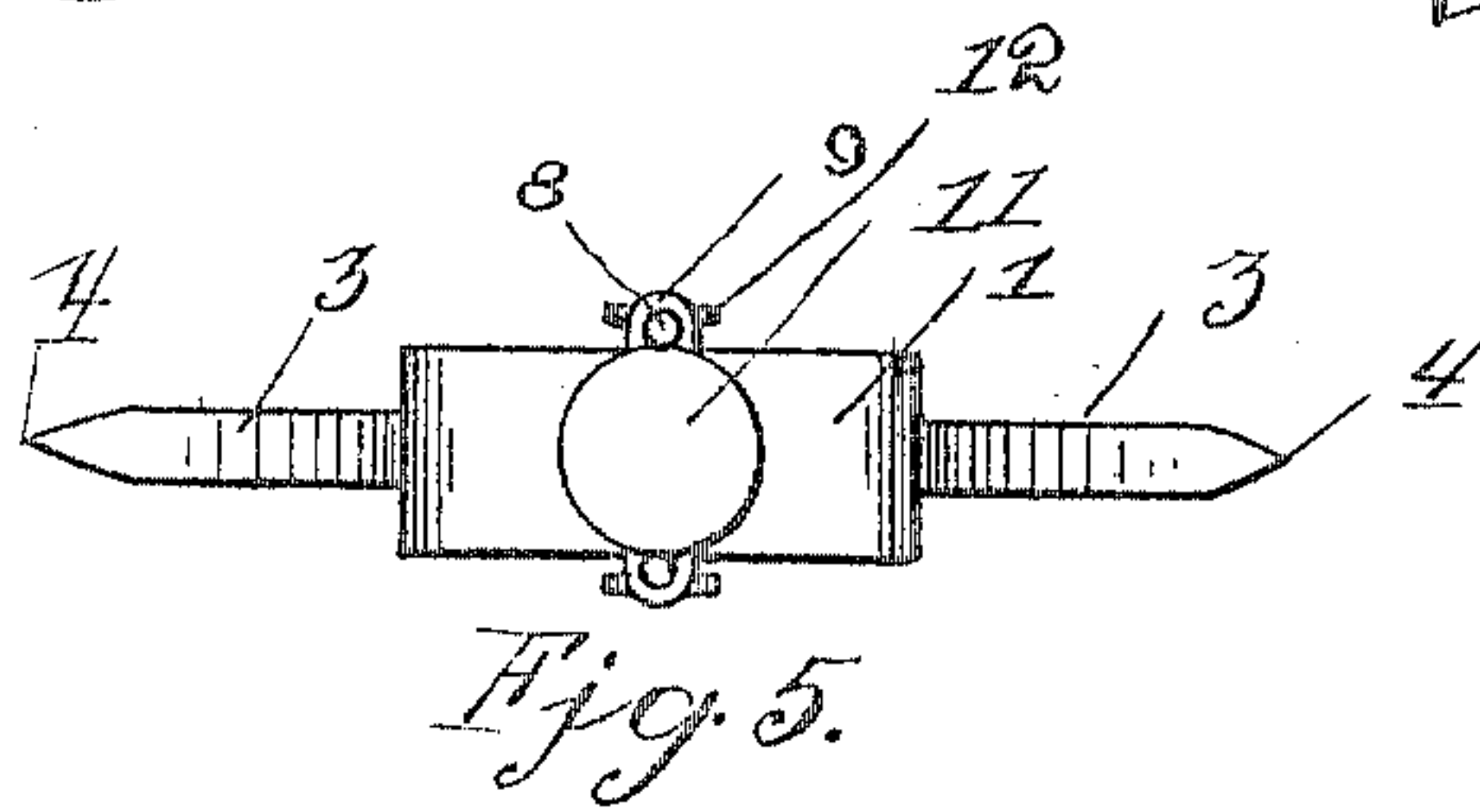
