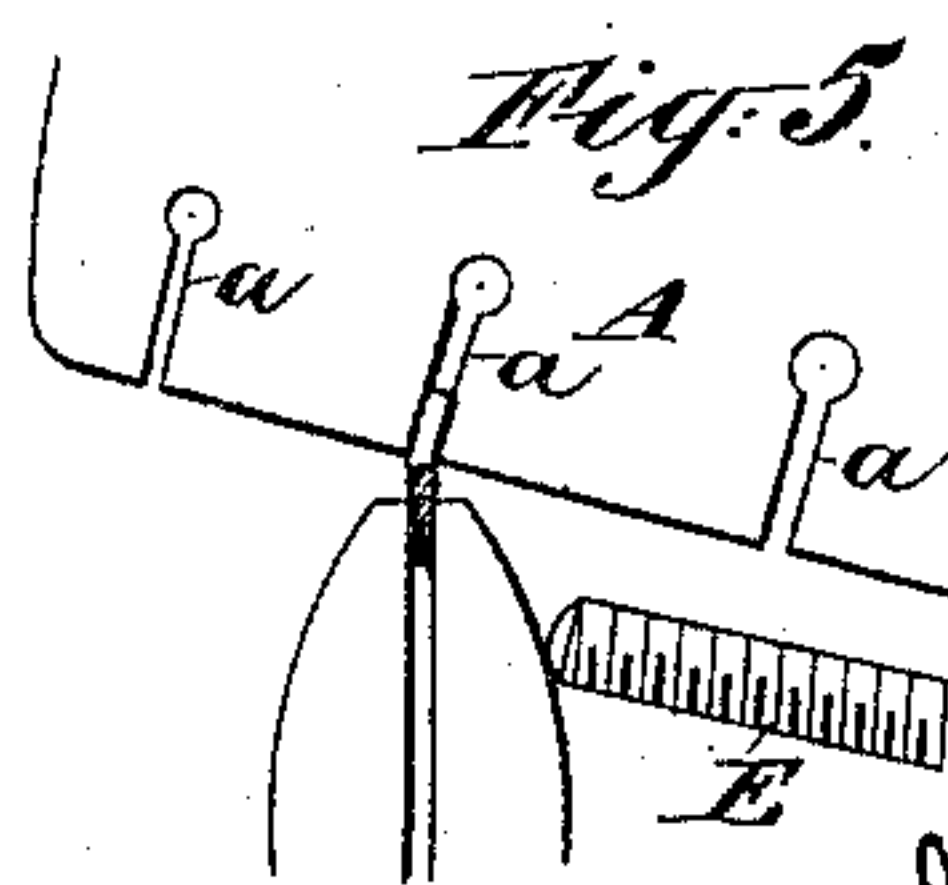
