No. 617,897. Patented Jan. 17, 1899.

B. F. DOWNS.

COMBINED WRITING AND DRAWING INSTRUMENT.

(Application filed July 18, 1898.)

(No Model.)

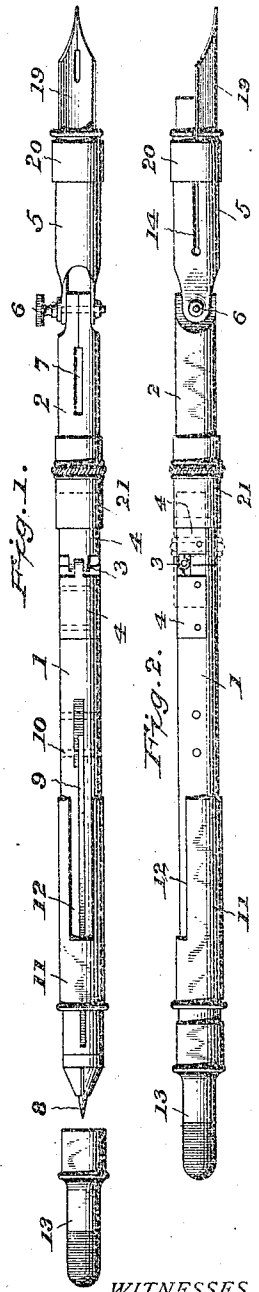


Fig. 1.

Fig. 2.

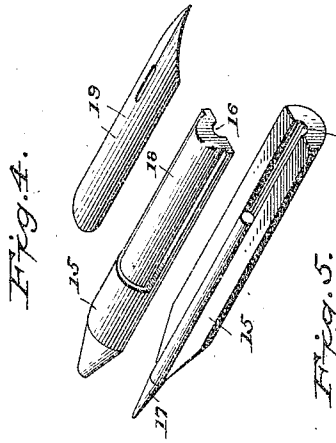


Fig. 4.

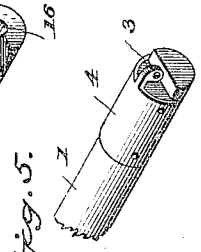


Fig. 5.

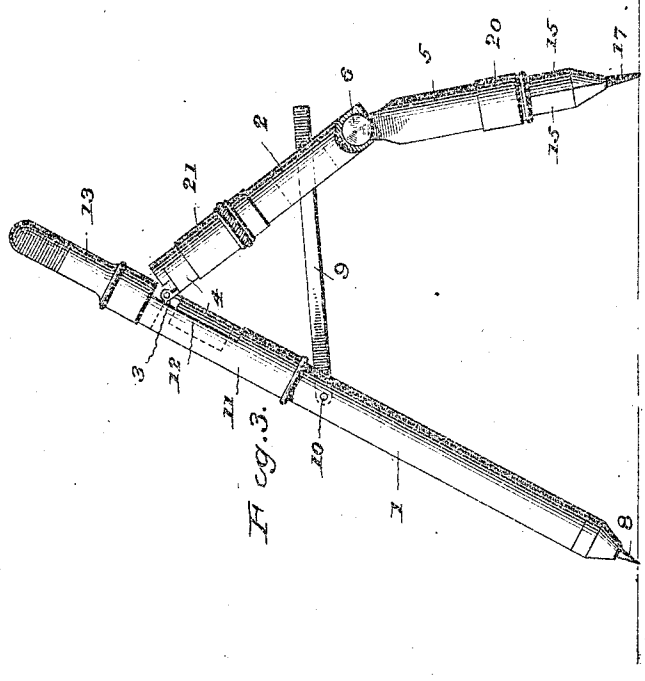


Fig. 3.

WITNESSES

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BENJAMIN F. DOWNS, OF WILMINGTON, DELAWARE.

COMBINED WRITING AND DRAWING INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 617,897, dated January 17, 1899.

Application filed July 18, 1898. Serial No. 686,272. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. DOWNS, a citizen of the United States, residing at Wilmington, in the county of New Castle, State of Delaware, have invented certain new and useful Improvements in a Combined Writing and Drawing Instrument, of which the following is a specification.

My invention relates to drawing and writing instruments, and has for its object to provide a combined compass, pen, and pencil possessing certain novel characteristics that will enable it to be readily converted from the one to the other and which will in no way impair its usefulness when adjusted for any one of such uses.

A further object of my invention is to provide a construction whereby when the device is adapted for use as a drawing-compass the adjusting-arm for the two members and the scribing-leg may be adjustably retained in any position by means of a single clamping device.

My invention also embraces certain other minor novel embodiments, as will be hereinafter more definitely described and claimed and which are fully illustrated in the accompanying drawings, in which—

Figure 1 is a side view of my improved instrument in its extended form, adapted for use as a penholder. Fig. 2 is a similar view taken at a right angle to Fig. 1. Fig. 3 is a side view showing the instrument in position for use as a drawing-compass. Fig. 4 is a detail perspective view of the pen and pencil holding attachment, the same being shown separated. Fig. 5 is a detail perspective view of one of the members, showing the connecting-hinge.

