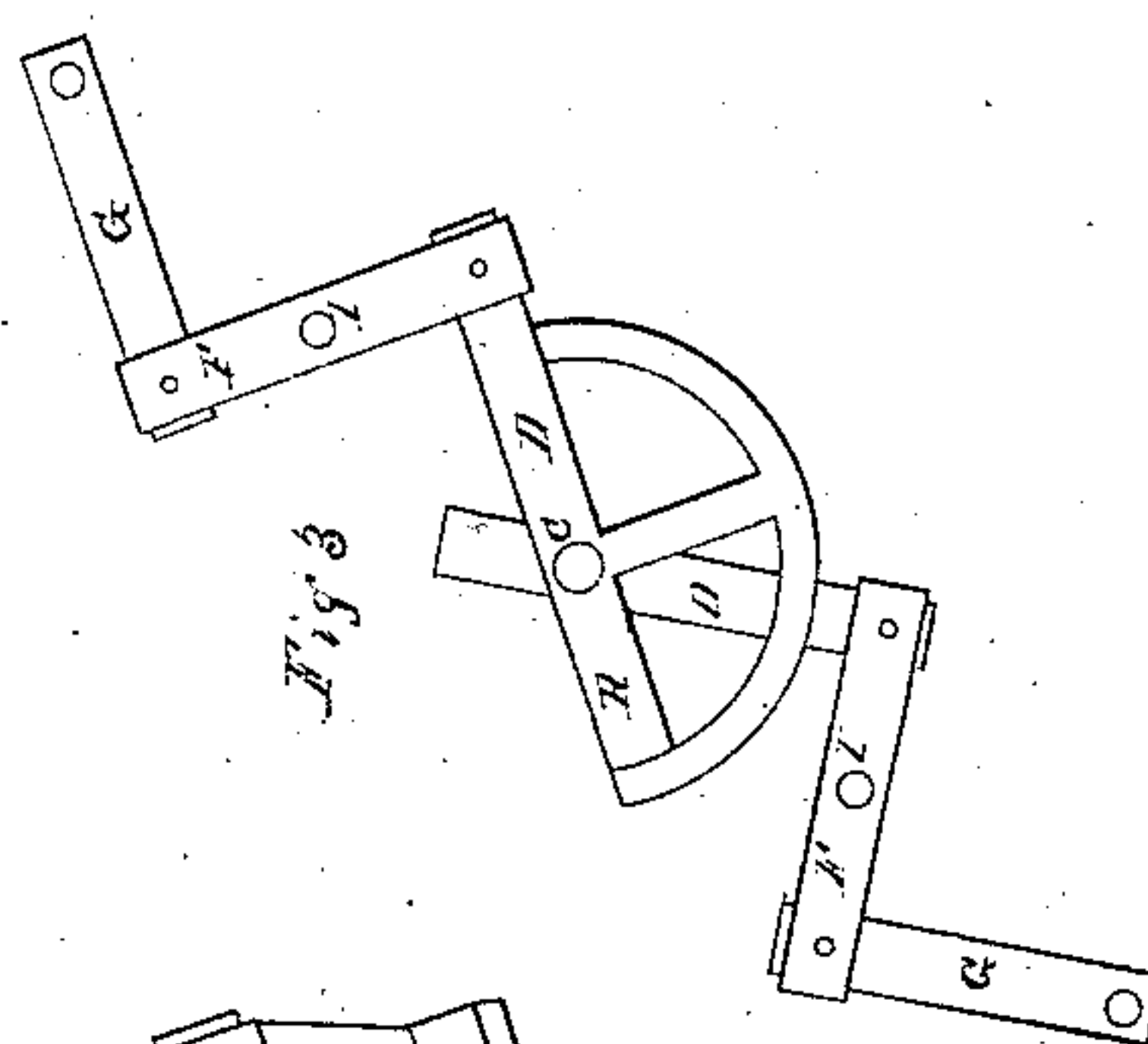
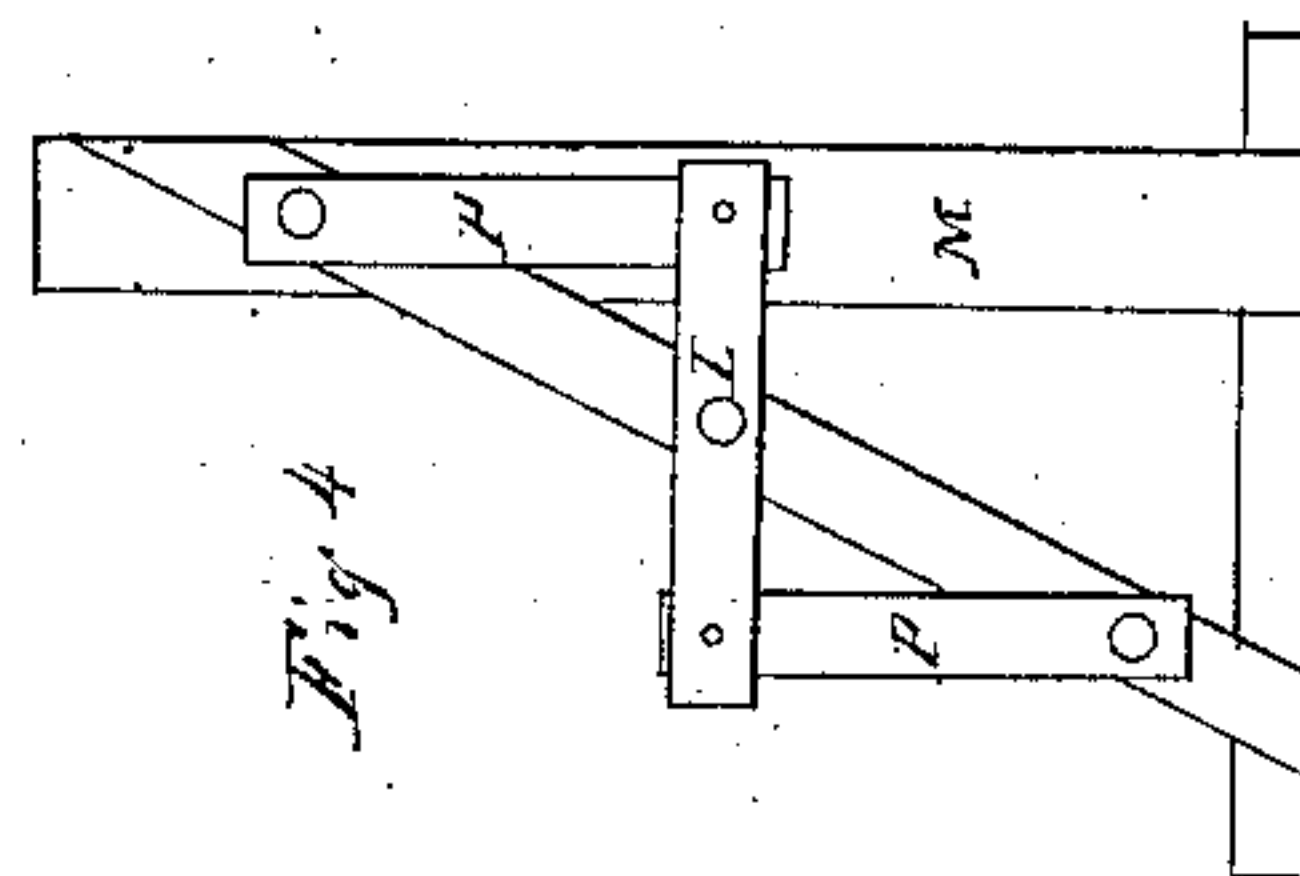