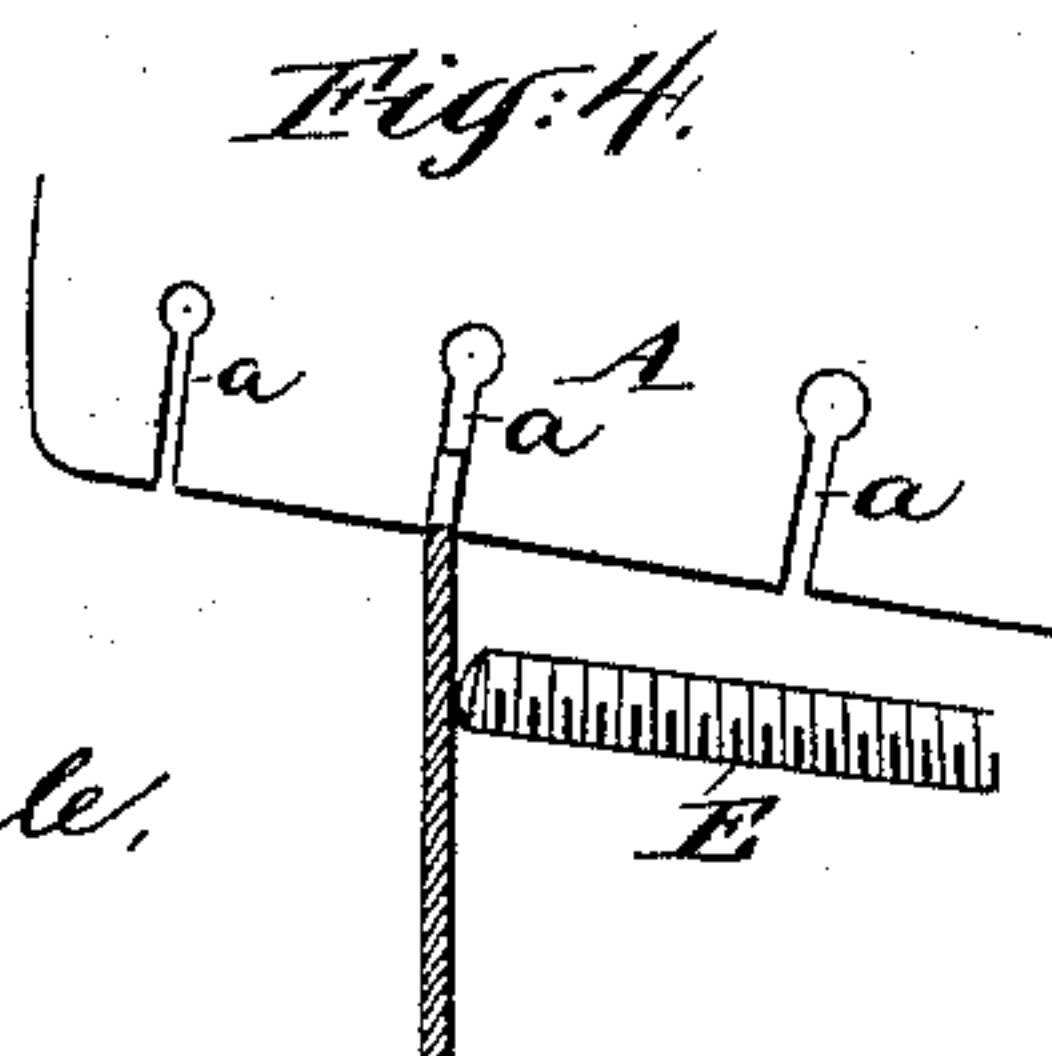
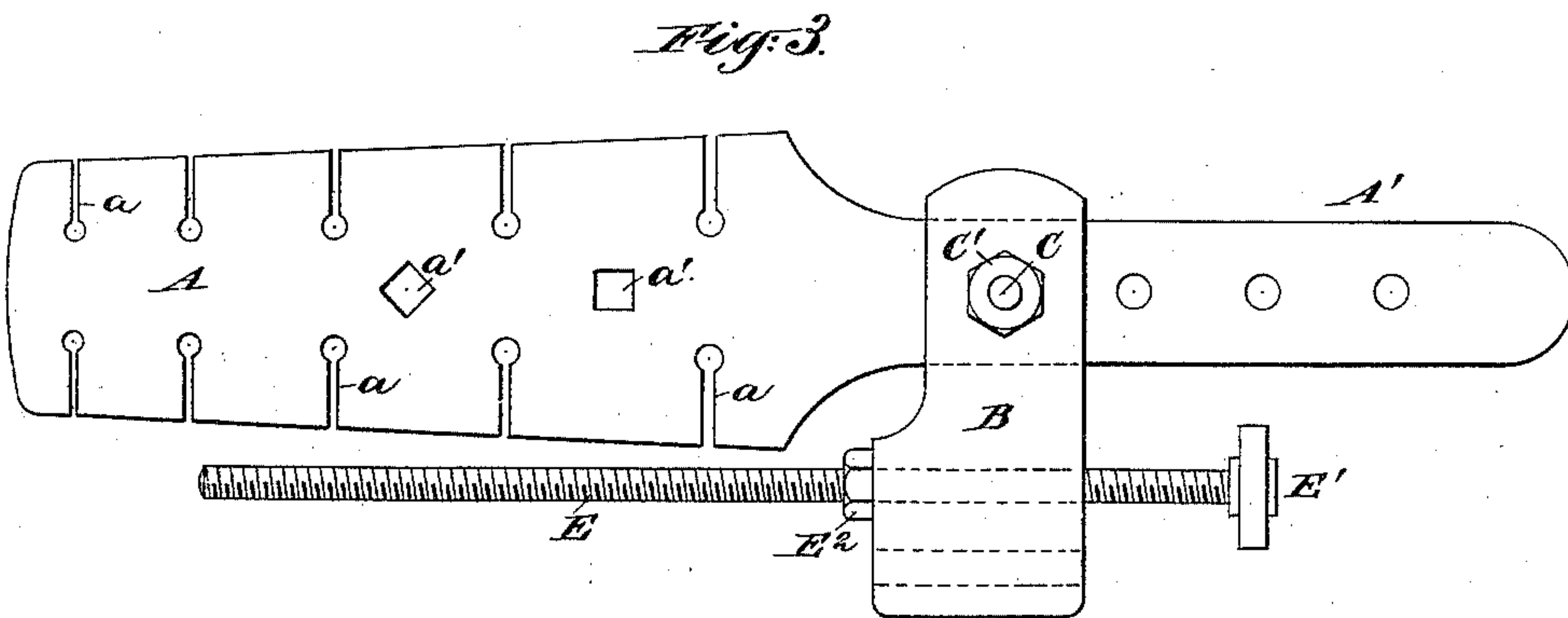
