

No. 751,405.

PATENTED FEB. 2, 1904.

G. D. PALMER.
INDICATOR FOR SAWMILL SET WORKS.

APPLICATION FILED MAR. 25, 1903.

NO MODEL.

FIG. 2-

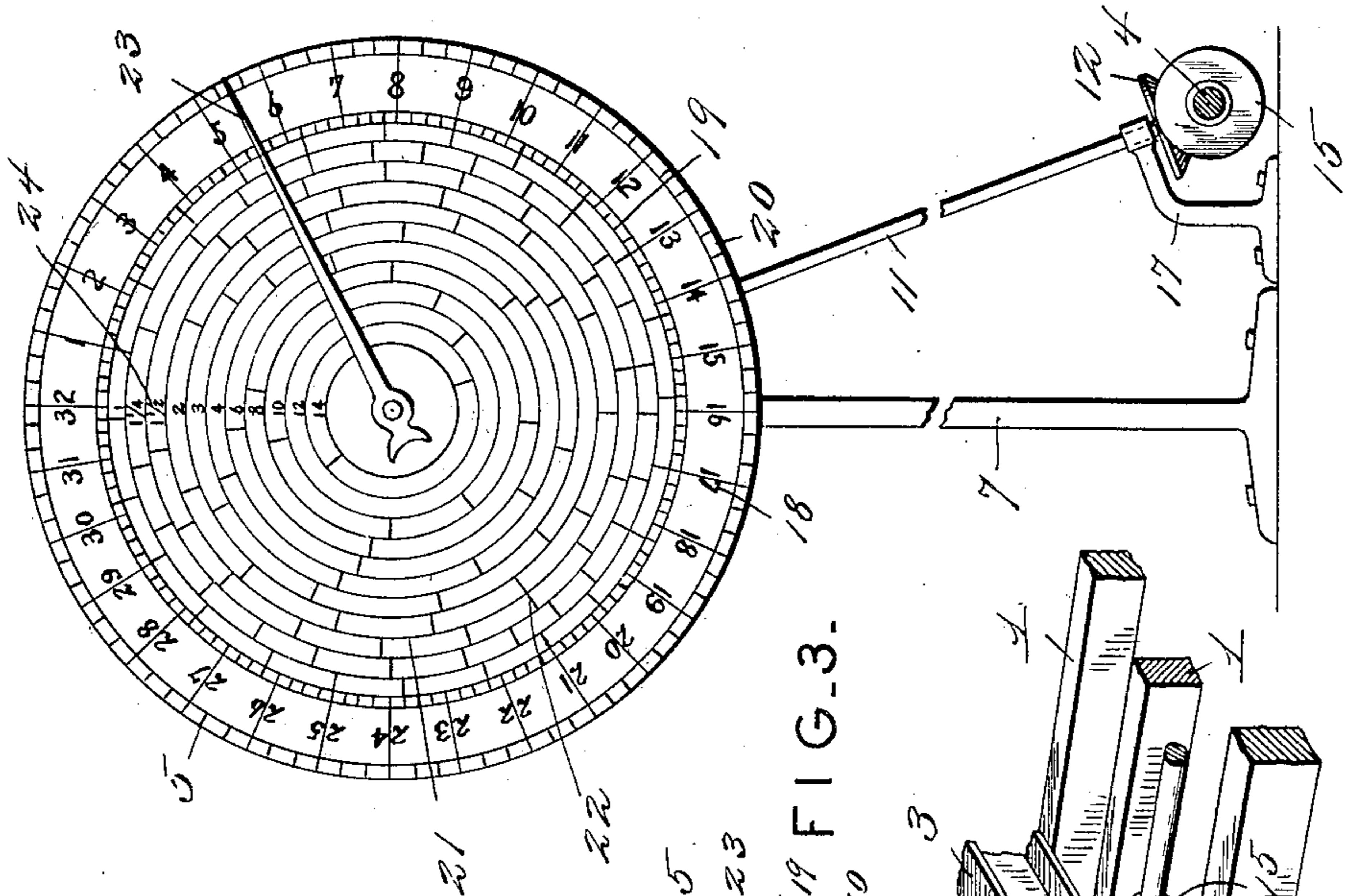