Similar numerals of reference denote corresponding parts in the several views.

In the said drawings the body portion of the instrument is shown formed of two members 1 and 2, united by means of a hinge 3, the latter formed of two semicircular leaves 4, lying in countersunk recesses in the members and being so constructed that no part of said hinge will extend beyond the flush surface of the members 1 and 2.

The member 2 has pivotally united thereto a scribing-leg 5, hereinafter described, a suitable set-screw 6 serving to adjustably unite the parts. The member 2 is also slotted at 7 and split from that point to its end, for a purpose hereinafter to be described.

On the free end of member 1 is carried the usual compass-point 8, while intermediate its length said member is recessed longitudinally to receive the arm 9, pivoted therein at 10 and adapted when retracted to lie flush with the surface of said member. A movable sleeve 11, slotted at one side at 12, serves to partly cover and retain the arm 9 within its recess when desired. A suitable cap 13, adapted to fit over and conceal the scribing-pin 8, is also adapted to fit onto the projected end of sleeve 11 when in the position shown in Fig. 3 and to thus serve as a handle for manipulating the instrument.

The scribing-leg 5 is formed hollow and is slotted at 14 for a portion of its length, and within which is fitted a pen and pencil holder, the same consisting of two members 15, centrally recessed at 16 to receive the lead 17, and on one of which is provided a countersink 18 for the reception of a pen 19, as clearly shown in Fig. 5. A sleeve 20, sliding on the scribing-leg 5, serves, by compressing the slotted end thereof, as a means for firmly retaining the various parts in any adjusted position.

A sleeve 21, mounted on member 2, serves to cover the hinge 3 when the members are in the position shown in Figs. 1 and 2, and thus retain said members in alinement.

From the above description the operation of my improved instrument will be understood to be as follows: The parts being in the position shown in Fig. 2, the instrument is ready for use as an ordinary pen, except that sleeve 21 should be located over the hinge 3, as shown in dotted lines. Now should it be desired to convert the instrument into a pencil it is only necessary to push back the sleeve 20 toward set-screw 6, remove and reverse the pen and pencil holder, and restore sleeve 20 to its original position. To convert the instrument into a drawing-compass, slide sleeves 11 and 21 to the position shown in Fig. 3, the slot 12 in the former permitting this adjustment, remove cap from over compass-point 8 and place on the projected end of sleeve 11, and draw out arm 9 from its recess in member 1 and pass it through the slot 7 of member 2, when by adjusting the member 2 and

scribing-leg 5 to the proper radius and tightening set-screw 6 the instrument is ready for use, as clearly shown in Fig. 3.

It will be observed that by reason of the slotting and splitting of member 2 the compression of the pivoted point of connection between member 2 and scribing-leg 5 to retain the latter in any adjusted position will also compress and retain the arm 9 in its slot 7, thereby accomplishing both adjustments by a single means and at a single operation

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

1. The combination of two members hinged together, one member carrying a compass-pin and the other member carrying a scribing-leg, one of said members being provided with a device adapted to project beyond the meeting end thereof when said members are out of alinement, and a cap adapted to fit over the compass-pin when the members are in alinement and to fit over the projected device when the parts are out of alinement, substantially as set forth.

2. The combination with two members hinged together, one member carrying a compass-pin and the other member carrying a scribing-leg, of a slotted sliding sleeve on one of said members adapted to project beyond the meeting end thereof when said members are out of alinement, and a cap adapted to fit over the compass-pin when the members are in alinement and to fit over the projected end of said sleeve when the members are out of alinement, substantially as set forth.

3. The combination with two members hinged together, one member carrying a compass-pin at its free end and a pivoted arm intermediate its length the other member having its free end slotted for the reception of said pivoted arm and having pivoted to said free end a scribing-leg, of a set-screw passing through the slotted end of said member and forming the pivotal connection between the same and the scribing-leg and adapted to simultaneously retain the scribing-leg and pivoted arm in any adjusted position, substantially as set forth.

4. In a compass, the combination with the hinged members thereof, one carrying a compass-pin and an adjusting-arm, and the other carrying a scribing-leg pivoted thereto, and adjustable independently of the adjustment of the said members, of a single clamping mechanism adapted to simultaneously retain said adjusting-arm and scribing-leg in any adjusted position, substantially as set forth.

5. The combined compass, pen and pencil, consisting of two members hinged together, one member carrying a compass-pin at its free end, means for retaining said members in alinement, and means for adjustably retaining them in fixed relation to each other when out of alinement, of a hollow slotted scribing-leg pivoted to the other member, a combined pen and pencil holder removably located in said scribing-leg and consisting of two separable members centrally recessed to receive a pencil-lead, one of the same being provided with a countersink to receive a pen, and a sleeve movable on said scribing-leg to removably retain said holder therein, substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

BENJAMIN F. DOWNS.

Witnesses:
HELEN E. PARKER,
PERCY B. HILLS.