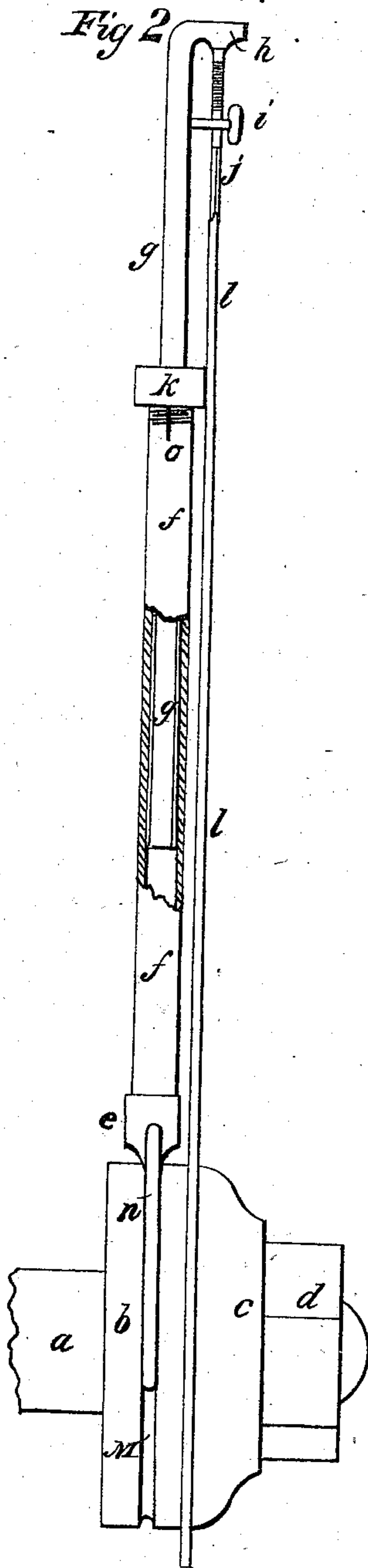
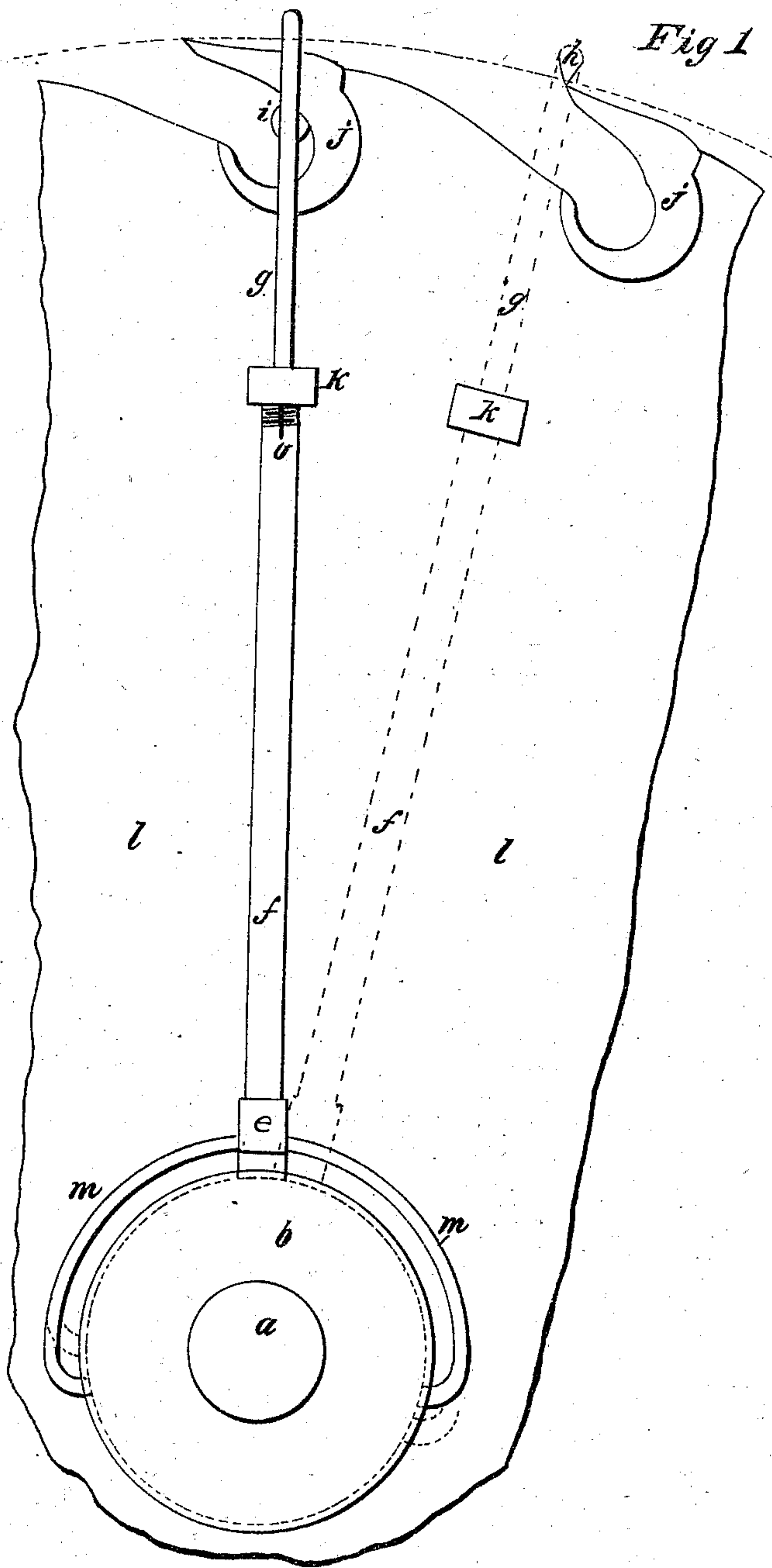