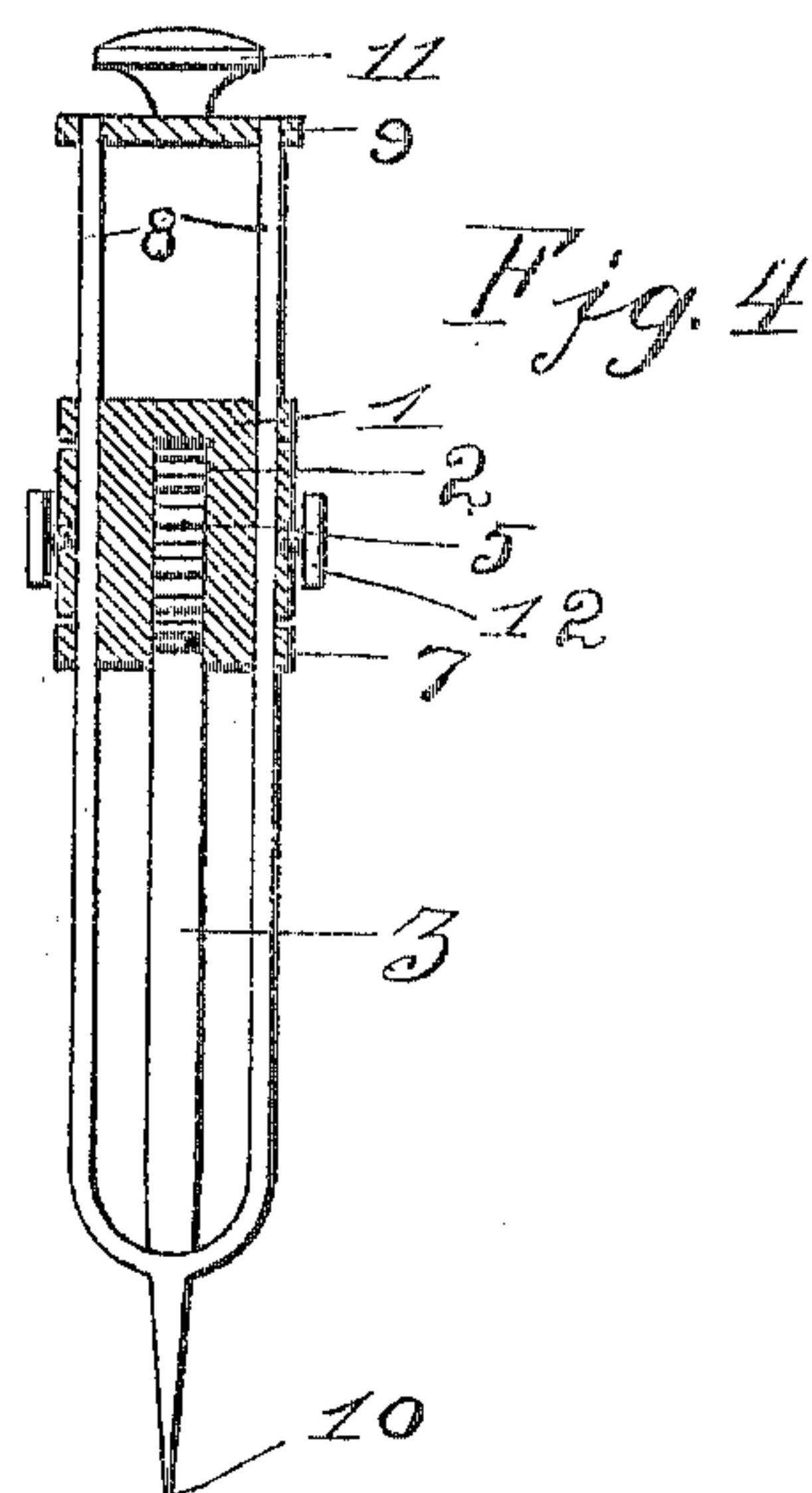
