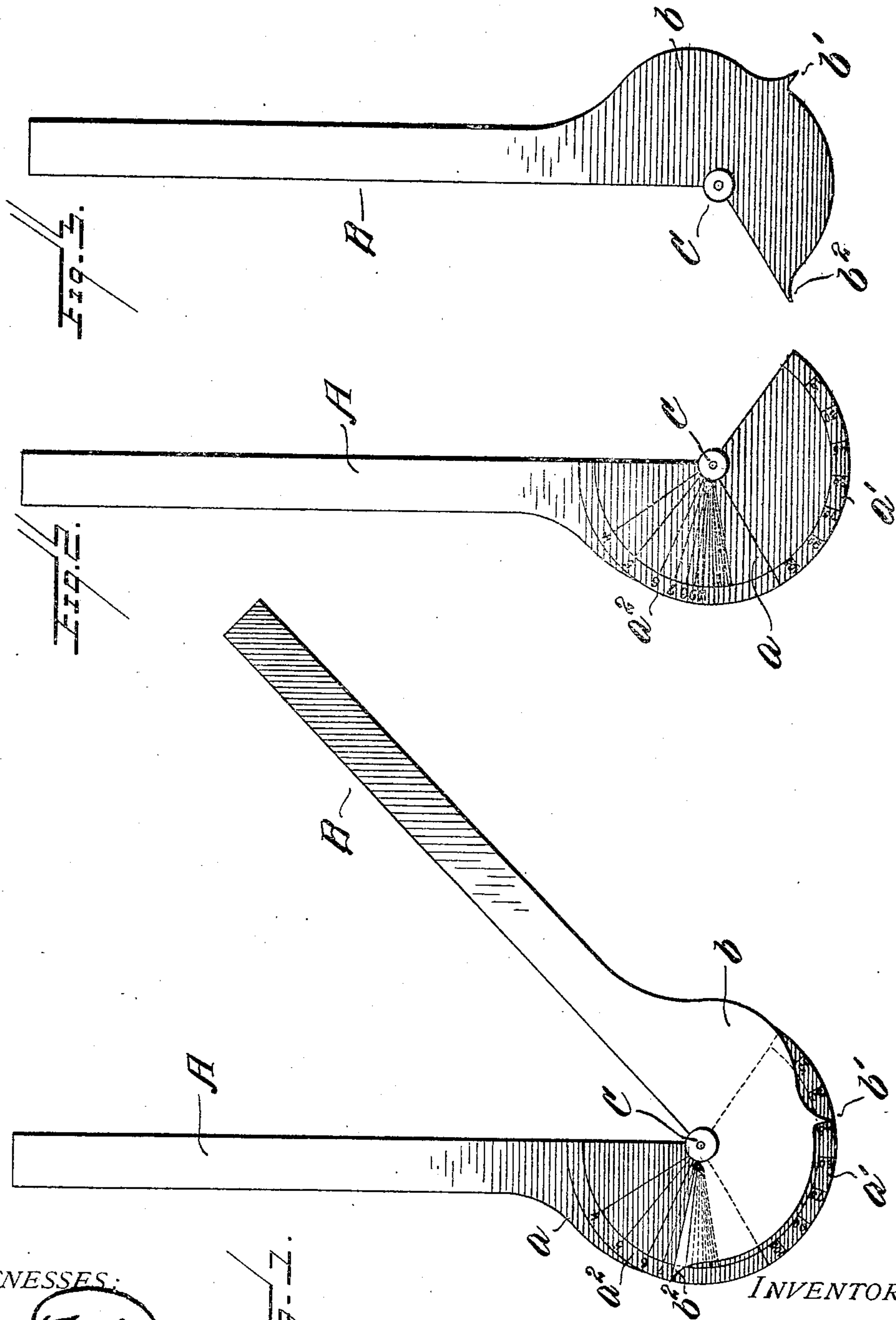


N. PERRIS.
CIRCLE DIVIDER.

APPLICATION FILED DEC. 2, 1907. RENEWED FEB. 16, 1909.

931,080.

Patented Aug. 17, 1909.



WITNESSES:

H. F. Roy
J. K. Moore

BY

Nicholas Perris
Whitaker & Trenchard
Attorneys

UNITED STATES PATENT OFFICE.

NICHOLAS PERRIS, OF HARRISBURG, PENNSYLVANIA.

CIRCLE-DIVIDER.

No. 931,080.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed December 2, 1907, Serial No. 404,747. Renewed February 16, 1909. Serial No. 478,334.

To all whom it may concern:

Be it known that I, NICHOLAS PERRIS, citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Circle-Dividers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in the novel features hereinafter described reference being had to the accompanying drawing which illustrates the best form in which I have contemplated embodying my invention and said invention is fully disclosed in the following description and claims.

Referring to the said drawings Figure 1 represents a side elevation of my improved circle divider, Fig. 2 represents a similar view of one of the arms or members thereof, Fig. 3 is a similar view of the other arm or member.

The object of my invention is to provide a device for dividing a circle of any diameter, and which will indicate simultaneously the number of degrees of angle or separation between the arms thereof, and the fractional part which such number of degrees bears to the entire circle of 360 degrees, without the necessity of calculation. To this end my improved device comprises two arms or members A and B preferably formed of flat sheet metal and lying one upon the other and connected by a pivotal connection as at C. One member as A is provided with a flat segmental portion, *a* preferably concentric with the pivotal connection, which has marked thereon two separated scales as at a^1 and a^2 , arranged concentrically with and preferably at the same distance from the pivotal connection C. One of these scales as a^1 is provided with indications corresponding with the degrees into which a circle is divided and certain of said indications are preferably accompanied by numerals as 15, 30 etc. The other scale a^2 is provided with indications showing fractions of the whole number of degrees, as $1/10$, $1/8$, $1/6$, $1/4$ etc.

The arm B, is provided with a flat plate portion *b*, overlying the segmental portion *a*, and having two integral pointers b^1 , and b^2

arranged to travel over the respective scales a^1 and a^2 and indicate simultaneously thereon the angle formed between the arms A and B, which can be read either in degrees, or in fractions without mental or other calculations. Any desired number of fractional indications may be marked on the scale a^2 as may be desired.

This instrument is extremely simple in construction and operation and will be found very desirable in use, as it obviates the necessity of calculating the number of degrees in a given fractional part of a circle as will be readily understood.

What I claim and desire to secure by Letters Patent is:

1. A circle divider comprising a pair of arms pivotally connected together, one arm having a pivot provided with two scales concentric with the pivotal connection and separated circumferentially, one of said scales being provided with divisions for indicating in degrees the separation of said arms, and the other scale being provided with unequal divisions for indicating fractional parts of a circle, the other arm being provided with a pair of pointers separated circumferentially, one of said pointers lying upon one scale, and the other pointer lying upon the other scale, substantially as described.

2. A circle divider comprising two flat sections pivotally connected together, each section being provided with an arm having a straight edge in line with the pivotal connection, one of said sections being provided with a segmental portion concentric with the pivotal connection provided with two circumferentially separated scales, one having divisions for indicating degrees, and the other having divisions for indicating fractional parts of a circle, the other part having two circumferentially separated pointers, one lying upon each of said scales, whereby the angle between said arms will be indicated by said separated pointers upon each of said scales, substantially as described.

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

NICHOLAS PERRIS.

Witnesses:

WILLIAM S. HARRIS,
A. W. SWENGEL.