

No. 803,081.

PATENTED OCT. 31, 1905.

R. D. TITTLE.
COMPOSING STICK.

APPLICATION FILED MAR. 23, 1905.

Fig. 1.

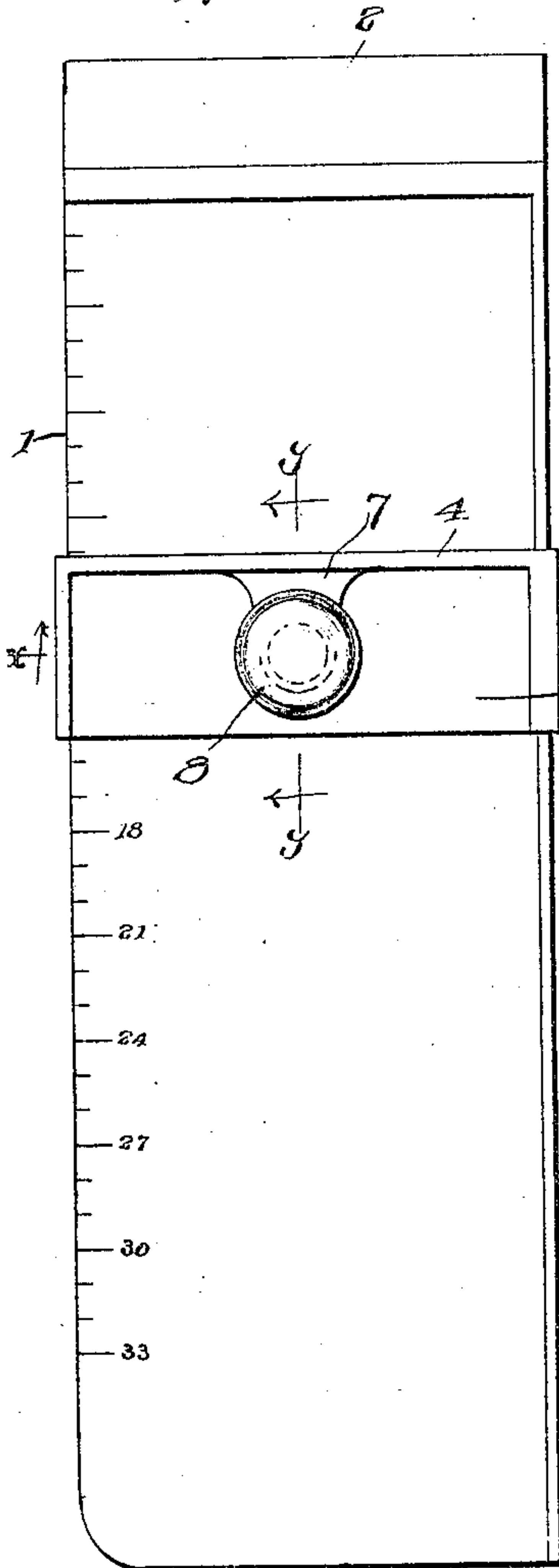


Fig. 2.

