Feb. 13, 1923. 1,445,460.

B. B. STUBBLEFIELD.

MEANS FOR RETAINING DRAFTING INSTRUMENTS.

FILED MAY 14, 1921.

Fig.2.

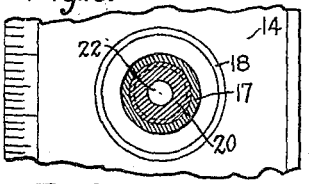


Fig.4.

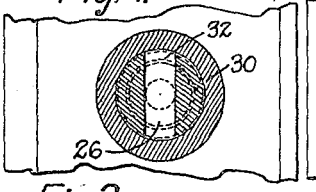


Fig.6

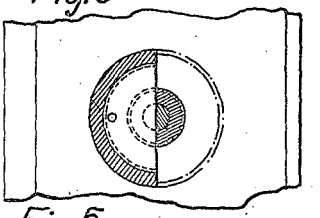


Fig.1.

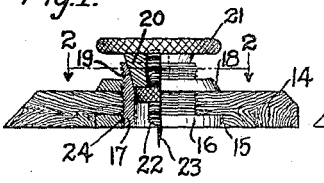


Fig.3.

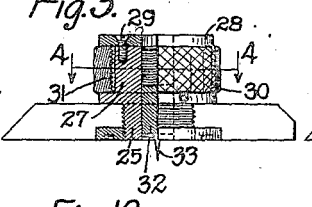


Fig.5.

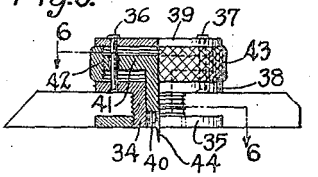


Fig.8.

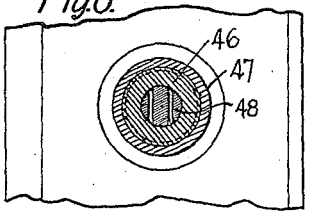


Fig.10.

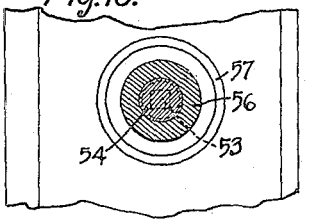


Fig.11.

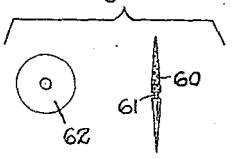


Fig.7.

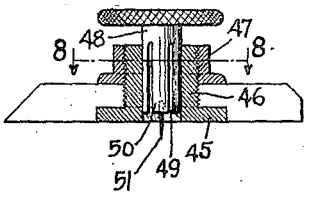


Fig.9

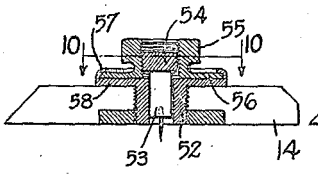


Fig.12.

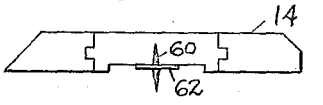
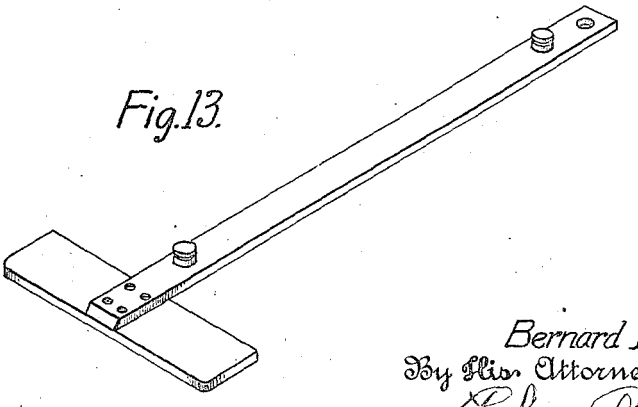


Fig.13.



Inventor

Bernard B. Stubblefield.

By His Attorney

Arthur Phelps Marr

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UNITED STATES PATENT OFFICE.

BERNARD B. STUBBLEFIELD, OF NEW YORK, N. Y.

MEANS FOR RETAINING DRAFTING INSTRUMENTS.

Application filed May 14, 1921. Serial No. 469,703.

To all whom it may concern:

Be it known that I, BERNARD BOWMAN STUBBLEFIELD, citizen of the United States, and resident of borough of Manhattan, city of New York, county of New York, State of New York, have invented certain new and useful Improvements in Means for Retaining Drafting Instruments.

The device the subject of this invention is intended primarily as a securing means for drafting instruments, T squares, straight edges and the like and is so designed that it materially assists the draftsman or operator by allowing him to use both hands freely at a distance away from the straight edge.

Another object of the invention is to provide a device that may be adjusted so that the securing means will extend to a greater or less degree into the surface of the table or support, a degree that shall be determined by nature of the material upon which the operator is working and by the length of time that the instrument is required to remain in a definite location.

Other objects and a complete description of my device will be set forth as the specification progresses. The following drawings should be considered for the full understanding of the specification.