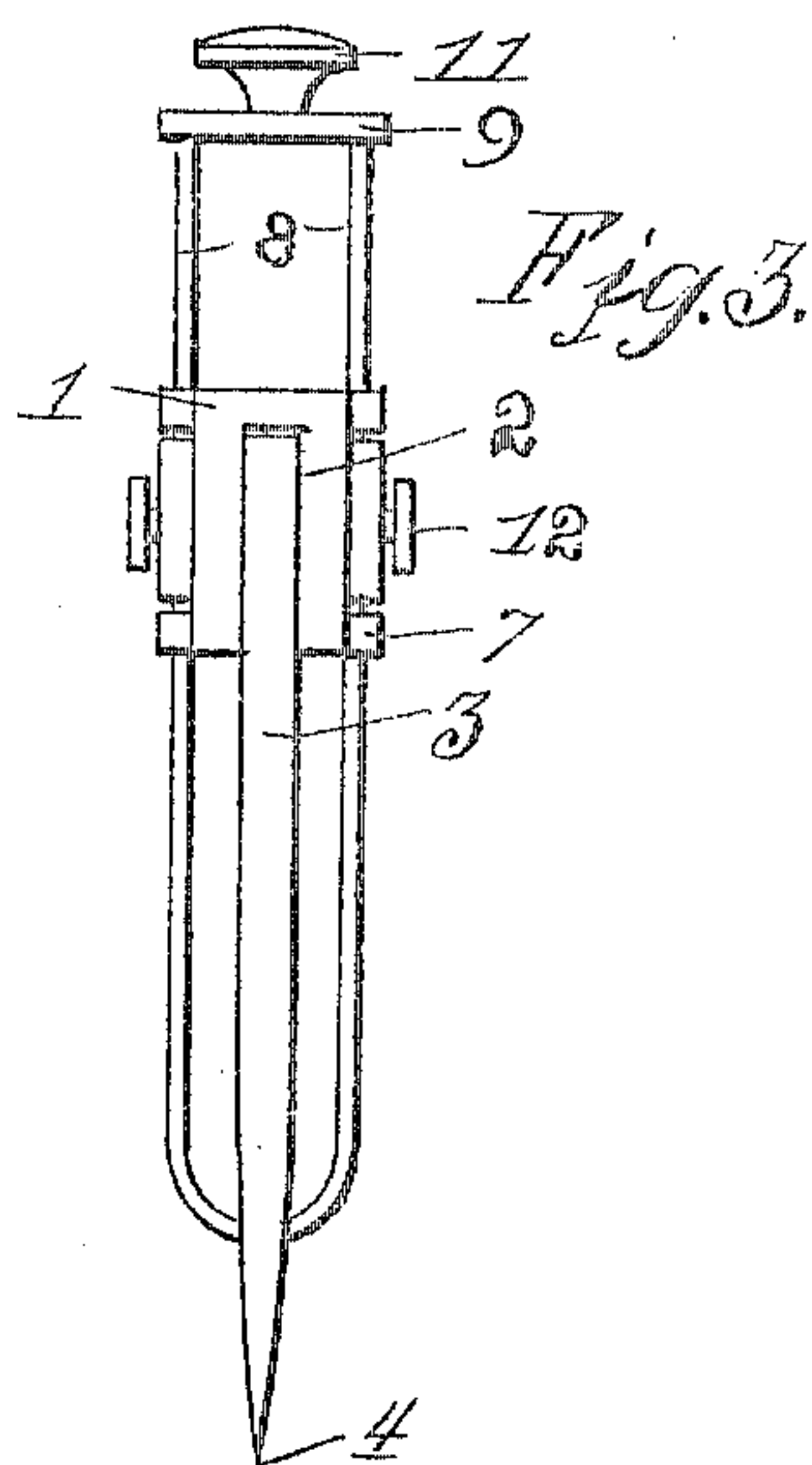