FIG. 3-

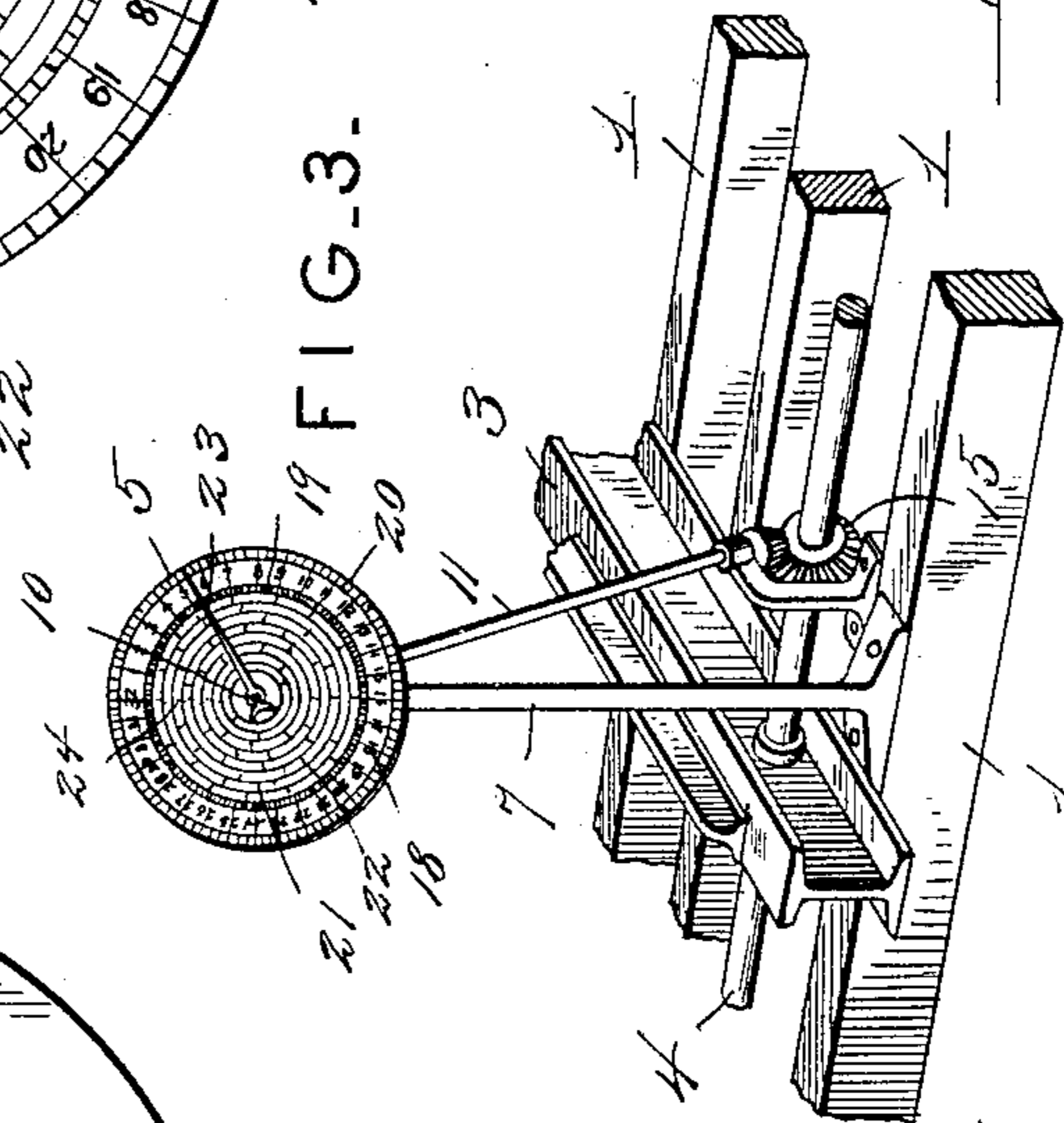
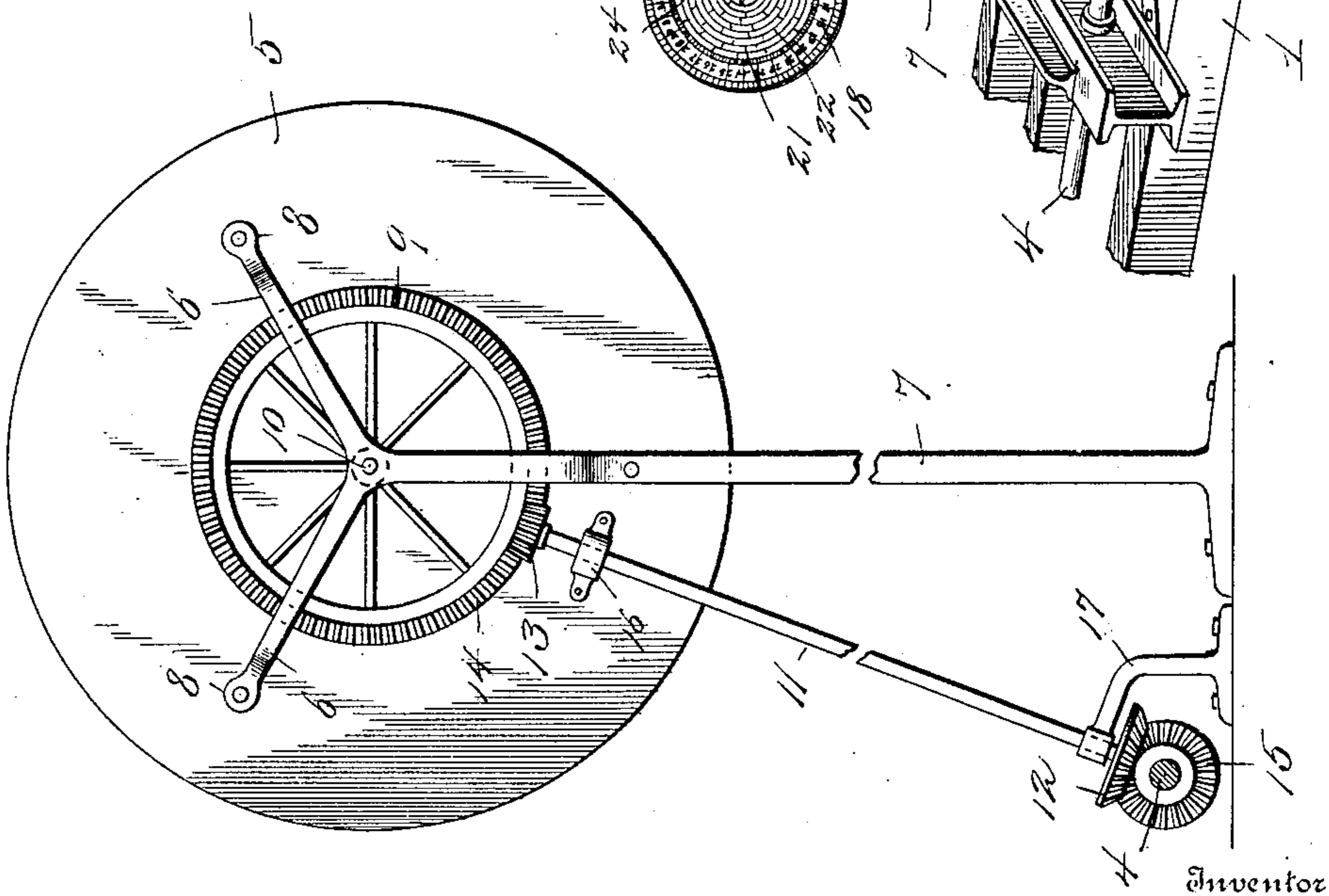


