

Nov. 27, 1928.

1,693,105

W. C. BIGNOLD

COMPOSING STICK

Filed June 29, 1927

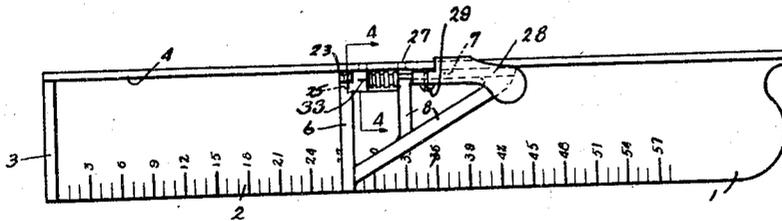


Fig. 1.

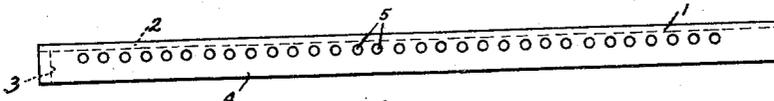


Fig. 2.

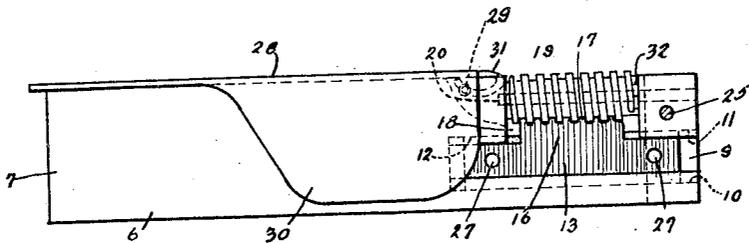


Fig. 3.

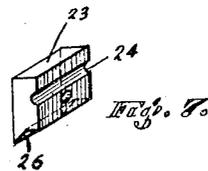


Fig. 4.

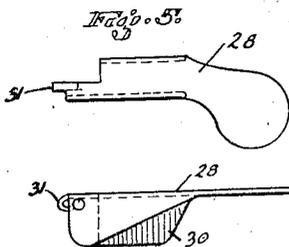


Fig. 5.

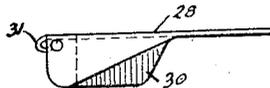


Fig. 6.

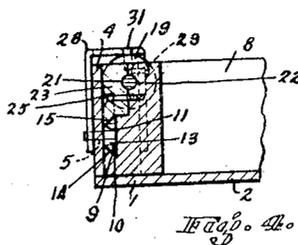


Fig. 7.

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COMPOSING STICK.

Application filed June 29, 1927. Serial No. 202,400.

My invention relates to improvements in composing sticks, and it consists in the combinations, constructions and arrangements hereinafter described and claimed.

5 An object of my invention is to provide a composing stick in which a stop may be adjusted along the stick for designating the number of picas, and in which means is provided for moving the stop with respect to
10 the stick any number of points which divide the picas into a number of equal parts.

A further object of my invention is to provide a device of the type described which is extremely simple in construction, and which
15 is durable and efficient for the purpose intended.

Other objects and advantages will appear in the following specification, and the novel features of my invention will be particularly
20 pointed out in the appended claims.

My invention is illustrated in the accompanying drawing, forming a part of this application, in which

Figure 1 is a top plan view of the device;

25 Figure 2 is a side elevation of Figure 1, with the stop member removed;

Figure 3 is a side elevation of the stop member;

30 Figure 4 is a section along the line 4—4 of Figure 1;

Figures 5 and 6 are top and side elevations of the locking lever; and

Figure 7 is a perspective view of a portion of the device.

35 In carrying out my invention I make use of a composing stick, indicated generally at 1, which has a scale 2 thereon, and two sides 3 and 4. The side 4 has a number of openings 5 therein, these openings being spaced
40 one pica apart.

The stop member 6 shown in Figure 3 employed with the composing stick 1 comprises a body member 7 that is L-shaped when looking at the device from the top and is provided
45 with bracing arms 8.

