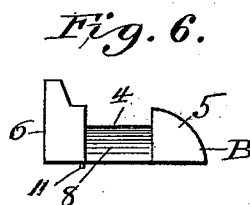
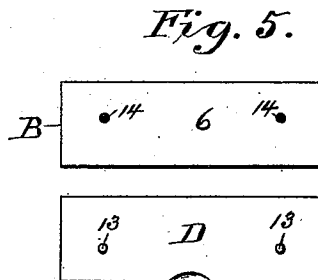
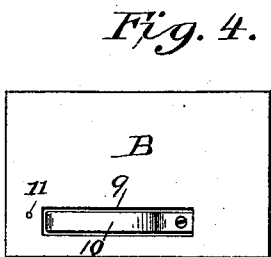
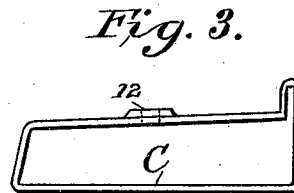
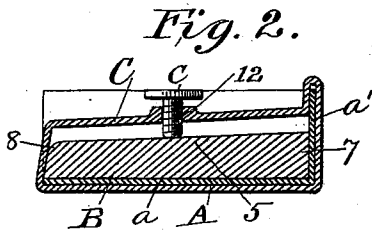
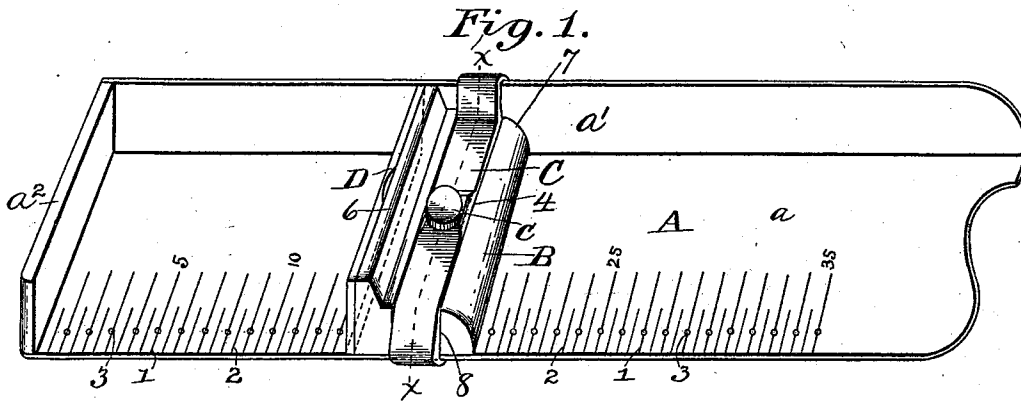


(No Model.)

F. W. FELDMAN.
COMPOSING STICK.

No. 550,263.

Patented Nov. 26, 1895.



Witnesses:

Joseph H. Glackwood
D. W. Gould.

Inventor.

Frederick W. Feldman
By Wm Hunter Myers,
Attorney.

UNITED STATES PATENT OFFICE.

FREDERICK W. FELDMAN, OF WASHINGTON, DISTRICT OF COLUMBIA,
ASSIGNOR OF NINE-TWENTIETHS TO CLARENCE E. DAVIS, OF SAME
PLACE.

COMPOSING-STICK.

SPECIFICATION forming part of Letters Patent No. 550,263, dated November 26, 1895.

Application filed March 14, 1895. Serial No. 541,726. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. FELDMAN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Composing-Sticks, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved composing-stick for printers' use; and it consists of a novel construction of the slide or knee and the means for holding it in the adjusted position, and also of the combination, with the knee, of an attachable face-plate designed to narrow the measure of the stick a definite number of points without moving the knee.

Referring to the accompanying drawings, Figure 1 is a perspective view of my improved composing-stick having the face-plate applied. Fig. 2 is a transverse vertical section on the line $x x$, Fig. 1, showing the set-screw in elevation. Fig. 3 is a side elevation of the yoke. Fig. 4 is a bottom plan view of the knee, showing the spring and stay-pin. Fig. 5 shows the face of the knee in elevation and the face-plate in plan, the latter being viewed from the inner side. Fig. 6 is an end elevation of the knee.

In the drawings, A represents the frame of the composing-stick, comprising, as usual, a base a , a rear vertical flange a' , and an end wall a'' . On the upper side of the base a , at its front edge, is marked a scale comprising twelve-point or pica lines 1, and six-point or nonpareil lines 2, and in the base, on the twelve-point lines of the scale, are formed small holes 3, for a purpose hereinafter explained.