FIG. 1-



Witnesses

Harry L. Amer.
B. J. Dunk

Guy D. Palmer.

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

GUY D. PALMER, OF POWELL VALLEY, OREGON.

INDICATOR FOR SAWMILL SET-WORKS.

SPECIFICATION forming part of Letters Patent No. 751,405, dated February 2, 1904.

Application filed March 25, 1903. Serial No. 149,577. (No model.)

To all whom it may concern:

Be it known that I, GUY D. PALMER, a citizen of the United States, residing at Powell Valley, in the county of Multnomah and State of Oregon, have invented new and useful Improvements in Indicators for Sawmill Set-Works, of which the following is a specification.

This invention relates to sawmill set-works, but more particularly to an indicator therefor which may be geared to the "set-shaft" to indicate the cut in the log or board to be sawed.

The primary object of the invention is to construct an indicator which will accurately indicate the cut to be made in a manner calculated to save the time of the operator of the sawmill.

With this object in view the invention consists in providing a stationary circular index in the form of a disk, a rotatable indicator-pointer operated by the set-shaft of the set-works, and a connection between the indicator-pointer and set-shaft. This indicator is so arranged and adjusted that each rotation of the shaft will advance the indicator-pointer a determined distance on the index.

The invention further consists in certain novel details of construction and combination of parts, to be specifically referred to hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 is a rear view in elevation of an indicator and its gearing arranged in accordance with my invention. Fig. 2 is a front view in elevation of the indicator. Fig. 3 is a perspective view of the indicator shown applied to the set-shaft of set-works.

The reference-numerals 1 1 designate the longitudinal beams of a stationary frame on which the sawmill set-works are supported. The transversely-disposed longitudinally-moving carriage 3 is operated in the usual manner by a rotary set-shaft 4, driven by any

suitable power. The reference-numeral 5 designates a circular disk superimposed above the shaft 4 by a spider comprising a plurality of radially-disposed arms 6, supported upon the upper end of a vertical standard 7, formed with the

spider. The arms are formed with inbent ends 8, through which suitable fastening devices pass and engage the disk at convenient points. The disk is placed outwardly and stands in vertical position, so that the graduations, which will be more fully hereinafter set forth, may be readily inspected without requiring an inconvenient bodily movement of the operator over the dial and set-works in making the adjustment desired. The inbent ends 8 of the arms permit them to be spaced apart from the rear face of the index-disk 5, so as to provide a support for a revolving gear-wheel 9, rigidly carried by a transverse spindle or shaft 10, which is supported between the disk 5 and the arms 6. An approximately vertical shaft 11 carries terminal pinions 12 and 13, one of which is in mesh with the peripheral teeth 14, formed on the gear-wheel 9. The opposite pinion is in mesh with a gear-wheel 15, keyed to the shaft 4. In order to retain the pinions 12 and 13 in mesh with their coöperating gears, suitable bearings 16 and 17 are provided for supporting the shaft 11. The bearing 16 is carried by the stationary disk 5, while the bearing 17 is suitably supported at any convenient point adjacent to the shaft 4.

The face of the dial or disk 5 is graduated for the purpose of denoting the size of the saw-cut. The spaces or graduations 18 are concentrically disposed on the dial 5 and arranged between the circles 19 and 20, near the periphery of the disk, and constitute a saw-gage. These graduations 18 will vary in number on different dials to provide for different-gaged saws. The spaces formed by the parallel concentric circles 21, arranged on the dial, are intersected by radially-disposed lines 22. These circles 21 decrease toward the center of the disk and coöperate with the radial lines 22 to form a board-rule to form a measuring-guide for the operator or person in control of the sawmill, whereby time will be saved which would otherwise be lost in making the proper calculations. The dial indicator or pointer 23 is made fast to the shaft 10, to which the gear 9 is keyed, so that a rotation of the gear will actuate the pointer 23, causing it to successively pass the radial lines

22 during the process of sawing. The operator is thus saved the time which would otherwise be utilized and necessary in calculating the proper position of the parts to cut a log or board the desired size. For instance, if the operator desires to cut a log into one-inch or one-and-one-half-inch planks he will start the needle or pointer 23 at the proper point on the dial 5. A column of figures 24 is provided on the dial to indicate the length of the several spaces whereby the operator is guided as to the proper point at which to start. If the pointer is started at one end of the two-inch spaces, the last cut will leave the board next to the knees exactly two inches in thickness. If the pointer is started at the three-inch spaces, the last cut will leave the board next to the knees exactly three inches, &c. Thus it will be apparent that the pointer can be conveniently set at any point between the limits of its adjustment, according to the size the board is to be made.

Having thus fully described the invention, what is claimed as new is—

25 The combination with a set-shaft of a saw-mill set-works, having a gear thereon, of a standard rising above the one side of the set-

works and held on the latter, a vertically-disposed outwardly-facing index-disk having a spider secured to the inner side thereof and 30 to the standard to rigidly hold said disk on the standard, a horizontally-disposed spindle extending through the center of the disk and the spider and having an annular gear secured thereon and movable within the confines of the 35 spider against the inner side of the disk, a pointer secured to the spindle and rotatable over the outer face of the disk, bearing devices on the lower portion of the disk and the set-works adjacent to the set-shaft, and an up- 40 wardly-extending operating-shaft having pinions on the opposite extremities thereof respectively meshing with the gear on the set-shaft and the said annular gear, the pinion meshing with the annular gear being smaller than that 45 in engagement with the gear on the set-shaft, the outer face of the disk having concentric scale-marks thereon.

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

GUY D. PALMER.

Witnesses:

A. E. DE HAVEN,
D. J. CULY.