No. 842,585. PATENTED JAN. 29, 1907.

T. S. ROSS.

DRAFTING ATTACHMENT.

APPLICATION FILED NOV. 5, 1906.

Fig. 1.

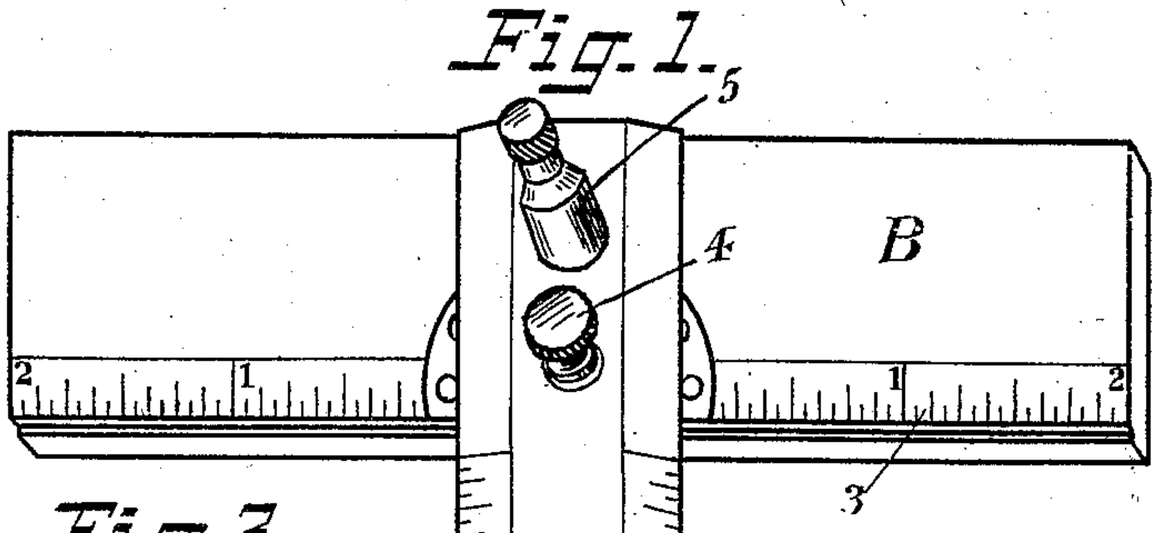


Fig. 2.

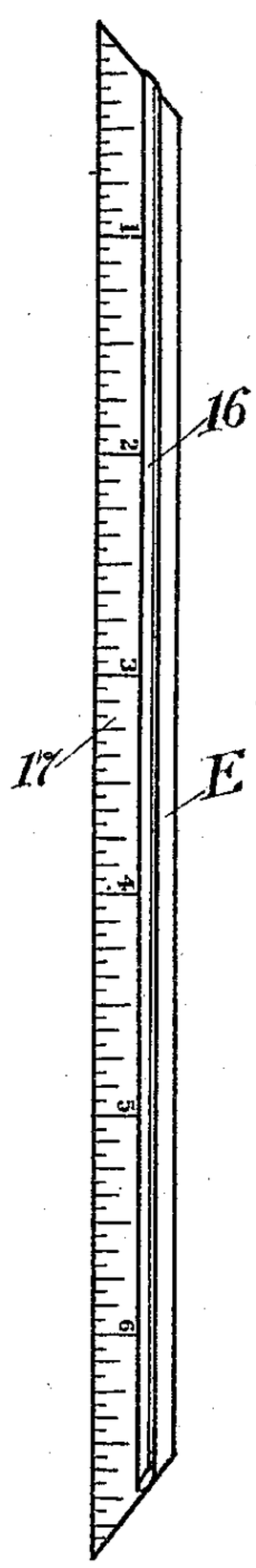


Fig. 3.

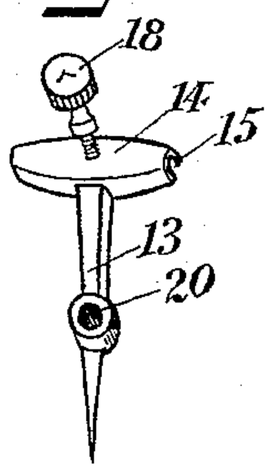
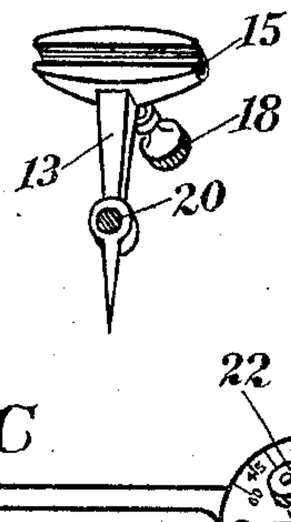


Fig. 4.