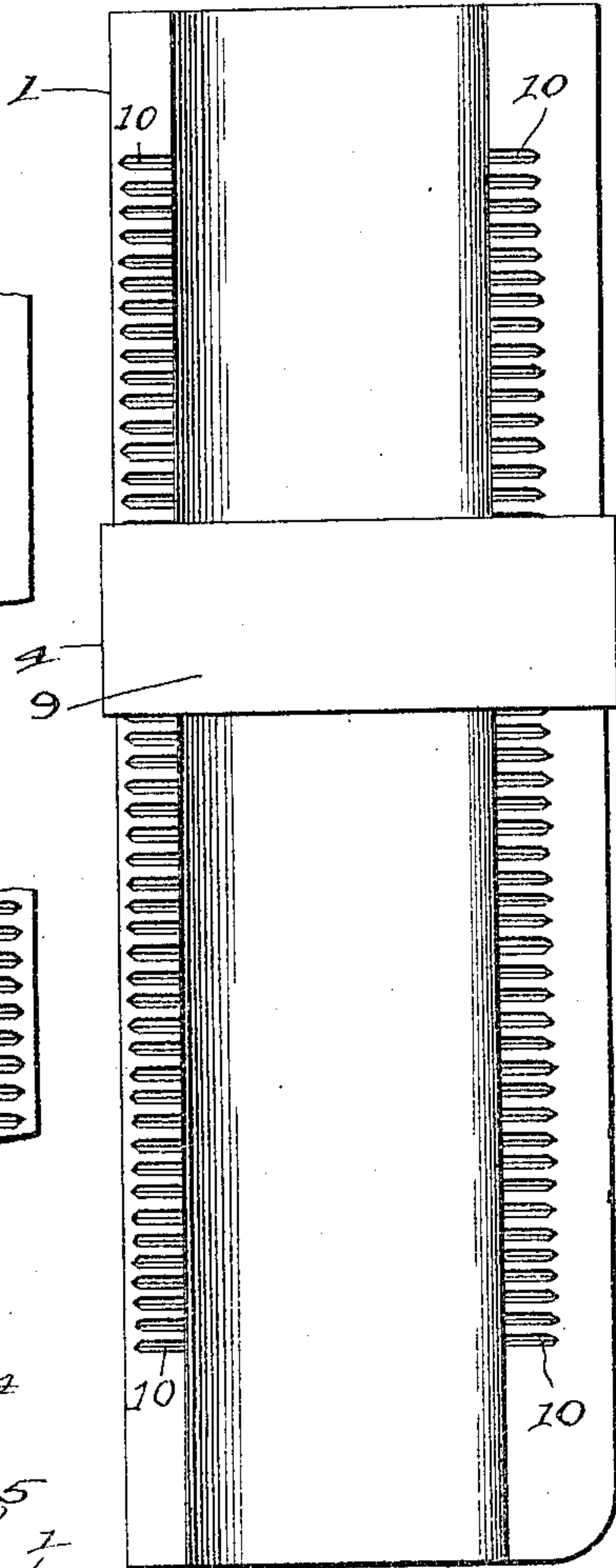


Fig. 5.