Adjacent to the corner of body 7 I provide a recess 9, which has beveled edges 10, 11 and 12. A slide 13 is provided with beveled edges 14 and 15, which are slidably received
50 in the edges 10, 11 and 12. Between the ends of the slide 13 there is disposed an extension 16, and across the top of the extension are cut a number of teeth 17, see Figure 3. The recess 9 is long enough to permit longitudinal

movement of the slide 13 therewith. The
55 body 7 is cut away at 18 for receiving the extension 16 and for permitting longitudinal movement of the extension with respect to the body 7.

Means for actuating a slide 13 comprises
60 a worm 19, which is rotatably carried by the body 7, and meshes with the teeth 17. The worm has one of its trunnions 20 mounted in the body 7 and its other trunnion 21 received in a groove 22, in the body 7, see
65 Figure 4. A block 23 of the shape shown in Figure 7, has a groove 24 therein, which receives the other half of the trunnion 21, and in this way the trunnion is journaled
70 in the body 7. The block 23 is secured in place to the body 7 by a screw 25. It will also be noted from Figure 7 that the block 23 has a beveled lip 26, which forms the beveled wall 11 of the recess 9 herein referred to.

The manner of mounting the slide 13 and
75 the worm 19 in the body 7 is as follows:

The block 23 is first removed from the body 7, and then the slide 13 is moved into place so as to be received by the beveled walls 10 and 12. The worm 19 is now placed in position
80 so that the trunnion 20 will be received in the body 7 and the trunnion 21 will be received in the groove 22. The block 23 is now secured in place and locks the trunnion 21 to the body 7 and also forms the beveled wall
85 11 for the forward end of the slide 13.

I provide pins 27 for securing the stop against longitudinal movement with respect to the side 4 and I further provide a lever
90 28 for preventing lateral movement of the body 7 with respect to the side 4. The pins 27 are carried by the slide 13, and are removably receivable in the openings 5. The lever 28 is pivoted at 29 to the body 7 and carries a wing 30 that engages with the outer
95 surface of the side 4, see Figure 4, for preventing lateral movement of the body 7. A projection 31, see Figures 5 and 6, is carried by the lever 28 and contacts with the worm 19 when the lever is in locked position. This
100 prevents rotation of the worm.

From the foregoing description of the various parts of the device, the operation thereof may readily be understood.

Assume that the printer wishes to place
105 the stop 6 at the number 27, on the scale 2 and then wishes to advance the stop a number of points forward or backward for providing a

line of the desired length, the pins 27 are inserted in the required openings 5 and then the worm 19 is rotated and will move the slide 13 for advancing the stop 6 into the desired position. After this has been done the lever 28 is swung into locked position and the device is ready for use.

The worm 19 is provided with six markings 32, which are equally spaced about the periphery of the worm. Each of these markings refers to a point. A marking 33 is carried by the block 23 and the operator aligns any one of the markings 32 with the marking 33 so as to position the stop 6 correctly. The marking 33 is placed upon the top of the block 23. As heretofore stated, there are twelve points between each pica and I therefore have provided a worm which when rotated through one complete revolution in one direction, will move the stop six points, and when rotated a complete revolution in the opposite direction, will also move the stop six points.

The threads on the worm form a solid circle at each end thereof, for providing an automatic stop when the worm has been advanced one revolution in either direction.

Although I have shown and described one embodiment of my invention, it is to be understood that the same is susceptible of various changes and I reserve the right to employ such

changes as may come within the scope of the appended claims.

I claim:

1. The combination with a composing stick 35 having a plurality of openings disposed along one of its sides, of a stop, a slide carried by said stop, pins carried by said slide for entering said openings, a worm for moving said stop in either direction and a lever 40 for securing said stop to said stick, and for preventing movement of said worm when said lever is swung into operative position.

2. In a device of the type described, a body, a slide carried by said body, a worm carried 45 by said body and engaging with said slide, projections carried by said slide for engaging with a composing stick and a lever for engaging with said worm and for locking the body 50 to the composing stick.

3. In a composing stick, a body portion, a slide carried by said body portion, and having a worm-receiving opening therein, said slide being connectible with a composing stick, a worm operatively connected to said slide and 55 being disposed in said opening and projecting a slight distance above the body portion, the circumference of said worm being graduated into a predetermined number of points, and a marking on said body portion adapted 60 to register with the graduations.

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