

(No Model.)

A. KOLESCH.
COMPASSES.

No. 479,329.

Patented July 19, 1892.

Fig. 2.

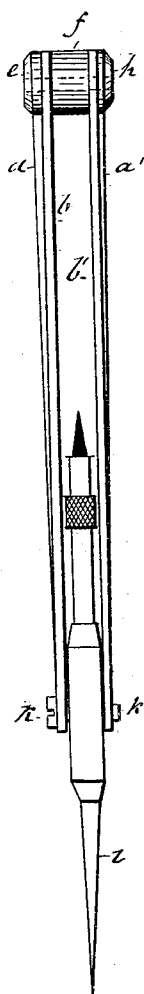


Fig. 1.

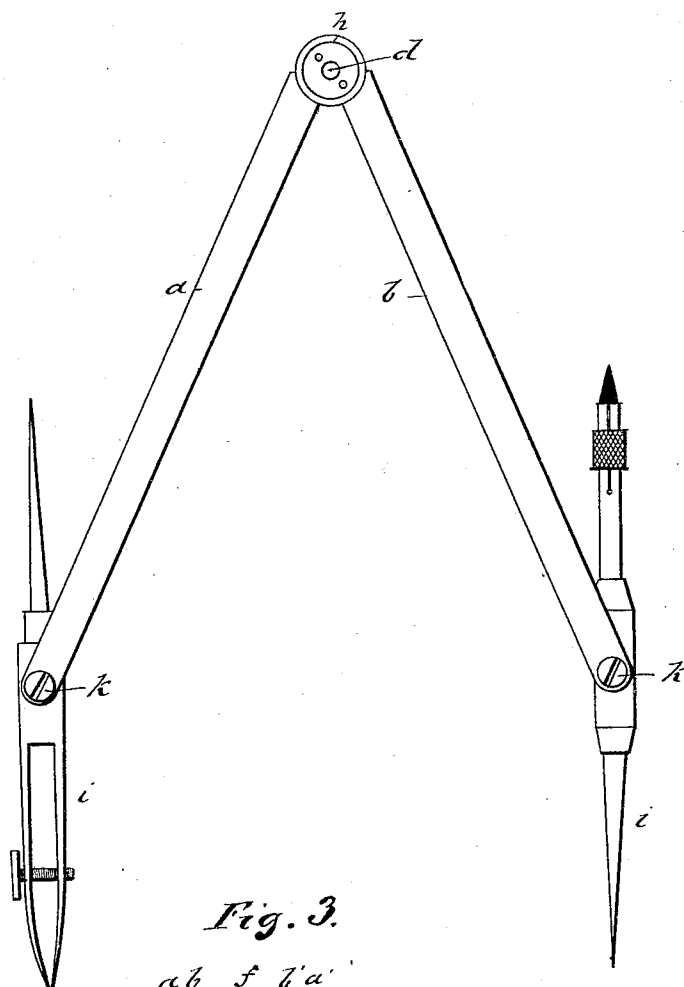
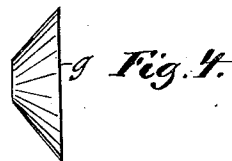
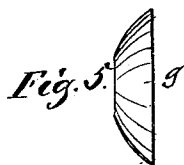
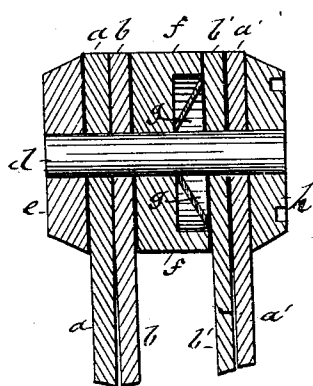


Fig. 3.



Witnesses
A. Schehl.

Wilhelm Kattz

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By his Attorney Charles Katz

UNITED STATES PATENT OFFICE.

ADOLPH KOLESCH, OF BROOKLYN, NEW YORK.

COMPASSES.

SPECIFICATION forming part of Letters Patent No. 479,329, dated July 19, 1892.

Application filed April 29, 1891. Serial No. 390,995. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH KOLESCH, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Compasses, of which the following is a specification.

My invention has reference to improvements in compasses, each leg of which is made of two blades pivoted to the head of the compasses and holding between the free ends pointers, pencil-holders, or drawing-pens. The head of the compasses is provided with a hollow disk located between the blades of the legs and having in its excavation a dish or conical washer that presses against one of the leg-blades and acts as a spring, so as to prevent the loosening of the legs.

In the accompanying drawings, Figure 1 is a front view of my compasses. Fig. 2 is a side view of the same. Fig. 3 is a vertical section through the head, and Figs. 4 and 5 are side views of the different forms of the washer.

Similar letters of reference indicate corresponding parts.

a' and b' in the drawings are blades cut or stamped out of sheet metal and having at their ends holes, which blades form the legs of my improved compasses. The pivot-pin d has a button or knob e , as usual in other kinds of compasses. A disk f , having a transverse hole by means of which it is pushed on the pivot-pin d , is located between the respective blades of the legs and has at one end an excavation, into which a conical or dish washer g of metal is placed, the rim of the washer projecting somewhat beyond the rim of the disk.

h is the screw-cap by means of which the leg-blades are held on the pivot-pin.

In making my improved compasses the head end of the blade a of one leg is pushed on the pivot-pin d against the knob e and then the blade b of the other leg attached to the pivot-pin in the same manner. The hollowed disk f , holding the dish or conical washer g , which latter has a hole in its center, is next placed on the pivot-pin, and then the blades b' of the second and a' of the first leg are attached to the pivot-pin in the same way as the blades a and b , and finally the screw-cap h is screwed on the pivot-pin by means of the common wrench-key, whereby the upper ends of the leg-blades are secured to the

pivot-pin and the head of the compasses is formed. It is evident that when the screw-cap is screwed tightly against the head end of the blade a' the washer in the excavation of the disk f is pressed down and acts as a spring against the head end of the leg-blade b' . If desired, both ends of the disk may be hollowed and washers of the shape described inserted in the excavations, so that by the same a spring action is imparted upon the respective blades of both legs. The spring-acting washer holds the legs of the compasses in proper position when used and prevents the same from loosening on the pivot-pin even when the screw-cap is somewhat loosened. Between the free ends of the leg-blades pointers, pencil-holders, or drawing-pens i are pivoted by means of screw-pins k .

My compasses are very cheap in the manufacture, and a very reliable working of the same is attained by the spring-acting washer, as before described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In compasses, a disk having an excavation and a spring-acting dish or conical washer in said excavation placed on the pivot-pin of the head of the compasses, so that the washer acts as a spring against one of the legs of the compasses, substantially as set forth.

2. Compasses having its legs consisting each of two blades cut or stamped out of sheet metal and secured to the pivot-pin of the head outside of an interposed disk, substantially as set forth.

3. In a pair of compasses, the combination of a disk having in an excavation of the same a spring-acting dish or conical washer, with two blades cut out or stamped out of sheet metal placed on each side of the disk and forming the legs of the compasses and a pivot-pin passing through the head ends of the blades and the disk and washer and secured to the same by means of a knob and a screw-cap, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 20th day of March, A. D. 1891.

ADOLPH KOLESCH.

Witnesses:

CHARLES KARP,
THOMAS CONRAD.