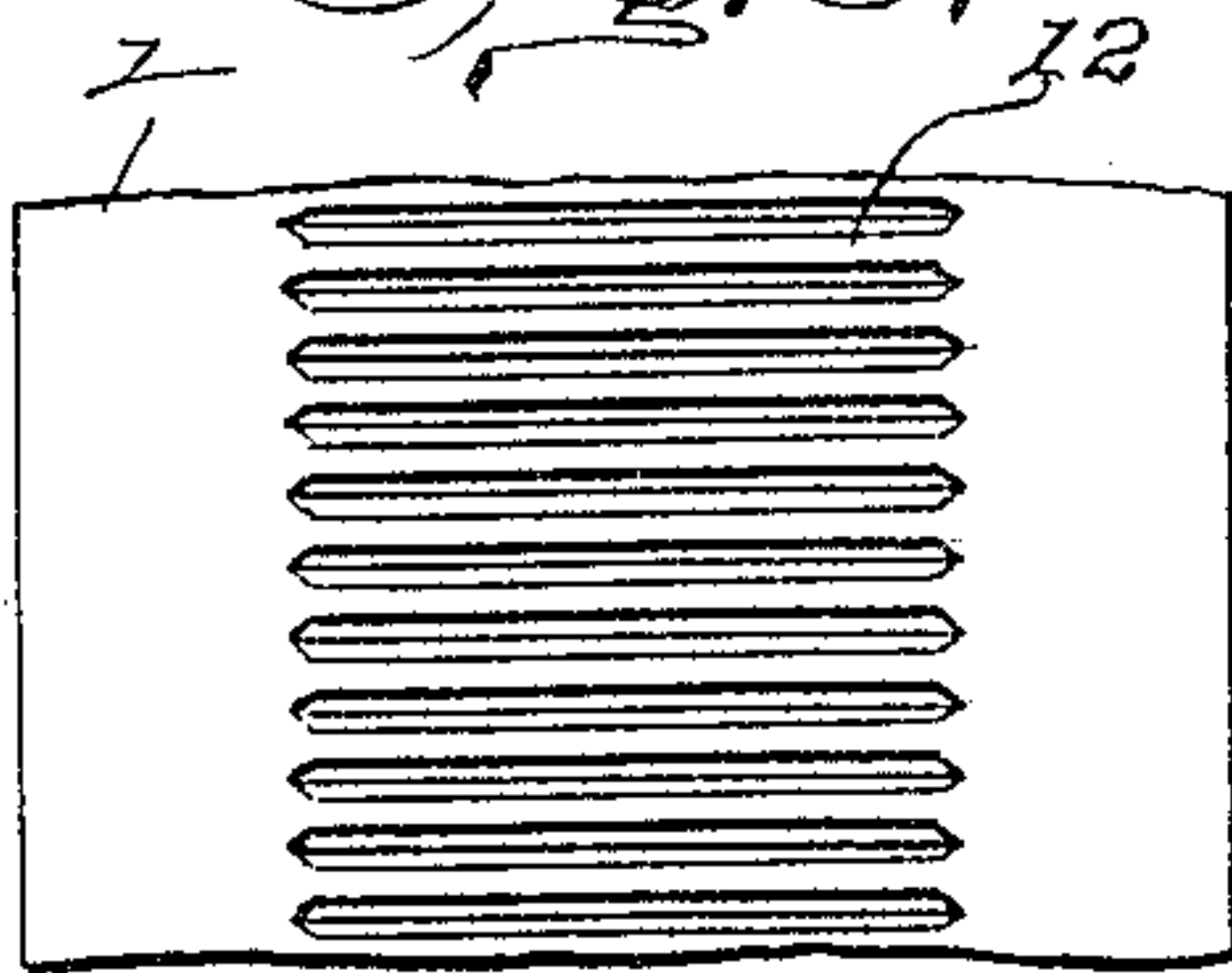


Fig. 6.

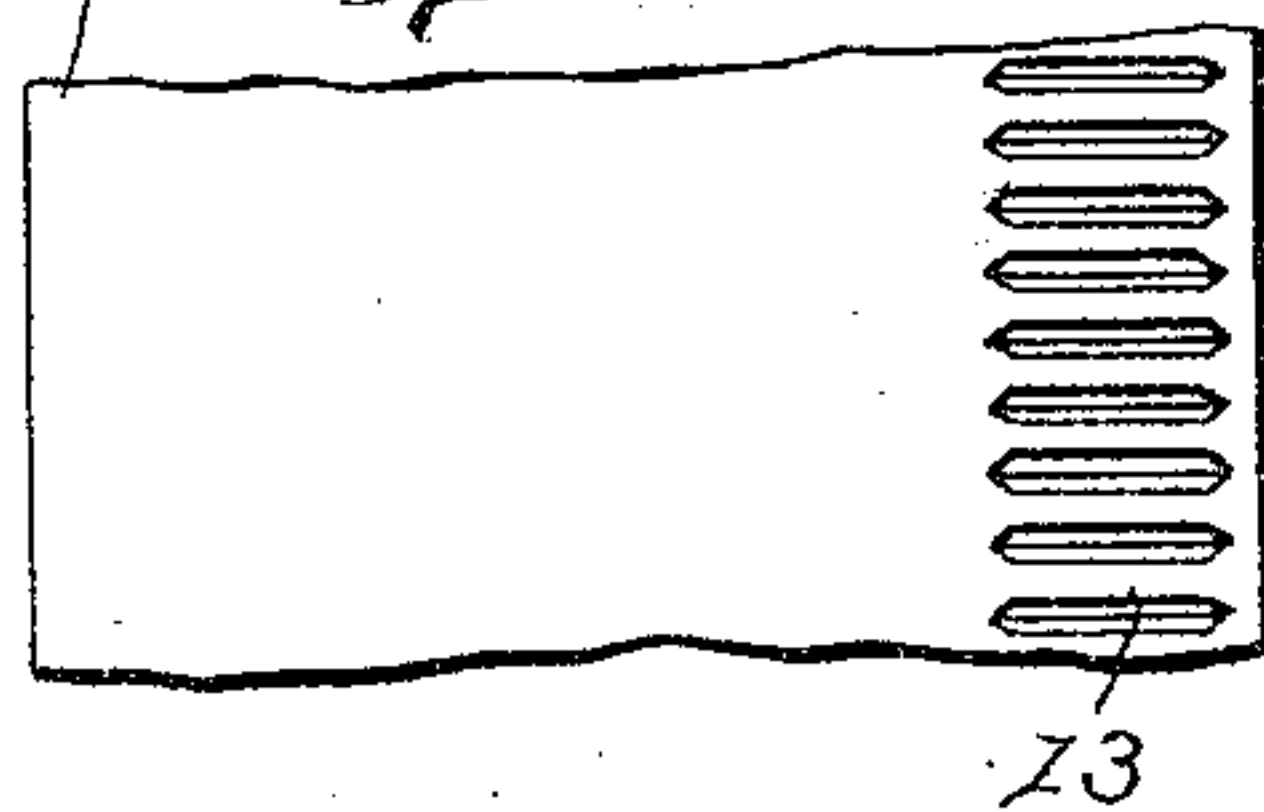


Fig. 4.

