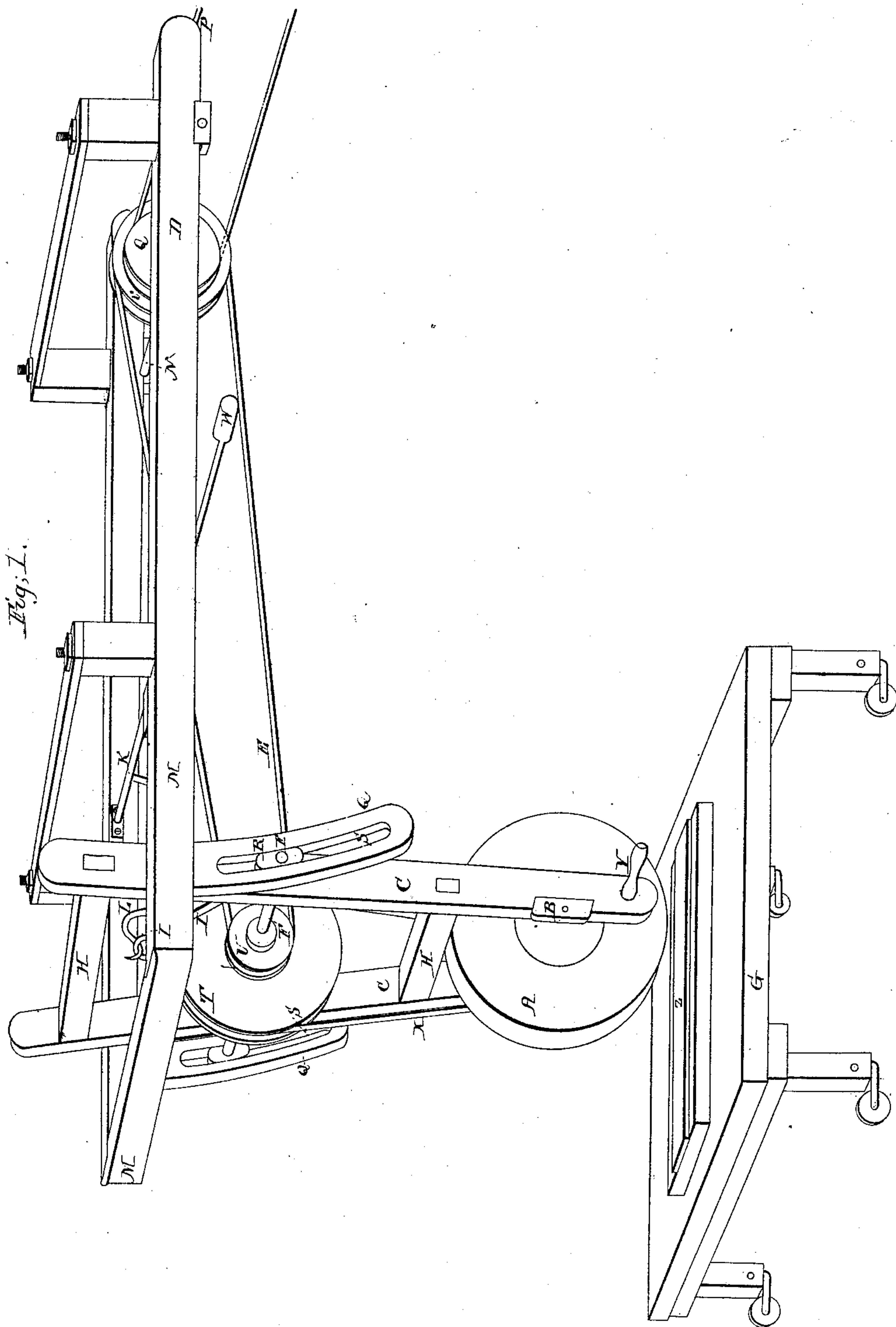


J. G. Tibbets.
Polishing Iron.

N^o 1,183.

Patented June 21, 1839.