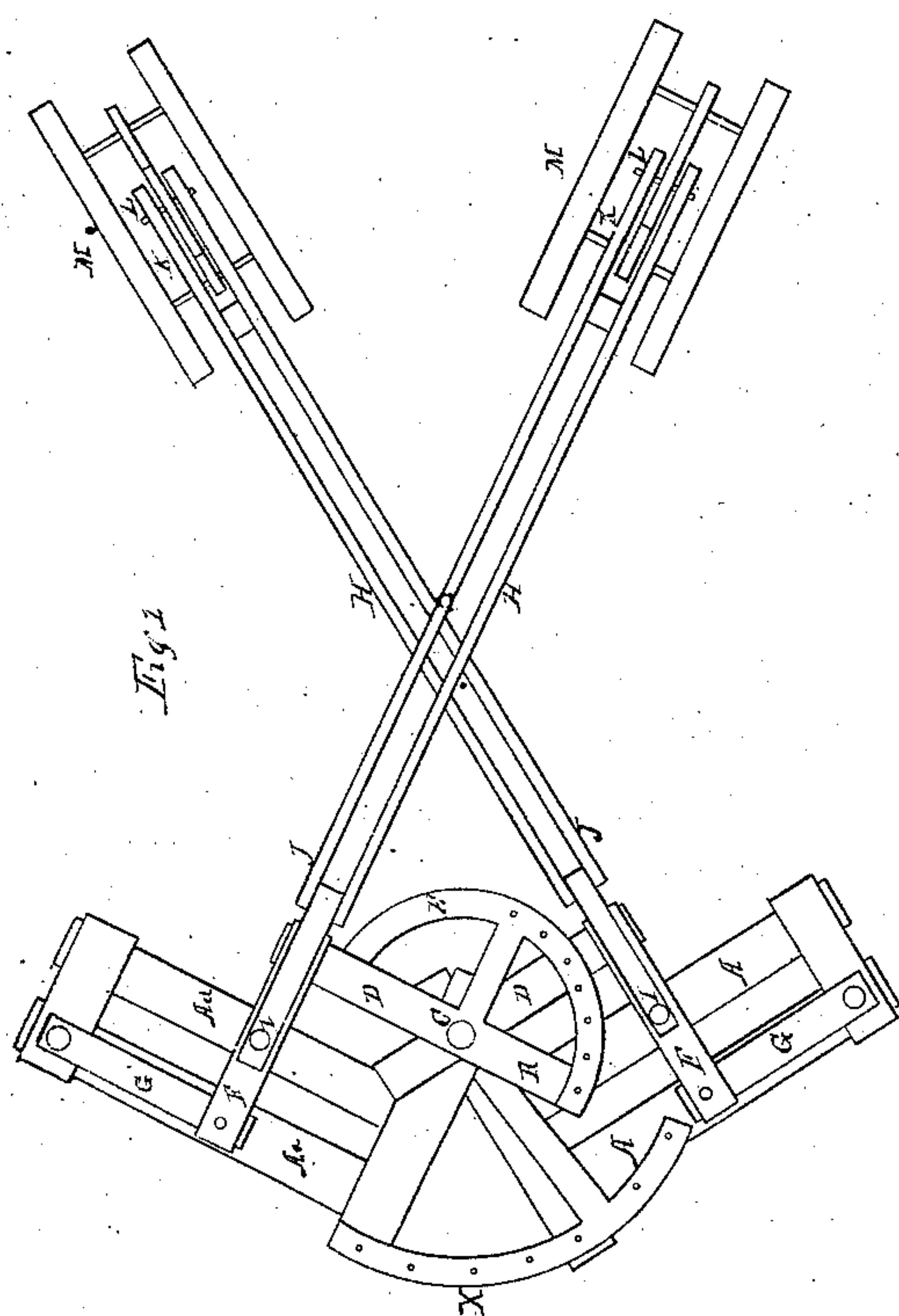


