

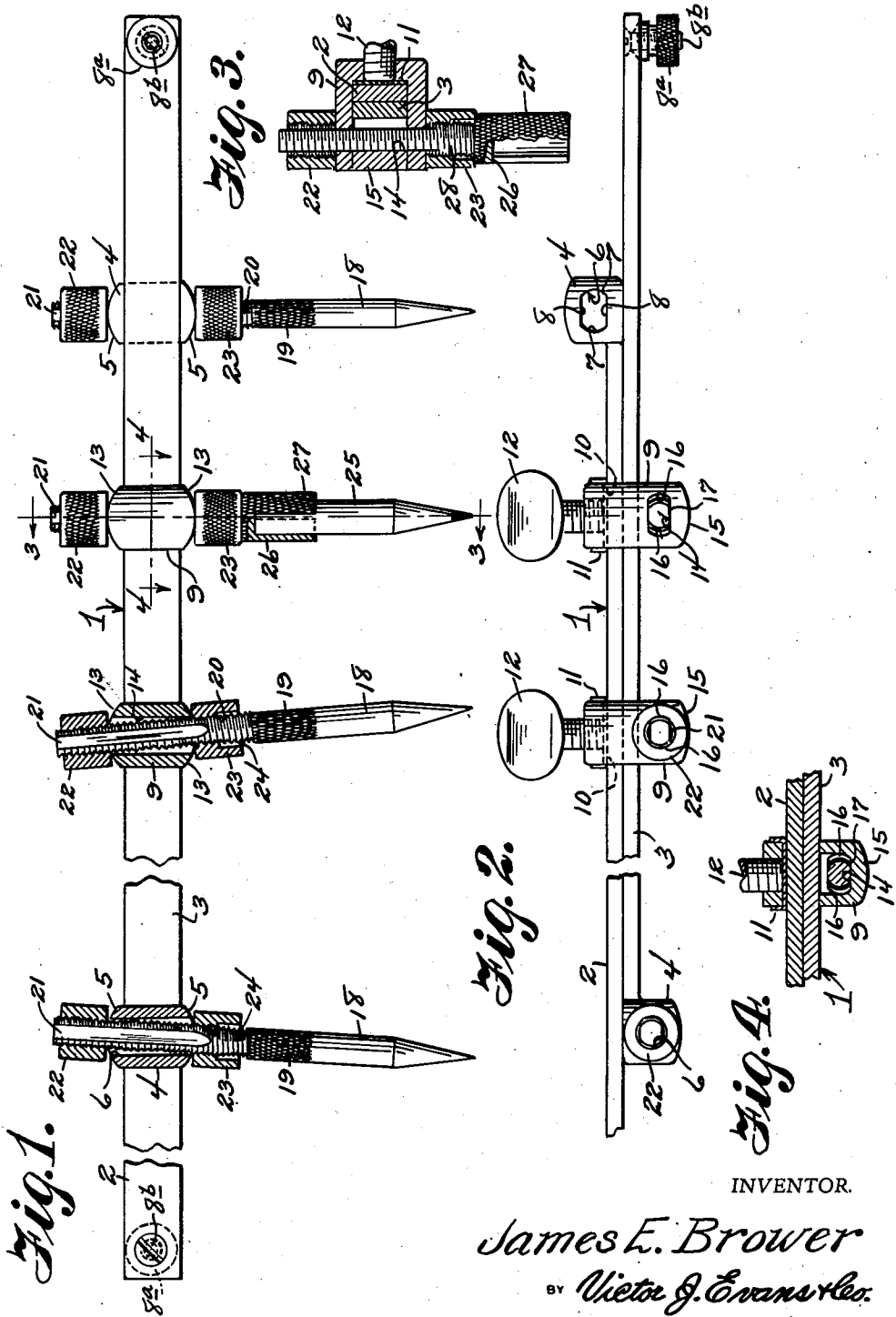
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BEAM COMPASS

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BEAM COMPASS

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3 Claims. (Cl. 33—158)

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My present invention, in its broad aspect, has to do with improvements in compasses, especially for making circles, and in improvements in bars for supporting the same. More particularly, it is my purpose to provide a sectional and extensible bar which may be extended to almost twice its compacted length, and provided with instrument (such as pencils and pens) or point supports slidably mounted thereon, and provided for clamping means for holding the section of the bar in adjusted position and to hold the supports in adjusted position. Said supports, or travelers, are provided with elongated vertical openings, as also are end blocks on the sections of the bar, to the end that the instrument, or points are adjustable to assume an incline position to properly center points and instruments, and to scribe figures which are circles, and figures which are not circles, as for instance, ellipses and the like. In addition, I provide for novel carriers for the points and instruments, such as pencils, pens and the like, and novel means for holding the same in the slidable or fixed supports. Furthermore, my device is capable of very fine adjustments, and is sturdy, practical, and designed to fulfill a number of purposes.