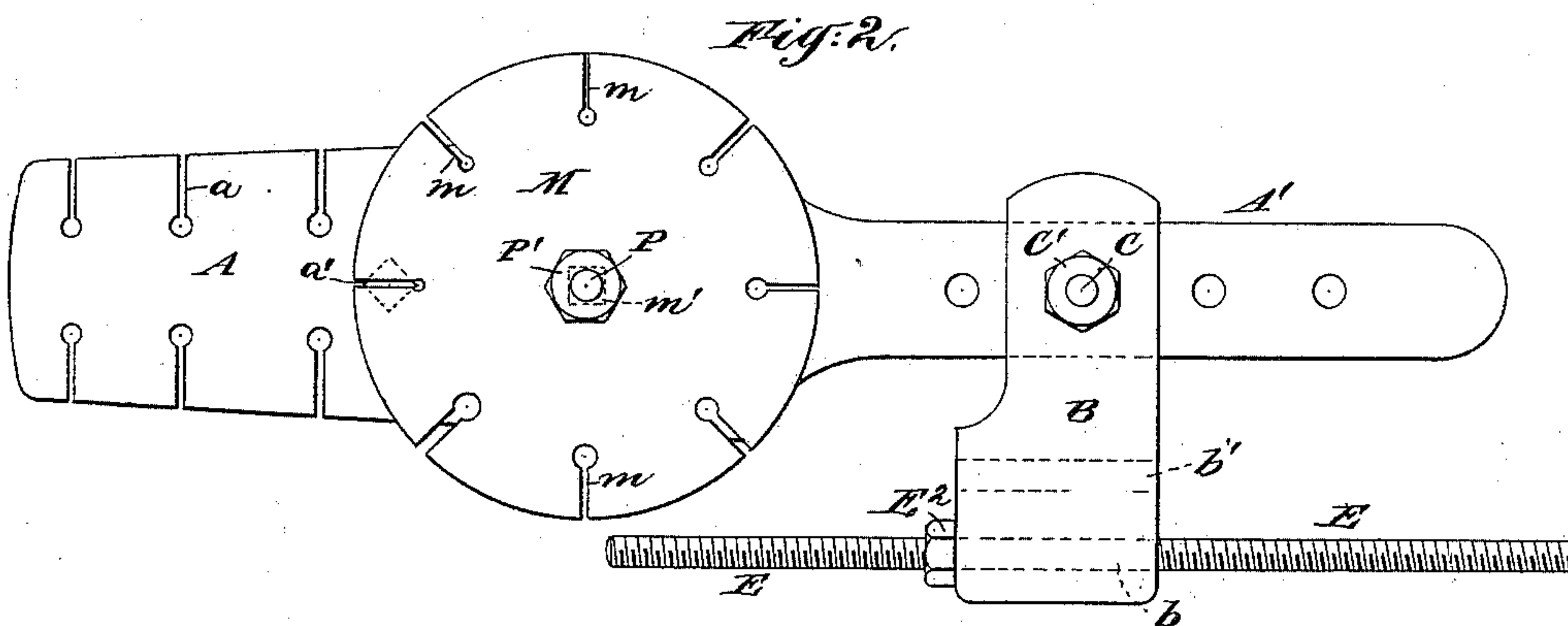