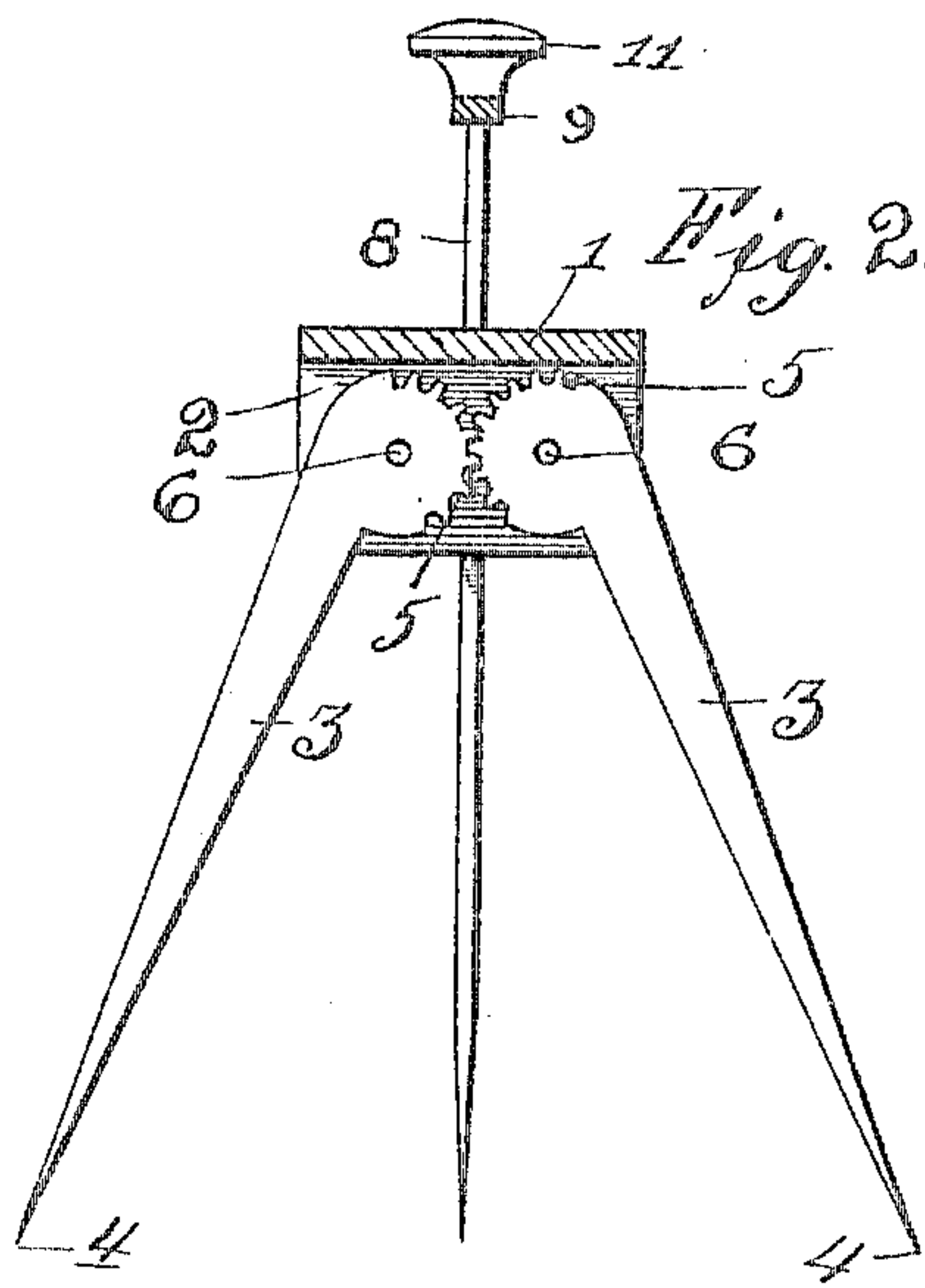
