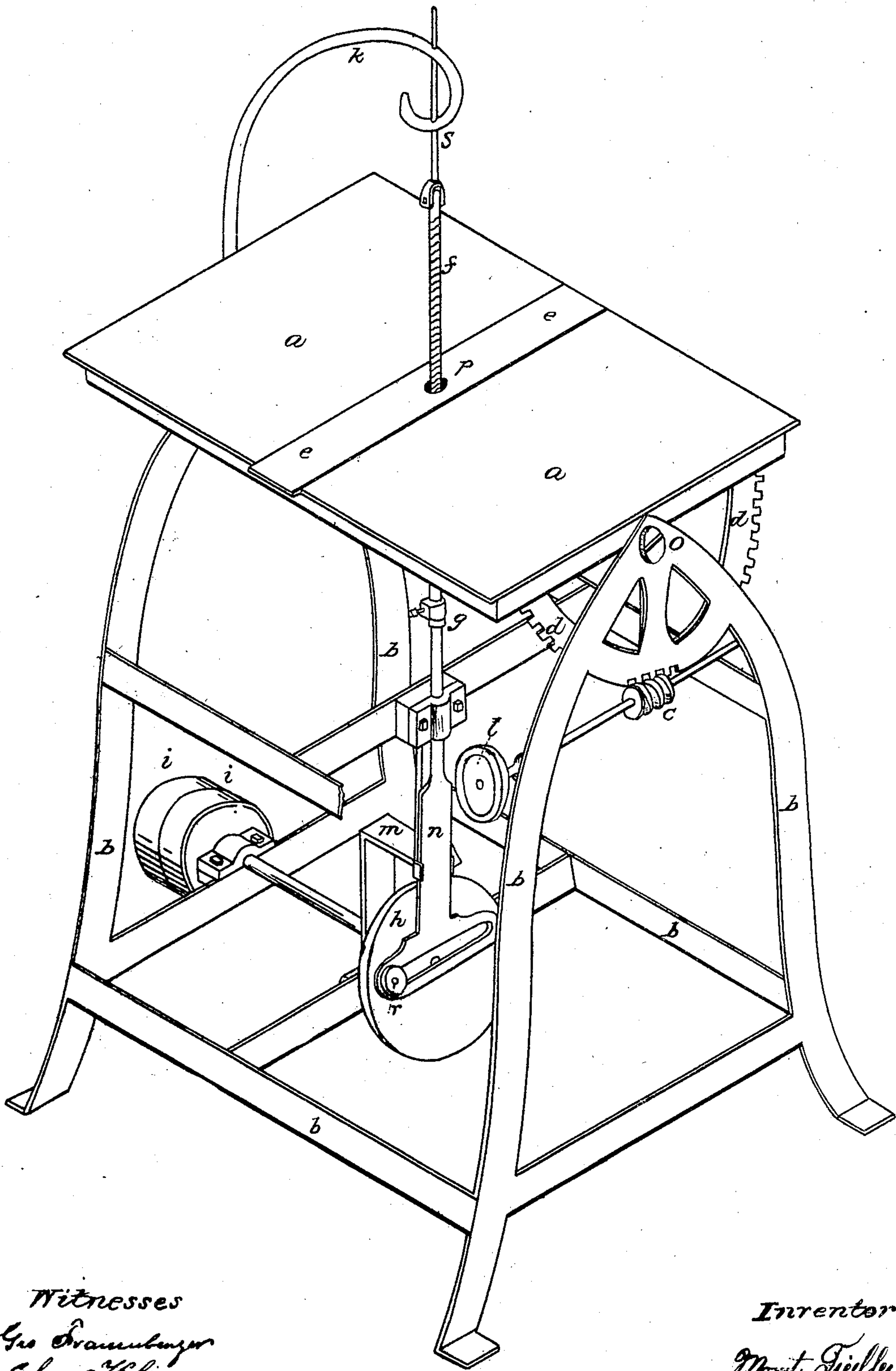


M. Fiedler.

Filing Machine.

Nº 75402

Patented Mar. 10, 1868.



Witnesses
Geo Braumburger
John Klein.

Inventor
Moritz Fiedler.

United States Patent Office.

MORITZ FIEDLER, OF ROCHESTER, NEW YORK, ASSIGNOR TO HIMSELF AND
JOHN KLEIN, OF SAME PLACE.

Letters Patent No. 75,402, dated March 10, 1868.

IMPROVED FILING-MACHINE.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, MORITZ FIEDLER, of Rochester, county of Monroe, and State of New York, have invented a new and useful Machine for Filing Wood or Iron at different angles; 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 drawing, making a part of this specification, in which—

Figure 1 is a perspective view of my machine.

b b b b b represent an iron frame. *a a* is an iron table, hung by two pivots, *o*, on opposite sides, in the frames *b b*. In the centre of table *a* is a sliding plate, *e e*, with a hole, *p*, in its centre. *i i* are pulleys. *h* is a balance-wheel, with a crank, *r*. *n* is a perpendicular shaft, to which the file *f* is attached at *g*. Letter *m* represents a brace, and also a guide for the perpendicular shaft *n*. *k* is an arm or brace, which forms a guide for the upper end of the file *f*. The rod *s* is made to slide freely through the holes made in the arm *k*. *d d* is a semicircle, made solid to the table *a a*, and is provided with cogs. *c* is a horizontal gear, by which the table *a a* is given the proper position ready for use.

The nature of my invention consists in constructing a machine for the purpose of filing wood or iron at different angles, with a file running perpendicularly through an adjustable table.

To enable others skilled in the art to make and use my machine, I will proceed to describe its construction and operation.

I build a frame, *b b b b b*, of either wood or iron, to which I apply an adjustable table, *a a*, of the same material. The table *a a* is hung in the frame *b b* by two pivots *o* on opposite sides. Solid to the table are two semicircles *d d*, on the same sides with the pivots, and at equal distance from the pivots, as seen in drawing at *o*, which forms the pivot, and *d d* the semicircle. One of the semicircles *d d* is provided with cogs, which are fitted in a horizontal gearing, *c*. This horizontal rod or gearing *c* is rotated by a small wheel, *l*, on one end of the rod, and by turning the wheel *l* either one way or the other the table will move to any desired angle, and will keep its position until changed by turning the wheel *l*. In or through the centre of the table *a a* is a sliding plate, *e e*, and in the centre of the sliding plate *e e* is an opening, *p*, through which the file passes. The file *f* moves perpendicular, and is made to cut downward. As the table *a a* is set at different angles, it becomes necessary to move the sliding plate *e e* so as to keep the file *f* always in the centre of the opening *p*. This hole or opening *p* should be so small as to give the file sufficient room to pass through without coming in contact with its sides. Without the sliding plate it would be necessary to have the opening *p* much larger. The wood to be filed should lie solid and close to the file, to prevent the file from tearing the wood. The quick motion of the file *f* makes a very smooth finish to the wood, so that it becomes unnecessary to use any sand-paper after it leaves the file, thus saving a great deal of labor.

The file *f* can be shaped to suit the work, and also can be very easily removed or changed at *g*, as seen in drawing. The arm *k* is only used for heavy work to support the upper end of the file *f*.

My machine can also be used for sawing, by inserting a saw in place of the file, and attaching one end to a lever above the table.

I claim the combination of the table *a*, toothed segment *d*, and worm *c*, with the slotted pitman *n* and crank *r*, arranged substantially as described.

MORITZ FIEDLER.

Witnesses:

GEO. FRAUENBERGER,
JOHN KLEIN.