B represents the slide or knee, which consists of an oblong block of metal of a length equal to the width of the base a of the frame inside the rear flange a' . A longitudinal horizontal channel 4 is formed in the upper side of the body portion 5 of the knee, which portion is preferably of uniform height from end to end, but of less height than the face portion 6, the top of the latter when the knee is in place standing flush with the top of flange a' . The ends of the knee are at right angles to the face, the inner end 7 being adapted to fit squarely against the flange a' of

the frame; but I prefer, however, for a purpose hereinafter explained, to slightly bevel the outer end 8 in line with the channel 4, as seen in Figs. 2 and 6. In the bottom of the knee, near the face-edge, I cut a rectangular recess 9, in which I secure a leaf-spring 10, the forward end of which is free, and slightly forward of the front end of the recess I secure a small stay-pin 11, as clearly shown in Fig. 4.

C is what I term a "yoke," which consists of an endless strip of metal shaped to fit neatly in the channel 4 in the knee up and over the flange of the frame, down, under, and across the base a of the frame, and up over the front end of the knee, the front end of the yoke sloping slightly inward from the bottom so as to conform to the bevel in the knee in register with the channel, this inward incline of the yoke at this point serving to permit the thumb of the compositor to assume a natural and easy position while he is using the stick. Through the upper portion of the yoke is formed a screw-threaded hole 12, in which a set-screw c is placed, the lower end of the set-screw being adapted to bear against the upper side of the knee. The width of space between the upper and lower portions of the yoke is such as to permit the yoke to be slipped over the body portion of the knee, and then when its upper portion is down in the channel in the knee the lower portion will extend far enough below the knee to permit the knee and yoke to be slid on the frame together.

To set the stick, the compositor moves the slide to any desired twelve-point mark on the scale and gently presses on the knee, when the stay-pin 11 will enter the second hole 3 in rear of that mark, after which the set-screw c is turned so as to tightly clamp the knee to the frame. The stay-pin, besides aiding in holding the knee in place, serves another very important purpose, in that by its use the knee cannot be set out of correct measure, for until the pin enters one of the holes in the base the knee cannot be secured, and all holes are on the twelve-point lines.

To break the stick, it is only necessary to loosen the screw c , when the spring 10 will raise the knee so that the pin 11 will be drawn out of the hole 3.

From the above description it will be seen

that the stick is capable of being set on a twelve-point gradation; but it will sometimes be desirable to narrow the measure by six points or nonpareil. For this purpose, and
 5 to avoid making an additional number of holes in the frame to receive the stay-pin, I employ a face-plate D for the knee. This plate is of the same size and shape as the face of the knee, and is of six-point thickness.
 10 From one side of the plate project two short studs 13, which are adapted to fit neatly in two holes 14 in the face of the knee. When this plate is on the knee and the knee is clamped to the frame, it will be held firmly in
 15 place by friction.

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

1. In a composing-stick, the combination, with the frame, of an oblong knee, a yoke passing horizontally over the knee and encircling the frame, and a set-screw passed through the yoke and adapted to bear on the knee.

25 2. In a composing-stick, the combination, with the frame, of an oblong knee having a horizontal longitudinal channel in its upper side, a yoke fitted in said channel and encircling the frame, and a set-screw passed
 30 through the upper portion of the yoke and adapted to bear on the knee.

3. In a composing-stick, the combination, with the frame having a series of perforations in its base, of a straight knee having a longitudinal channel in its upper side and a stay-

pin on its under side, said pin being adapted to enter either of said perforations, a yoke fitted in the channel in the knee and encircling the frame, and a set-screw passed through the upper portion of the yoke and adapted to bear on the knee. 40

4. In a composing-stick, the combination, with the frame having a series of perforations in its base, of a straight knee having a longitudinal channel in its upper side and a spring 45 and a stay-pin on its under side, said pin being adapted to enter either of said perforations, a yoke fitted in the channel in the knee and encircling the frame, and a set-screw passed through the upper portion of the yoke 50 and adapted to bear on the knee.

5. In a composing-stick, the combination, with the knee, of a face-plate of a definite number of points in thickness adapted to be removably secured to the face of the knee, 55 whereby the measure of the stick may be reduced a corresponding number of points without moving the knee after it has been set.

6. In a composing-stick, the combination, with the knee, of a face-plate of a given number of points in thickness having one or more studs on one side adapted to enter one or more holes formed in the face of the knee, for the purposes set forth. 60

In testimony whereof I affix my signature 65 in presence of two witnesses.

FREDERICK W. FELDMAN.

Witnesses:

WM. HUNTER MYERS,
 CLARENCE E. DAVIS.