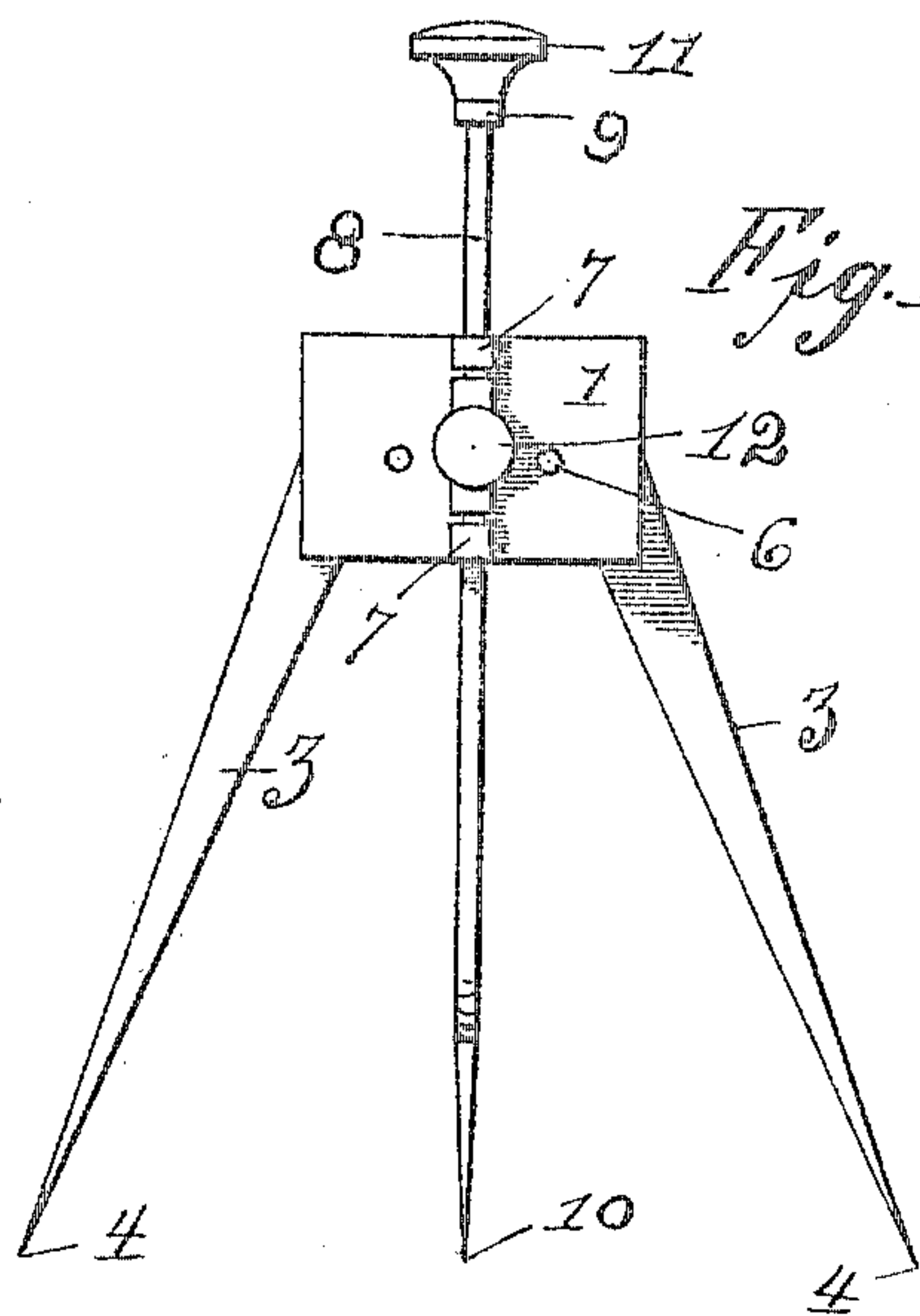


