

(No Model.)

W. S. ROBBINS.
GRINDING MACHINE.

No. 401,212.

Patented Apr. 9, 1889.

Fig. 1.

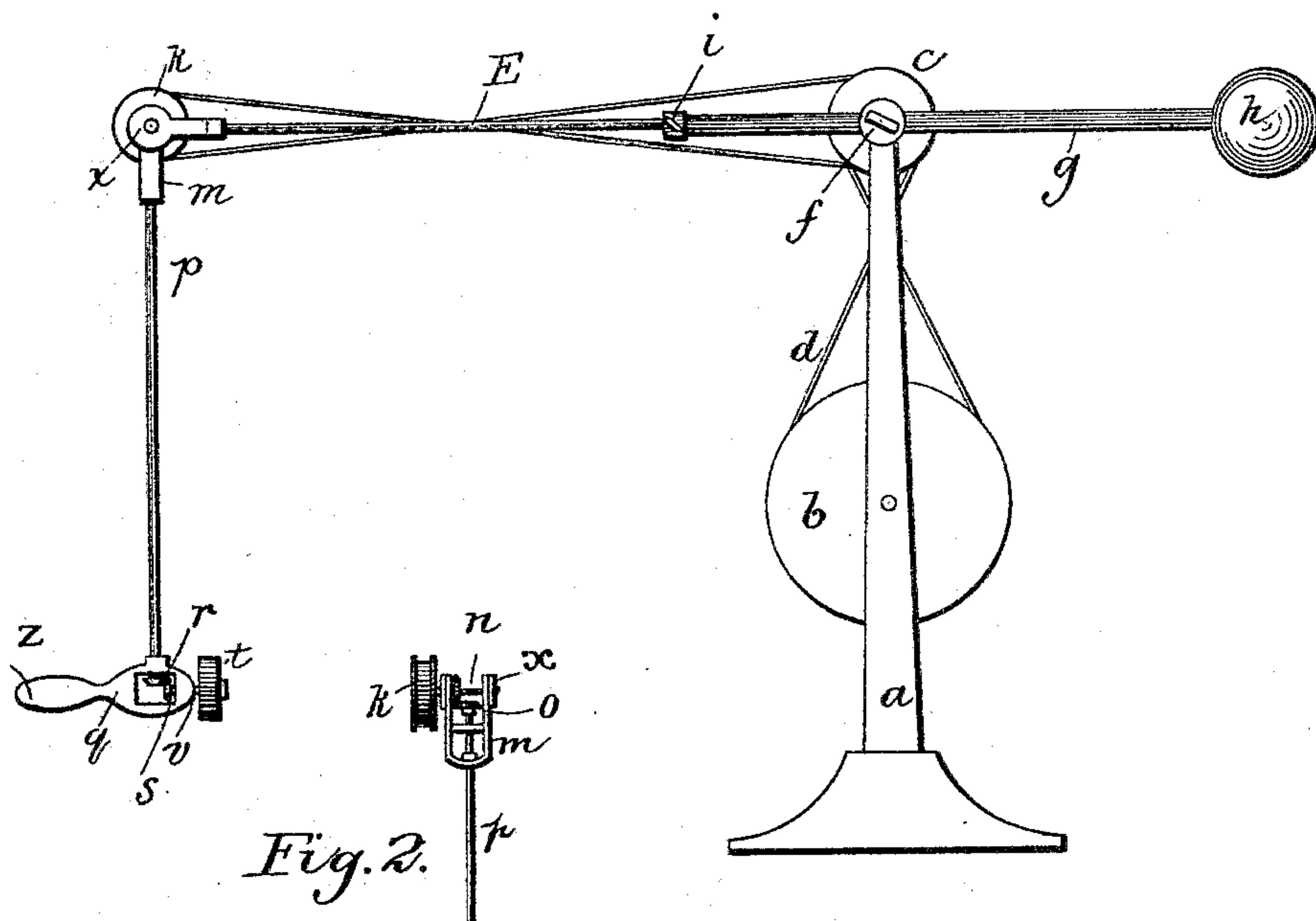


Fig. 2.

Witnesses
Fred A. Mason
C. O. Mason

Inventor,
William S. Robbins
by F. A. Mason atty

UNITED STATES PATENT OFFICE.

WILLIAM S. ROBBINS, OF NEW BEDFORD, MASSACHUSETTS.

GRINDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 401,212, dated April 9, 1889.

Application filed July 20, 1888. Serial No. 280,578. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. ROBBINS, a citizen of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Grinding-Machines, of which the following is a specification.

In the accompanying drawings, Figure 1 is a side elevation of the machine, and Fig. 2 is a view showing the detail of some of the working parts.

The band-wheels *b* and *c* are journaled on studs projecting from the side of the standard *a*, and are connected by a band, *d*. The tube *g*, having weight *h*, is pivoted to the top of the standard *a* at *f*. The rod *e* is placed within the tube *g*, and secured by the thumb-screw *i*.

The outer end of the rod *e* is provided with a fork, *x*, between which is hung the yoke *m* by the shaft of the band-wheel *k*. The rod *p* is journaled in the yoke *m* and its end provided with a bevel-gear, *o*, which meshes with a bevel-gear on the shaft of the band-wheel *k*.

The lower end of the rod *p* is journaled in

the box *q*, and is provided with a bevel-gear, *r*, which meshes with the bevel-gear *s* on the shaft *v*, on which shaft is mounted the emery-wheel *t*. The box *q* is provided with a handle, *z*, by means of which the work of the emery-wheel is controlled. The band-wheel *c* has a double face, in order to take the band from the wheel *b*, and also carry the band to the wheel *k*.

What I claim is—

In a grinding-machine, the combination of the standard *a*, band-wheels *b* and *c*, pivoted tube *g*, rod *e*, provided with fork *x*, the shaft *n*, provided with band-wheel *k*, and bevel-gear meshing with bevel-gear on rod *p* and pivoting the fork *x* and yoke *m* together, the rod *p*, journaled in yoke *m* and box *q*, and provided with bevel-gears *o* and *r*, the box *q* provided with handle *z*, having journaled in it the shaft *v*, having mounted on it the emery-wheel *t*, and bevel-gear *s*, all as shown and described.

WILLIAM S. ROBBINS.

Witnesses:

HENRY W. MASON,
THOS. M. JAMES.