UNITED STATES PATENT OFFICE.

JOHN G. TIBBETS, OF NEW YORK, N. Y.

MACHINE FOR DRESSING IRON AND OTHER SUBSTANCES.

Specification of Letters Patent No. 1,183, dated June 21, 1839.

To all whom it may concern:

Be it known that I, JOHN G. TIBBETS, of the city, county, and State of New York, have invented a new and useful Mode of

5 Applying Revolving Emery-Wheels to Dressing Iron and other Substances, which is described as follows, reference being had to the accompanying drawings of the same, making part of this specification.

10 The figure represents a perspective view.

The axle of the revolving emery wheel A, turns in boxes B, in two side pieces C, of a hanging frame, which has an upward and downward movement in the arc of a circle, 15 whose center is at D, by which the band E is always kept tight, as well as a pendulous movement in the arc of a circle whose axle is at F, by which the emery wheel may be applied to any part of the substance to be 20 dressed by bringing said emery wheel down upon it and moving a table G on which the substance to be dressed is secured backward and forward, or to the right or left, as desired, said table moving on casters or rollers 25 to enable the workman to shift its position without much exertion. The two side pieces C C, of the hanging frame, at the lower ends, approach each other, and are united together by two cross pieces H H tenoned 30 into the side pieces. The hanging frame is suspended by a handle I, chain, or other fixture, to the short end of a curved lever L, whose fulcrum is at K, and at whose long end is suspended a weight W, sufficient 35 to balance the pendulous frame C, H, and the parts appended thereto. The fulcrum of the lever suspending the pendulous frame, and the emery wheel, &c., is supported in a horizontal rectangular frame 40 M, fastened to the ceiling joists of the factory, above or to any convenient place, by bolts and screws, or other suitable means. The axle N, of the pulley O, around which passes the band P leading from the driving 45 pulley may turn in this horizontal frame M, or in any convenient place, two parallel curved guides A, A, the segment of the circle whose center is at D, are fastened to the under side of the horizontal frame M extending downward any required distance. 50 In these curved guides are made curved slots S S, in which are placed curved segments, slides, or boxes R, R, in which the axle F, of the pulleys T, U, is fixed or revolves, and which boxes R R, move up or

down in said curved slots as the wheel is raised or lowered and when it is not in use and is removed out of the way the pendulous or hanging frame turns on said axle until the emery wheel is brought against the 60 ceiling joists, where it may be secured in any convenient manner. The pulleys may either be fixed to said axle F, or they may turn it when they are fixed the axle must turn in the curved slides and when they are 65 loose, the axle may be fixed in the slides. The band E after passing around a large pulley V on the axle N leads around the small pulley U, turning on the axle F and which pulley is fixed to the sides of the 70 large pulley T, from which a band X extends to a small pulley fixed on the side of the emery wheel.

Y represents a handle inserted into the side of the hanging frame for the work- 75 man to lay hold of to guide the emery wheel over the substance to be dressed.

Z represents a plate of cast iron fixed on the movable table G in a position to be dressed by the emery wheel which is repre- 80 sented as hanging over it.

To dress cast iron or other substances by this mode of applying the emery wheel the iron or other substance is first secured on the table G, which is brought under the 85 emery wheel and placed in a proper position, the emery wheel is then turned with great velocity, say at the rate of about 1,500 revolutions per minute (by hand, horse, steam, or other power) by means of the be- 90 fore described combination of pulleys, bands, and axles; the workman then lays hold of the handle Y and brings the wheel down upon the iron which is dressed almost as soon as the revolving emery wheel touches 95 it, moving the emery wheel horizontally backward and forward over the iron.

The invention claimed and desired to be secured by Letters Patent consists—

In the before described mode of applying 100 the revolving emery wheel by means of the balanced hanging frame in combination with the curved guides A A as described whether the emery wheel be suspended in the manner before described, or in any other 105 mode substantially the same.

JOHN G. TIBBETS.

Witnesses:

WM. P. ELLIOTT,
EDMD. MAHER.