H. AMENDT.

DIVIDERS.

APPLICATION FILED JULY 21, 1905.



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UNITED STATES PATENT OFFICE.

HUBERT AMENDT, OF BLAIRSVILLE, PENNSYLVANIA.

DIVIDERS.

No. 804,571.

Specification of Letters Patent.

Patented Nov. 14, 1905.

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To all whom it may concern:

Be it known that I, HUBERT AMENDT, a citizen of the United States of America, residing at Blairsville, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Dividers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in instruments of precision; and the invention relates more particularly to a novel form of centering device or compass adapted to be used by mechanics, 15 draftsmen, or artisans.

The invention has for its object the provision of novel means for determining the center of a circle or the center of a given diameter, such as the bore of a pipe or tube.

20 My invention aims to provide a novel device or instrument which can be easily and quickly manipulated to determine the center of a given diameter or line, and in this connection I have devised an instrument patented somewhat after the compass, the legs 25 of which are geared together to operate in unison, whereby if one leg is moved its opposing leg will be correspondingly moved.

30 In constructing my improved device or instrument I have embodied a construction which will be extremely simple, strong, and durable, comparatively inexpensive to manufacture, and accurate in operation.

35 With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts which will be hereinafter more fully described and then specifically pointed out in the claims, and, referring to the drawings accompanying this application, like numerals 40 of reference designate corresponding parts throughout the several views, in which—

45 Figure 1 is a side elevation of my improved instrument or device. Fig. 2 is a vertical sectional view of the same. Fig. 3 is an edge view of the same. Fig. 4 is a transverse sectional view, and Fig. 5 is a top plan view.

50 To put my invention into practice, I construct my improved instrument or device of a body portion 1, which forms the head of the instrument. This body portion is provided with a vertically-disposed slot 2, which extends from one edge of the body portion to the opposite edge, forming a recess or slot 55 in which the legs 3 3 of my improved instrument are mounted. These legs are tapering

in form and terminate in points 4 4. The upper ends of the legs are sector-shaped and are provided with teeth 5 5, which when the legs are pivotally mounted in the slot 2 by 60 pins 6 6 are adapted to mesh with one another, whereby if one of the legs is moved its opposing leg will be correspondingly moved and in unison with the first-named leg.

The sides of the head or body portion 1 of 65 the instrument are provided with vertically-disposed bosses 7 7, and in these bosses are slidably mounted rods 8 8, the upper ends of which are connected by a cross-head 9, while the lower ends of the rods terminate 70 in a common point 10. The cross-head 9 is provided with a knurled button or knob 11, whereby the rods can be gripped in case it is desired to adjust the same, these rods serving 75 functionally as a pivotal point or fulcrum for the legs 5 5 when the instrument is used as a compass or dividers.

To retain the rods 8 8 in a fixed position relative to the head or body portion 1 of the instrument, I provide the bosses 7 7 with set- 80 screws 12 12, whereby the rods 8 8 can be adjusted and then fixed in engagement with the head 1 of the instrument or device.

My improved instrument can be used for numerous purposes by draftsmen, mechanics, 85 or artisans who desire to determine the center of a given diameter or line. For instance, should it be desired to determine the center of a bore of a pipe or tube the legs 3 3 are separated until their points engage the inner 90 walls of the pipe or tube, and when the instrument or device is held properly within the bore of the pipe or tube the center or longitudinal axis of the pipe or tube is determined by the point 10 of the rods 8 8. 95

The device or instrument can be easily manipulated by draftsmen for determining the middle point or center of a given line, also as dividers for equally spacing off a given line 100 or space. On account of the many ways in which my improved instrument or device can be used I believe it to be unnecessary to further describe the numerous ways it can be used, the above examples giving a fair insight 105 into the merits of my improved instrument or device.

110 It is thought from the foregoing that the construction, operation, and advantages of the herein-described instrument will be apparent without further description, and various changes in the form, proportion, and minor details of construction may be resorted to

without departing from the spirit of the invention or sacrificing any of the advantages thereof.

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

1. An instrument of the class described consisting of a body portion, legs pivotally mounted in said body portion, and geared together to operate in unison, bosses carried by the sides
10 of said body portion, rods slidably mounted in said bosses, a cross-head carried by the upper ends of said rods, a knurled button carried by said cross-head, the lower ends of said rods terminating in a point, means to lock
15 said rods within said bosses, substantially as described.

2. An instrument of the class described consisting of a body portion, legs pivotally mounted in the edges of said body portion, bosses
20 carried by the sides of said body portion, rods slidably mounted in said bosses and terminating in a point, a knurled button carried by the upper ends of said rods, means to lock said rods within said bosses, means whereby

when one leg is moved, the other leg will be moved correspondingly. 25

3. An instrument of the class described, consisting of a body portion, legs pivotally mounted in said body portion, rods slidably mounted in said body portion and terminating in a
30 point, a cross-head carried by said rods, means to lock said rods in said body portion, and means to move said legs in unison, substantially as described.

4. An instrument of the class described consisting of a body portion, legs pivotally mounted in said body portion and adapted to move
35 in unison, rods slidably connected to said body portion and terminating in a point, means to lock said rods within said body portion, substantially as described. 40

In testimony whereof I affix my signature in the presence of two witnesses.

HUBERT AMENDT.

Witnesses:

JOSEPH J. ELBERT,
W. H. TUXFORD.