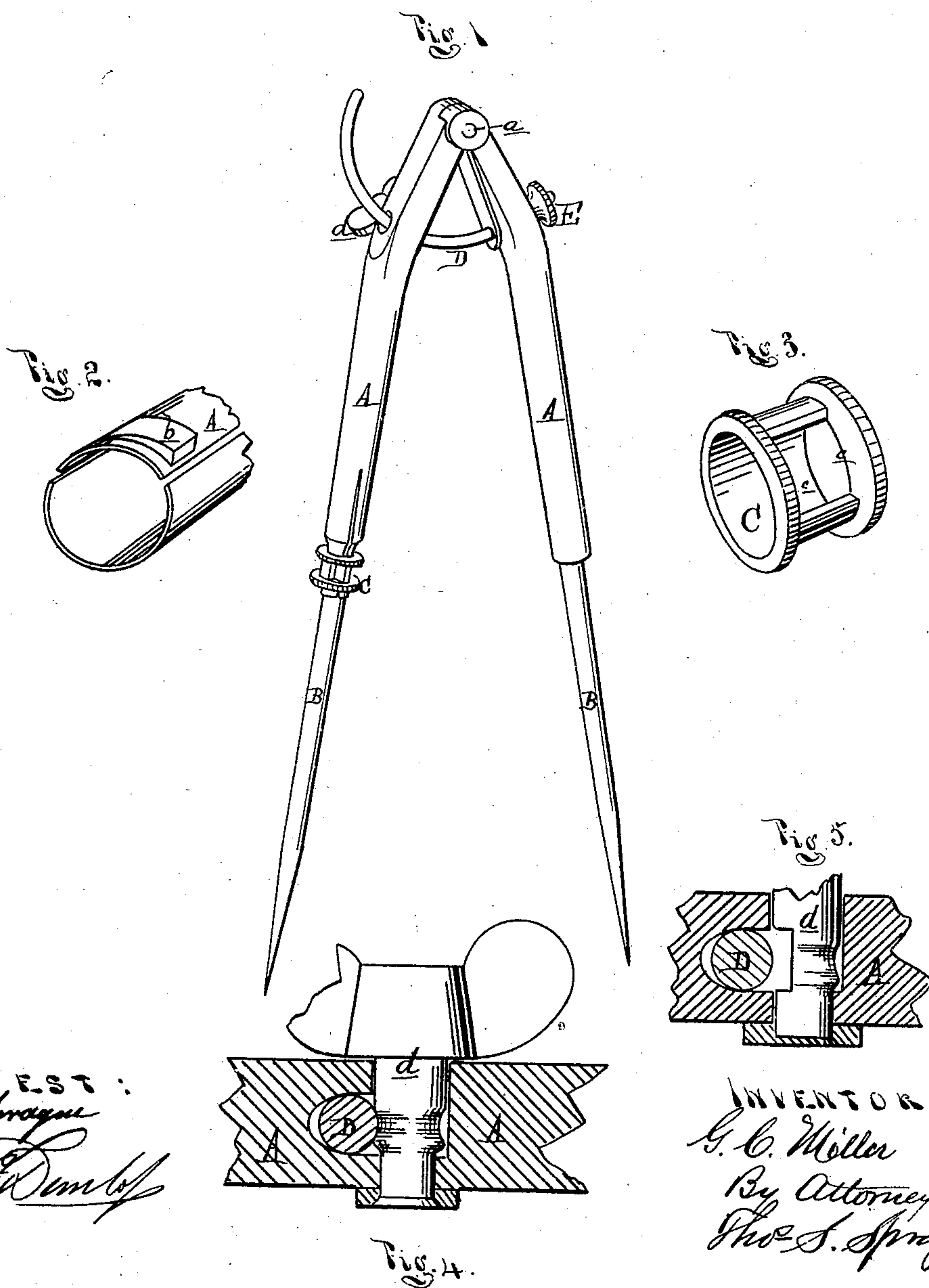


G. C. MILLER.
Dividers.

No. 149,052.

Patented March 31, 1874.



ATTEST:
W. W. Sprague
A. F. Dumble

INVENTOR:
G. C. Miller
By Attorney
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

GEORGE C. MILLER, OF DETROIT, MICHIGAN, ASSIGNOR TO JAMES C. MALOY,
OF OIL CITY, PENNSYLVANIA.

IMPROVEMENT IN DIVIDERS.

Specification forming part of Letters Patent No. **149,052**, dated March 31, 1874; application filed
December 22, 1873.

To all whom it may concern:

Be it known that I, GEORGE C. MILLER, of Detroit, in the county of Wayne and State of Michigan, have invented an Improvement in Dividers, of which the following is a specification:

The nature of this invention relates to new and useful improvements in the construction of dividers; and consists in the novel construction and arrangement of the devices for holding the legs in the desired position, as more fully hereinafter explained.

Figure 1 is a perspective view of my improved extension-dividers with the points in place. Fig. 2 is a section of one of the legs. Fig. 3 is a perspective of the holding-ring. Fig. 4 is a sectional view, showing the engagement of the thumb-cam with the arch.

Like letters refer to like parts in each figure.

In the annexed drawings, A represents the legs of the dividers, hinged together at *a* in the usual manner. One or both of these legs are hollow or tubular at their outer extremities to receive the extension-points B. These hollow ends are slotted to allow them to be compressed, and upon the outer face there is a small inclined plane, *b*. By compressing the slotted tubular end of the leg the ring is slipped over the end until the inclined plane *b* enters the slot *c* in the ring. The point is then inserted in the tubular end of the leg, and, the ring being turned, the solid part

thereof, sliding up the face of the inclined plane, compresses the tubular end, and holds firmly the extension point or pencil in place. D is the arch, secured by the usual thumb-screw E to one of the legs, and passing through a proper opening in the opposite leg. The position of the legs, when distended, is governed by the thumb-cam *d*, which is inserted through the leg in such a manner that when turned in the proper direction the face of the cam will press against and bind the arch. This arch is usually made of a thin and flat piece of iron or steel, the edge of which is too thin to form a reliable bearing-surface for the cam, although it may be used in connection with the flat arch. I prefer said arch to be made of a round metal rod, bent to proper shape. Then the bearing-face of the cam *d* should be made concave to obtain a greater bearing-surface on the convex face of the arch.

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

1. In combination with the leg A, the thumb-cam *d* and arch D, substantially as and for the purposes specified.

2. In combination with said thumb-cam *d*, the round arch D, as and for the purposes described.

GEO. C. MILLER.

Witnesses:

CHAS. E. HUESTIS,
H. S. SPRAGUE.