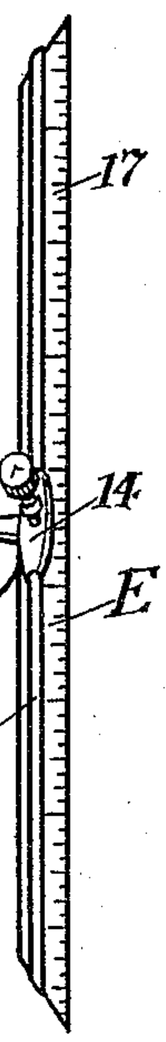
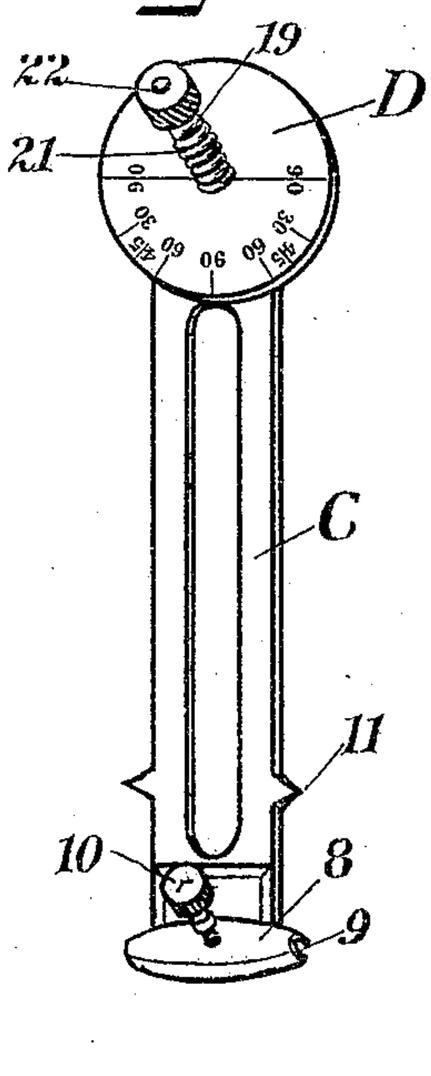
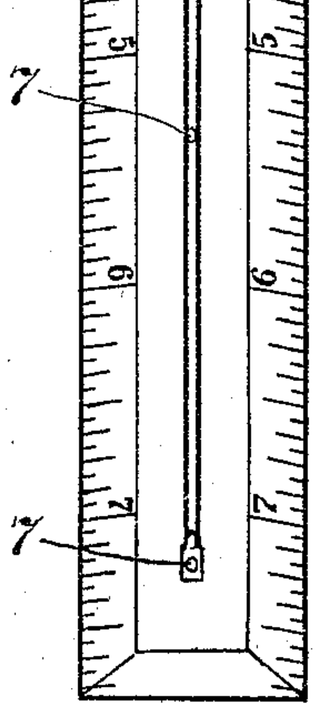


Fig. 5.





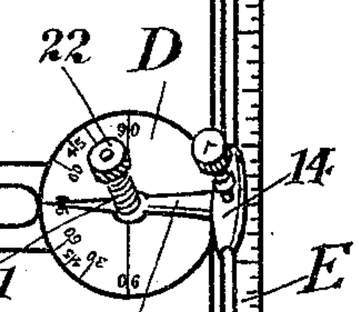
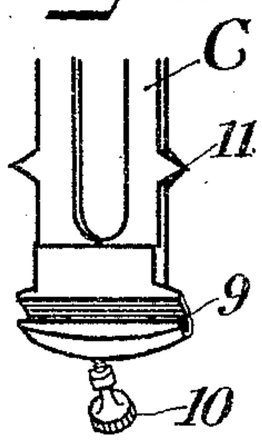


Fig. 6.



Witnesses

John J. Schulz

E. Walton Brewington.

Inventor

Thomas S. Ross.

By Henry J. Brewington

his

Attorney

UNITED STATES PATENT OFFICE.