In the drawings:

Fig. 1 shows an elevation partly in section of one construction of my device.

Fig. 2 is a plan view partly in section of the device shown in Fig. 1.

Fig. 3 shows another construction of my device and

Fig. 4 is a plan view partly in section thereof.

Fig. 5 is another construction and

Fig. 6 a partial sectional view thereof.

Fig. 7 is still further modification and

Fig. 8 a general sectional view thereof.

Fig. 9 is another modification and

Fig. 10 a partial section thereof.

Figures 11 and 12 show a simple demonstration of the principle that I have here employed and

Fig. 13 shows my device in operable position.

Similar reference numerals indicate like parts in all the figures where they appear.

At 14 I show a straight-edge ruler or T square and while by the shape, the member 14 in Fig. 1 may be considered a ruler I will indicate any of the aforesaid devices by the same reference character 14 as it makes little or no difference which of these devices are employed.

In the member 14 I produce a recess 15 into which I introduce a washer or perforated disc 16 secured to a screw threaded cylindrical member 17 and a collar 18 secures the member 17 in position. The upper and inner edge of the member 17 is tapered and into this taper member I introduce a tapered thimble 20 having a nurled flange 21. The thimble 20 is screw-threaded to receive one screw-threaded end of a stud 22 and into one end of the stud 22 a pin 23 is secured, and a nurled collar 24 allows the stud 22 to be inserted or removed from the thimble 20 as and when desired, and when the stud 22 is placed in the thimble 20 in a position reversed to that shown in Fig. 1, the pin 23 will be out of contact with any surface over which a member 14 may be caused to pass. The pin 23 is inserted into the surface by pressure upon the flange 21 and the extent of the insertion of the pin is determined by the contact of the angular surface 19.

In the member shown in Figs. 3 and 4 the cylindrical member 25 is of a length greater than that of the cylindrical member 17 and is provided with a transverse slot 26 extending somewhat over half of the full length of the member 25. Surrounding the member 25 is a ring 27 to which a cap 28 is secured by means of screws 29 and this ring 27 is also slotted. A nurled ring 30 operating on the exterior of the ring 27 has screw-threads 31 upon its interior and the movable stud 32 the upper end of which is flattened to be received and guided in the slot 26 has screw threads engaging the screw threads 31. A rotation of the ring 30 will elevate or depress the stud 32 and the pin 33.

In the device shown in Figs. 5 and 6 the cylindrical member 34 is placed in a reversed position the collar 35 being removable, pins 36 and 37 secure the flange 38 and a disc 39 together and the stud 40 is provided with a flange 41 having perforations through which the pins 36 and 37 pass. A nurled ring 43 provided with screw threads engages the screw threads 42 on the flange 41. By this construction a rotation of the ring 43 will elevate or depress the stud 40, the flange 41 and the pin 44.

The device shown in Figs. 7 and 8 operates by friction only. The flange 45 is secured to a cylindrical member 46 which is in turn secured in position by a nut 47. The member 48 is a shell or thimble provided with slots 49 which allow the projections 50 of the thimble to serve as springs engaging the side walls of a perforation through the cylinder 46. The pins 51 may be secured in any desired manner.

In the device shown in Figs. 9 and 10 the cylindrical member 52 has a squared perforation therethrough to receive a stud 53 square in cross-section. The head 54 of the stud 53 is screw threaded and is moved longitudinally by a thumb nut 55. The thumb nut 55 is provided with a flange 56 adapted to be received under the inturned edge of a flange 57 formed integral with the annular projection or flange 58 of the cylinder 52.

A part of the desirable functions of my device may be obtained in the simple construction shown in Figs. 11 and 12 which consist of a double pointed shank member 60 having a recess 61 at midlength thereof and a somewhat flexible disc 62 which is adapted to be received upon the member 60 and to be engaged at the recess 61. The operation of this device is plainly shown in Fig. 12.

It will be understood that parts of one device may be used with another or that part of either or any of the devices may be used alone and that other modifications may be made within the scope of the appended claims without departing from the principle or sacrificing the advantages of the invention.

Having carefully and fully described my invention, what I claim and desire to secure by Letters Patent is:

1. The combination with a drafting instrument of a screw threaded cylindrical member, means for securing said cylindrical member to said instrument, a pin support passing thru said cylindrical member, a pin supported thereby, and means rotatable upon the exterior of said cylindrical member for moving said pin longitudinally thereof.

2. The combination with a straight edge or the like of a screw threaded cylindrical member, means for securing said cylindrical member to said straight edge, a pin support passing through said cylindrical member, a pin supported thereby, means rotatable upon the exterior of said cylindrical member for moving said pin longitudinally thereof and means for preventing the rotation of said pin during said longitudinal movement.

3. The combination with a straight edge or the like of a screw threaded cylindrical member, means for securing said cylindrical member to said straight edge, a pin support passing through said cylindrical member, a pin supported thereby, means rotatable upon the exterior of said cylindrical member for moving said pin longitudinally thereof, means for preventing the rotation of said pin during said longitudinal movement and means for limiting the longitudinal movement thereof.

BERNARD B. STUBBLEFIELD.