W. P. Miller,

Saw-Set,

N<sup>o</sup> 83,524.

Patented Oct. 27, 1868



WITNESSES:

J. S. Woodward  
David H. Edsall

INVENTOR:

Warren P. Miller

# United States Patent Office.

WARREN P. MILLER, OF NEW YORK, N. Y.

Letters Patent No. 83,524, dated October 27, 1868.

## IMPROVED GAUGE FOR CIRCULAR SAWS.

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, WARREN P. MILLER, in the city, county, and State of New York, have invented a new and improved Mode of Rounding Circular Saws; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the application of a trammel to one of the collars on the mandrel, and is so constructed as to carry an adjustable index-point, by which the relative position of the points of all the teeth may be readily determined.

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

I construct a hollow shaft, of suitable length and diameter, and insert in one end a plug, whose external diameter is fully equal to that of the tube; reduce the external end of the plug to a thick edge, suitable to traverse in a groove formed in the stationary collar on the saw-mandrel; pierce the plug at a proper distance from the end, and insert a round piece of iron, which bends into the form of a circle having about one hundred and ninety-five degrees; contract the ends inward, and reduce them to form suited to the groove in the collar.

On the opposite end of the tube, cut a screw that has a taper towards the end, and fit a milled nut thereto, having previously divided the end of the tube, with a saw parallel with its length, into four equal parts, so that when the nut is turned on, it will contract the end of the tube.

Take a round rod of metal, the diameter of which is equal to the hole in the tube, and bend the end at right angles, and reduce the under side to an edge suited to the purpose of a gauge-point. Parallel with the gauge-point insert into the shaft, at a proper distance from the end or bent point, a knob that will freely pass into the throats of the teeth. Insert the straight end of the rod into the tube. Now pass the forked end of the tube over the collar on the mandrel, the ends of the forks and plug plying into the groove. Adjust the gauge-point to any tooth on the saw that it is desired that the other teeth should be made equal to.

Like letters refer to like parts on the several drawings.

Letters *a a*, the saw-mandrel.

Letters *b b*, the fast collar, with groove.

Letters *c c*, loose collar.

Letters *d d*, nut.

Letters *e e*, plug, in the end of tube.

Letters *f f*, the tube or shaft.

Letters *g g*, rod, carrying the adjustable point.

Letters *h h*, point of the sliding rod.

Letters *i i*, knob, to engage in the teeth.

Letters *j j*, teeth of the saw.

Letters *k k*, nuts, on the end of the tube.

Letters *l l*, the saw-plate.

Letters *m m*, forks, to clasp the collar.

Letters *n n*, groove in the collar.

Letters *o o*, slits in the end of the tube.

Figure No. 1 is a side view of a section of a saw, showing the indicator applied to the collar. The dotted lines show its application to the point of a tooth.

Figure No. 2 is a cross-section of the saw, showing the application of the indicator to the collar, and the gauge to the point of a tooth.

When the gauge is to a tooth, the traversing-rod is fastened by turning the nut *k*. Now, it will be understood that the clamps *m m* will traverse on the collar as the gauge-point is swung around the saw from one tooth to another, thus determining the length of all the teeth.

The knob *i* is for the purpose of engaging in the sockets of throats of the teeth to prevent them from falling when the person is engaged in filing or upsetting a tooth.

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

The gauge for rounding circular saws, consisting of gauge-point *h*, gauge-rod *g*, nut *k*, tube *f*, plug *e*, and curved arms or forks *m m*, in connection with grooved collar *b*, all constructed, combined, and arranged substantially as and for the purpose specified.

WARREN P. MILLER.

Witnesses:

JNO. S. WOODWARD,  
DAVID M. EDSALL.