THOMAS S. ROSS, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-THIRD TO MICHAEL H. NOON AND ONE-THIRD TO JAMES J. ELLIS, OF BALTIMORE, MARYLAND.

DRAFTING ATTACHMENT.

No. 842,585. Specification of Letters Patent. Patented Jan. 29, 1907.

Application filed November 5, 1906. Serial No. 342,108.

To all whom it may concern:

Be it known that I, THOMAS S. ROSS, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in Drafting Attachments, of which the following is a specification.

My invention relates to an improvement in drafting attachments, and is intended to be applicable to my beveled-square rule as invented by me and for which Letters Patent were granted me April 17, 1906, No. 817,991, the following being a description whereby any one skilled in the art may make and use the same.

With the foregoing object in view my invention consists in certain novel features of construction and combination of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my invention attached to a rule. Fig. 2 is a longitudinal sectional view of the blade. Fig. 3 is a view of the dial. Fig. 4 is a reversed view of the dial. Fig. 5 is a longitudinal sectional view of the sliding arm. Fig. 6 is a reversed sectional end view of the sliding arm.

In Fig. 1, A is a rule-blade provided with a scale 1 and 2 on each tapered edge. B is the stock, being provided with a scale 3 and secured to the blade by means of the thumb-screw 4 and the locking device 5. 6 is a longitudinal round metal rod secured to the rule-blade A by means of the rivets 7. C is the sliding arm provided on one end thereof with the slide 8. A horizontal circumferential groove 9 is cut within the under side of the slide and is adapted to become engaged and slide on the rod 6 of the blade A. 10 is a thumb-screw adapted to screw down on the rod 6, by which means the arm C is secured in the desired position on the blade A. 11 are pointed extensions for the purpose of facilitating the measuring of required distances and to render the measurements more accurate. D is a dial provided on the free end of the arm C, and 13 is a pointer or index provided with a slide 14 on the end thereof, similar to the slide on the end of the arm which has already been described, comprising a horizontal circumferential groove 15, cut within the under side and which is adapted to become engaged by and permit the round metal rod 16 of the smaller rule-blade E to slide therein, which rule-blade is provided with a scale 17, while 18 is a thumb-screw for securing the blade E in position of desired adjustment in the same manner as the set-screw 10, which has been heretofore described.

Through the center of the dial D is secured a stem or post 19 for the purpose of securing the pointer or index 13 on the dial, which is accomplished by the pointer or index being drilled at 20 and the stem or post 19 being extended therethrough.

21 is a spring, and 22 a cap-screw whereby the pointer or index 13 is movably secured to the dial D.

The numerals 45 90, &c., on the face of the dial D denote degrees of semicircumference.

It will thus be seen that I have provided an attachment which by the use thereof rapid calculations as to circumferential degrees and degrees of angles can be made and executed which would otherwise require the use of several other separate and distinct instruments to accomplish the same purpose.

I am aware that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction as herein set forth; but,

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

1. A drafting attachment comprising an arm having pointed extensions on the sides near the free end portion thereof, a slide on the free end thereof, a dial on the opposite end, a pointer or index movably secured on the dial, a slide provided on the extended end portion of the pointer or index, a short rule-blade having a scale thereon and provided with a longitudinal round metal rod secured on the top part thereof whereby the rod is slidably secured within the slide on the pointer or index, substantially as described.

2. A drafting attachment comprising an arm having pointed extensions on the sides near the free end portion thereof, a slide on the free end thereof, a thumb-screw provided on the slide, a dial on the opposite end, a pointer or index movably secured on the dial, a slide provided on the extended end

portion of the pointer or index and having a thumb-screw secured therein, a short rule-blade having a scale thereon and provided with a longitudinal round metal rod secured on the top part thereof, whereby the rod is slidably secured within the slide on the pointer or index and secured in position by the thumb-screw therein, substantially as described.

3. A drafting attachment in combination with a bevel-square rule provided with a longitudinal round metal rod secured on the top side thereof, comprising an arm provided with pointed extensions on the sides near the free end portion thereof, of a slide secured on the said end portion, of a dial on the opposite end, of a pointer or index movably secured on the dial, of a slide on the extended end portion of the pointer or index, of a short rule-blade having a scale thereon, of a longitudinal round metal rod secured on the top part of the blade for the purpose of being engaged by the slide on the end of the pointer or index, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS S. ROSS.

Witnesses:

E. WALTON BREWINGTON,

MARY M. MAGRAW.