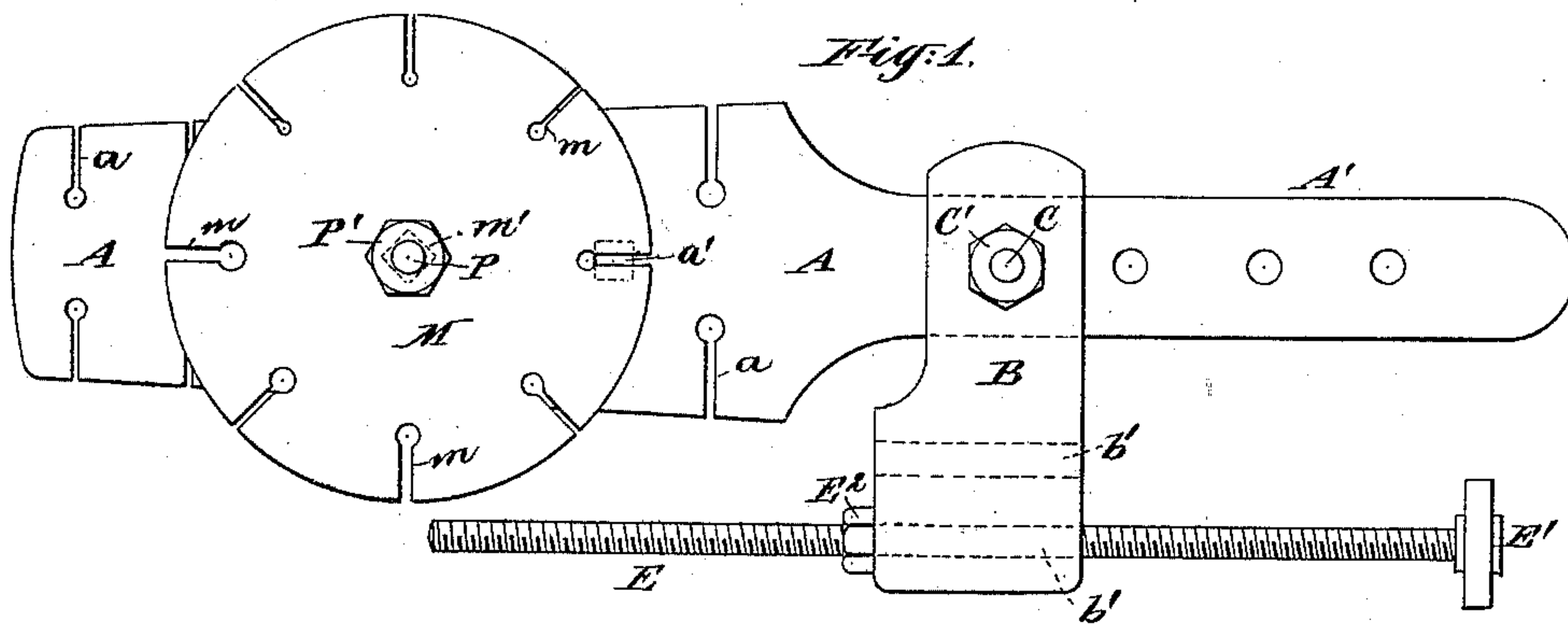