Other and equally important objects and advantages of my invention will be apparent from the accompanying description and drawings, but I wish it understood that changes in form, size, shape, construction and arrangement of parts is permissible, and is contemplated within my broad inventive concept and the scope of the appended claims.

In the drawings wherein I have illustrated a preferred form of my invention:

Figure 1 is a side elevation of my device;

Figure 2 is a plan view of Figure 1, but with one of the instruments removed to show construction of an end block;

Figure 3 is a section on the line 3—3 of Figure 1, and

Figure 4 is a section on the line 4—4 of Figure 1.

In the drawings wherein I have illustrated a preferred form of my invention:

The numeral 1 designates my bar, which is formed with similar sections 2 and 3, and each section has an end block 4 having a curved top and bottom 5 and a vertical elongated slot 6 with arcuate end walls 7 and parallel side walls 8. The opposite end of each section carries a serrated nut 8^a attached by a screw 8^b to the section end. The blocks are of a length exceeding the width of the sections 2 and 3. The bar sec-

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tions 2 and 3 are designed to be placed side by side, as shown in Figures 1 and 2, and clamped together in various adjusted positions lengthwise to vary the length of the bar as a whole, which may be adjusted from a compact position to an extended position of almost twice its compact length.

Mounted for sliding movement on the bar are a plurality of instruments (such as pens and pencils) and point supports or travelers 9, each of which is longer than the width of the bar sections, and wider than both sections, and is transversely slotted as at 10 to receive the sections therethrough. A U-shaped bearing plate or clip 11 is provided with the bight against a wall of the slot and the ends engaged about the body, as shown in Figure 2, and a thumb nut 12 is provided in the side of each support or traveler, which bears against the plate or clip 11 to clamp the bar sections 2 and 3 together and to hold the support or traveler in adjusted position thereon. Each support or traveler has arcuately curved upper and lower faces 13 and is formed with an elongated, vertical slot 14 in the thick portion 15 thereof, which has arcuate ends 16 and parallel side walls 17. Slots 10 and 14 communicate, as shown in Figure 4. Each point 18 is knurled, as at 19, and threaded as at 20, and has flattened plane sides 21, as shown in Figures 1 and 2, to be received in slots 14. Knurled nuts 22 and 23 are threaded thereon to engage above and below the supports or travelers, and the lowermost nut 23 has an enlarged bore 24 so that it may be threaded down to overlie the knurled portion 19. The points 18 are movable to various inclined positions, as shown in Figure 1, to make finer adjustment on centering points and to draw circles and figures which may not be circles, such as ellipses and the like. The curved faces 13 facilitate the angular adjustment and permit the nuts 22 and 23 being tightened up against such faces to hold the points in the angular position. Points or instruments may be similarly supported and adjusted on the blocks 4. An instrument, such as a pencil 25 has a carrier 26 having a tubular knurled ferrule 27 on the threaded shank 28, and the nuts 22 and 23 are similar to those used for the points. Instead of a pencil, a pen, or any other instrument may be used.

From the foregoing, it is believed that the operation and advantages of my invention will be apparent, but it is again emphasized that interpretation of the scope of my invention should only be conclusive when made in the light of the subjoined claims.

I claim:

1. A compass device, comprising a sectional longitudinal adjustable bar, a block formed on one of the ends of each section and having arcuate upper and lower faces, and a vertical elongated slot, a plurality of supports slidably mounted on the bar and having a transverse slot through which the sections of the bar are received, clamping nuts for holding the sections in adjusted position and the supports in place thereon, said supports having upper and lower arcuate faces and an elongated vertical slot, and implements carried in the slots of the supports and blocks and angularly movable with respect thereto, means for clamping the implements in position, said means engaging the arcuate faces of the supports and blocks.

2. The invention as defined in claim 1 wherein the implements have threaded portions extending

through the slots, nuts on said threaded portions, flat sides on said implements, and the slots have arcuate ends.

3. The invention as defined in claim 1 wherein implements are carried in the supports and blocks and have threaded extensions formed with flat plane sided opposed parts, and nuts are carried thereon engaging the arcuate faces above and below the blocks and supports.

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REFERENCES CITED

The following references are of record in the file of this patent:

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