*W. D. Gallaher,
Sawing Stone.*

N^o 16,086.

Patented Nov. 18, 1856.



UNITED STATES PATENT OFFICE.

WILLIAM D. GALLAHER, OF BRIDGEWATER, PENNSYLVANIA.

MACHINE FOR SAWING MARBLE.

Specification of Letters Patent No. 16,086, dated November 18, 1856.

To all whom it may concern:

Be it known that I, WILLIAM DOBSON GALLAHER, of the township of Bensalem, county of Bucks, and State of Pennsylvania, have invented a new and useful machine for sawing marble by a combination of two saws to cut at the same time two sides of a block of marble at any required angle to each other; 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 a bird's-eye view or ground-plan of the several parts in connection; Fig. 2 a perspective view in detail; Fig. 3 a plan in detail, and Fig. 4 a vertical section in detail; and to the letters of reference marked thereon, as follows: to wit:

A, A^a (Figs. 1 and 2) are two rectangular frames raised to any desired height by the columns B, B at their several angles; one of which columns B X is common to both frames, and around which as an axis, they can be moved horizontally, so as to allow them to be placed at any required angle to each other: the said angle being indicated by the arc X which is attached to the frame A^a. On this connecting column B X also as a support, the axis C of the two beams R, C D and D' vibrates vertically, the two beams R C D and D' having been adjusted to the same angle with the supporting frames A, A^a, and being retained in this position by means of a screw-pin in the connecting arc E which is attached to the beam R, C, D. These beams R C D and D' form with the other beams G G F F "parallel-joints," to each of which, one end J of each of the two frames H H for containing the saws is attached by means of the pivot I.

The frames H H for containing the saws

are supported at their other extremities K K and work on the pivots L L in the "parallel-joints" placed in the frames M M in a vertical position, and are so arranged as to pass one above the other, without contact in crossing.

In sawing the two sides of a block to meet at an angle, it is necessary that the saws should cross each other. They must therefore be adjusted after the apparatus is placed in position; the blade of one saw being arranged above that of the other.

When the sides of the block to be sawed (if it be of large bulk) are not required to meet at an angle, the frames H H for containing the saws can be carried around to the opposite side of the main supporting framework A, A^a; in which case they will not cross, but diverge from each other.

In adjusting the apparatus, the frames H, H for containing the saws are to be placed in a right line with the center bars F F of the combined horizontal "parallel-joints": and the vertical frames M M to be placed in such a position that the two corresponding limbs P, P of their "parallel-joints" shall also be vertical.

Motion can be communicated by means of steam, horse or water power by an appropriate attachment to the point R, of the vibrating beam R C D.

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

The frames H H, and the mechanism connected therewith, when constructed and arranged to operate in relation to each other, in the manner and for the purpose set forth.

WM. D. GALLAHER.

Witnesses:

J. O. GALLAHER,
JOSEPH PAXSON.