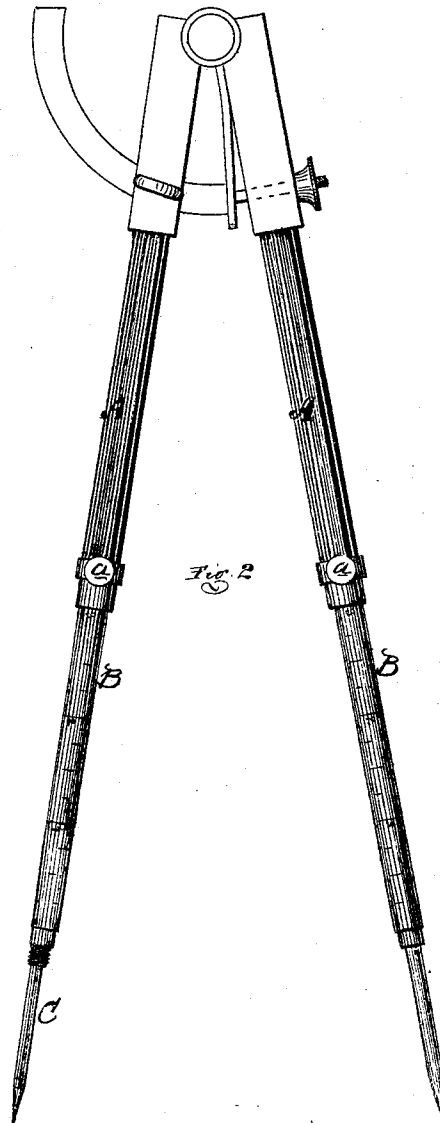
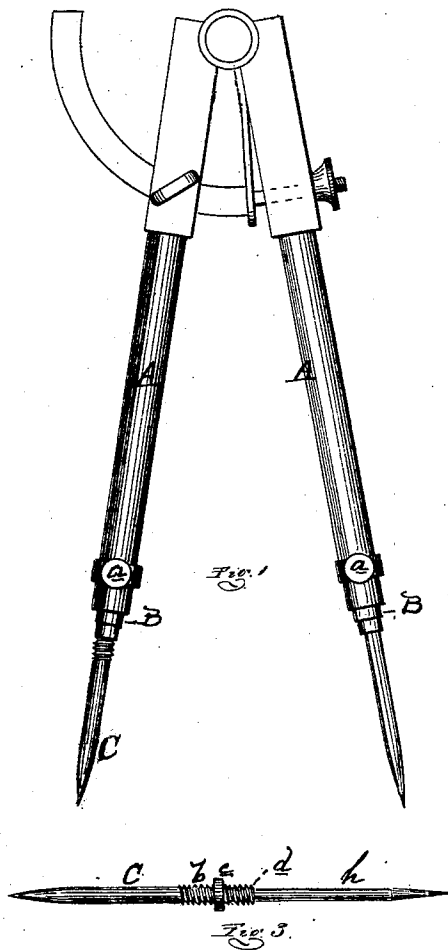


O. STODDARD.

Improvement in Compasses.

No. 130,879.

Patented Aug. 27, 1872.



ATTEST

Frank R. Dumble
Napier & Church

INVENTOR

O. Stoddard
per atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

OSCAR STODDARD, OF DETROIT, MICHIGAN.

IMPROVEMENT IN COMPASSES.

Specification forming part of Letters Patent No. **130,879**, dated August 27, 1872.

To whom it may concern:

Be it known that I, OSCAR STODDARD, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Adjustable Extension Compasses; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a plan of my device not extended. Fig. 2 is a plan of the same extended. Fig. 3 is a detached view of one of the points, showing the same reversible, and provided with a pencil.

Like letters indicate like parts in each figure.

The nature of this invention relates to the improved construction of an adjustable extension compass provided with reversible points, one end of each having a socket to receive and hold a pen or pencil, as may be desired. The invention consists in so constructing a compass that its arms may be adjusted and extended by having the extensions thereof telescoped within the arms, and in providing the extensions with a graduated scale upon their faces, by means of which they may readily be adjusted to the proper and equal lengths; also, in making the points, one or both, reversible, and providing the opposite ends thereof with suitable sockets or other equivalent devices for holding a pen or pencil.

In the accompanying drawing, A represents the arms of a compass, secured together at their upper ends in the usual way; B, are extensions, telescoped within the arms, where they are held in place by the set-screws *a*. Upon the faces of these extensions there is a graduated scale, as shown, and for the purpose of adjusting either leg of the compass to any desired length, which will be verified by the corresponding scale on the other. C is a point, provided with a right and left hand thread, *b*, and a collar, *c*. This thread engages with a female thread in the lower end of the extension B. At *d* there is a socket or other suitable device for holding a pen or pencil, *h*. The arms and extensions are preferably round, and made of small pipes, the latter fitting accurately into the former.

The usefulness of this device is so self-apparent and its operation so simple that any further description thereof is deemed unnecessary.

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

The combination of the arms A, extension arms B, and reversible point C, when each part is constructed and arranged substantially as described and shown, for the purposes set forth.

OSCAR STODDARD.

Witnesses:

THOS. S. SPRAGUE,
MYRON H. CHURCH.