(No Model.)

P. RYAN.
SAW SET.

No. 409,805.

Patented Aug. 27, 1889.



Witnesses:
Charles R. Searle,
H. A. Johnstone.

Inventor:
Patrick Ryan
by his attorney
Thomas Drew Stetson

UNITED STATES PATENT OFFICE.

PATRICK RYAN, OF NEW YORK, N. Y.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 409,805, dated August 27, 1889.

Application filed January 24, 1889. Serial No. 297,375. (No model.)

To all whom it may concern:

Be it known that I, PATRICK RYAN, of the city and county of New York, in the State of New York, have invented a certain new and useful Improvement in Saw-Sets, of which the following is a specification.

My saw-set is adapted to serve a greater range of thickness of plate and size of teeth than usual, and is eminently light and portable.

The object of this invention is to supply a want heretofore existing in the ordinary saw-set—namely, that it can be applied to all classes of saws by the easy adjusting of the parts. When the blade is narrow, it can be set so as to strike against the saw-clamps instead of against the saw-blade, and when the saw is wide it can be rapidly and easily adapted to strike against the blade directly. In either case it may be set to any angle, making a larger or smaller kerf, as required by the conditions of its use. Any person can set it without being an expert by regulating the screw to the clamps or blade.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figures 1, 2, and 3 are face views showing the device arranged to work under different conditions. In Fig. 2 the disk has been set farther to the right. In Fig. 3 the disk is removed. Fig. 4 is an elevation of a portion of the saw-set as it is applied to wide saws. Fig. 5 is the same applied to a narrow or band saw.

Similar letters of reference indicate corresponding parts in all the figures where they occur.

A is the main body, having slits *a*, which may be formed and arranged in the ordinary manner, the thinner and shallower being at the end farthest from the handle.

A' is a shank or extension of uniform section, on which is snugly fitted an adjustable arm or block B, firmly secured by a bolt C and nut C', extended through one of the holes in the shank. There are two screw-threaded holes *b b'* in the arm B. A gage-screw E, having a milled head E', is applied in one of the holes *b b'*, the choice depending on whether the device is to serve on a wide or a

narrow saw. By turning the screw in its proper hole its end may be adjusted to strike the plate at the exactly-desired point. After the screw E has been properly adjusted the jam-nut E² may be set down tightly against the front face of the arm B, holding it very rigidly. To set the teeth on a wide saw, the screw E may be carried in the farthest hole *b*, and will meet the saw-plate a corresponding distance from the notched edge. When the device is to serve on a narrower saw, it is set in the hole *b'*. I provide means for working with the slit very close to the gage-screw. This is required when the device is to be used on a very narrow saw, as some forms of band-saws and jig-saws.

M is a disk having slits *m*, adapted to receive the teeth of saws of different sizes and thicknesses. There are four thick slits arranged equidistant and four thin slits arranged between the thick ones. P is a bolt having a square shank fitting in a square hole *m'* in the disk M and also in a square hole *a'* in the body A. By removing the bolt P and inserting it anew, with the plate in a new position, and by shifting the attachment from one hole *a'* to the other I can present any one of the slits *m* extending beyond the edge of the body A, and on reapplying and tightening the nut P' and adjusting the gage-screw E the device will be ready for use with the gage-screw very close to the toothed edge of the saw.

The arm B and the gage-screw may be rapidly adjusted to large extents by taking off the nut C' and removing the bolt C and shifting the block B forward or backward on the shank A' and inserting the bolt in a different hole and again securing it.

The facility for great changes makes it practicable and easy to adjust for widely-differing conditions. Narrow saws may be set by adjusting the device to allow the gage-screw to strike against the clamps instead of against the saw.

Modifications may be made without departing from the principle or sacrificing the advantages of the invention. Portions can be used without the whole. I can dispense with the jam-nut E².

I claim as my invention—

1. In a saw-set, the combination, with a

body A, having the slits *a*, of the arm B, adapted to slide on the shank A', holding means C C', and the gage-screw E, fitted exchangeably in the holes *b b'*, as herein specified.

5 2. The saw-set described, having the body A *a*, shank A', sliding arm B, having the holes *b b'*, holding means C C', and gage-screw E E', in combination with each other
10 and with the disk M, having slits *m* and

fastening means P P', arranged for joint operation substantially as herein specified.

In testimony whereof I have hereunto set my hand, at New York city, this 10th day of January, 1889, in the presence of two sub- 15
scribing witnesses.

PATRICK RYAN.

Witnesses:

CHARLES R. SEARLE,
JULIA SIMONTON.