# T. HAGERTY.

## Improvement in the Construction of Compasses.

No. 130,036. Patented July 30, 1872.

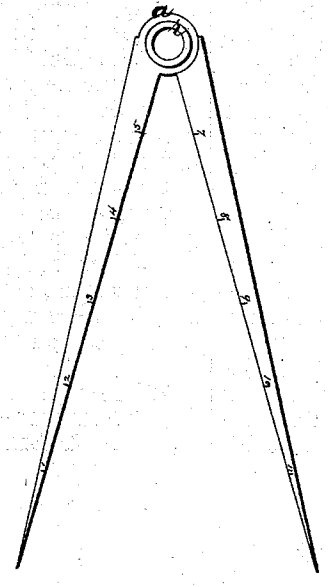
*Fig. 1.*




*Fig. 2.*




*Fig. 3.*




Witnesses.
C. F. Brown.
M. Church.

Inventor.
Thos. Hagerty
By his Attys.
Hill & Ellsworth.

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

# UNITED STATES PATENT OFFICE.

THOMAS HAGERTY, OF RICHMOND, VIRGINIA.

## IMPROVEMENT IN THE CONSTRUCTION OF COMPASSES.

Specification forming part of Letters Patent No. **130,036**, dated July 30, 1872.

*To all whom it may concern:*

Be it known that I, THOMAS HAGERTY, of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Compasses; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents one of the blanks for the legs of the compasses. Fig. 2 represents said blank bent up to form the leg, and Fig. 3 represents the compasses perfected.

Similar letters of reference in the accompanying drawing denote the same parts.

The object of this invention is to improve the construction of compasses, calipers, &c., so as to make them lighter, neater, and cheaper than heretofore. To this end the invention consists in the construction which I will now proceed to describe.

I first strike out of sheet metal the blank A, shown in Fig. 1, the same being provided with a perforated circular ear, *a*, the center of which should come in line with the inner edge of the leg. I then turn the metal on the side *m* over onto the side *n*, taking care to make the edges exactly coincide, and I stamp or roll them firmly down together so that the seam will be hardly perceptible, unless by careful examination. The two edges being thus brought together, the ear *a* projects beyond the curved edge *e e* in the form of a circular plate, as clearly shown in Fig. 2. Both edges being thus made exactly alike, they are placed together and firmly riveted, as shown at *r*, when, having been suitably polished and pointed, and, if preferred, nickel or silver plated, the instrument is ready for use.

I sometimes employ an eyelet or hollow rivet for securing the legs of the compasses together, it being lighter, neater, easier to adjust and tighten when it works loose, and convenient for hanging the instrument upon a peg when not in use. The legs of the instrument may be graduated into inches and fractions thereof by the same stroke of the die which cuts out the blanks, if that form of construction is preferred.

I claim as my invention—

As an improved article of manufacture, compasses formed by striking out from sheet metal the blanks A, having the circular ear *a* and the recesses *e e*, doubling the metal over upon itself to form the legs, as shown in Fig. 2, and uniting the parts, substantially as described.

THOMAS HAGERTY.

Witnesses:

MELVILLE CHURCH,

N. K. ELLSWORTH.