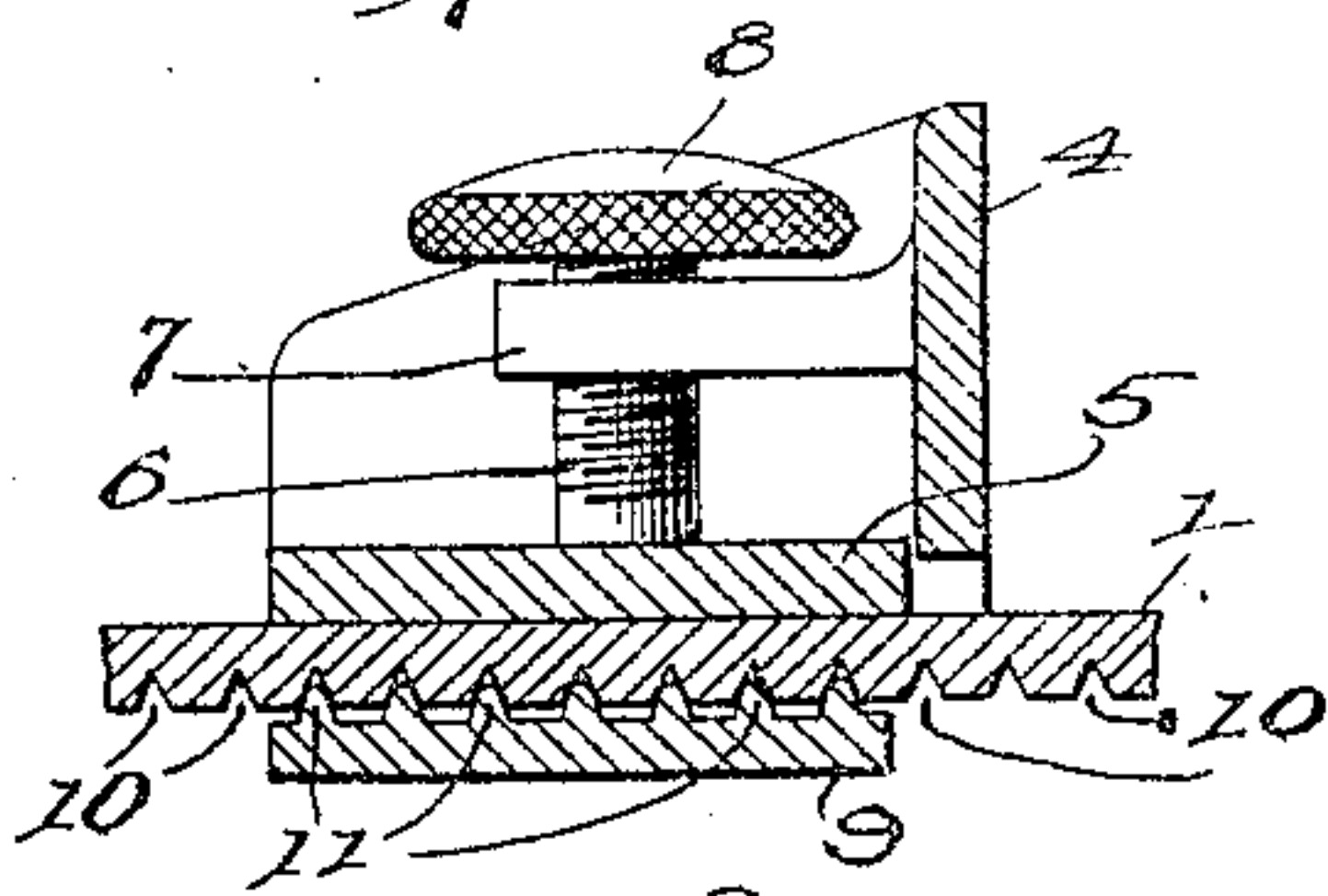
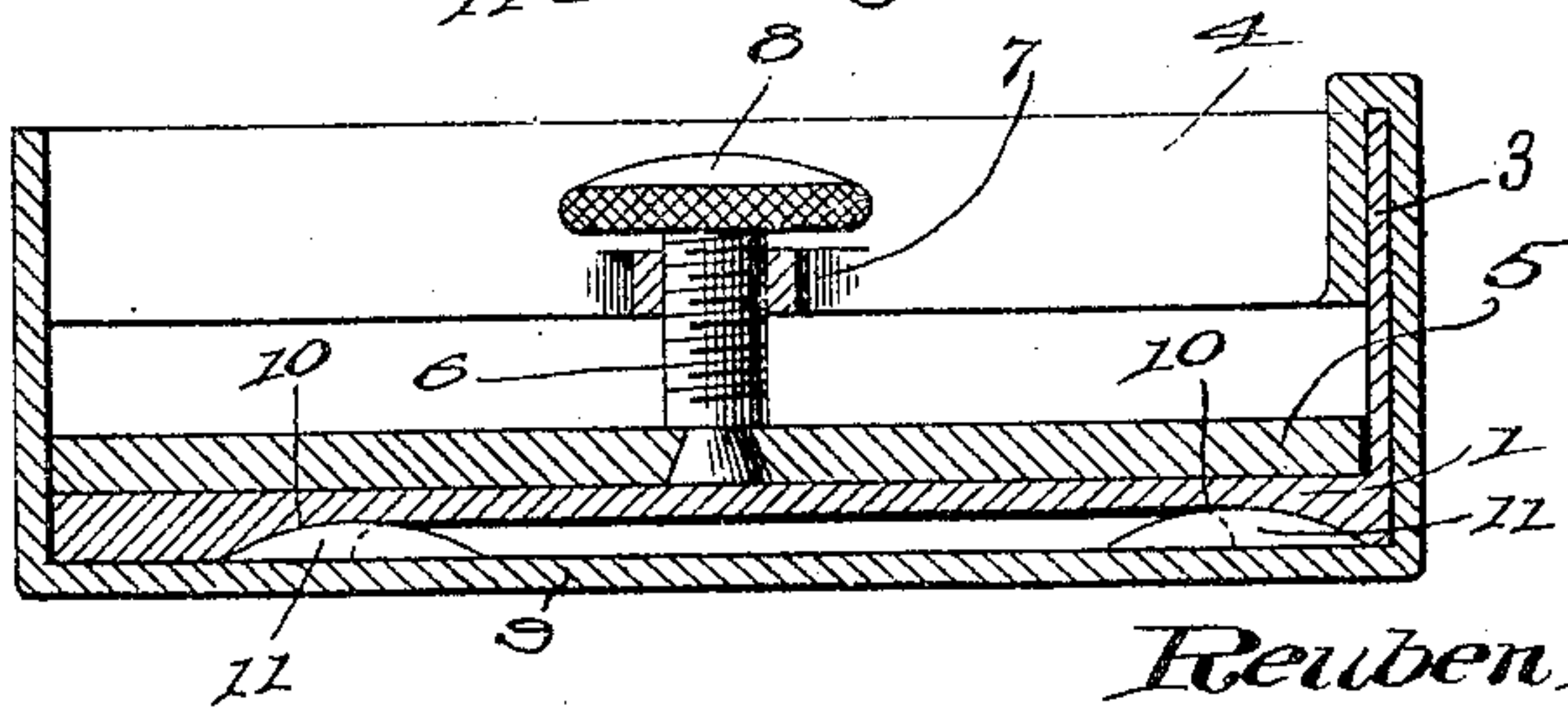


Fig. 3.



Inventor

Reuben D. Tittle,

Witnesses

H. Howard Walmsley
Irvine Miller.

By *H. A. Coulson*,
Attorney.

UNITED STATES PATENT OFFICE.

REUBEN D. TITTLE, OF SPRINGFIELD, OHIO, ASSIGNOR OF ONE-HALF TO
CHARLES H. STEPHAN, OF URBANA, OHIO.

COMPOSING-STICK.

No. 803,081.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed March 23, 1905. Serial No. 251,557.

To all whom it may concern:

Be it known that I, REUBEN D. TITTLE, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, 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.

10 This invention relates to improvements in composing-sticks, and is in the nature of an improvement upon the construction set forth in my prior Letters Patent, No. 772,116, of October 11, 1904. In my said prior Letters
15 Patent the body of the stick has a smooth continuous upper surface and lateral edges, and the slide fits upon said body and is secured in position after adjustment thereon by means of interlocking devices which en-
20 gage with the under side of the body. In the construction shown in said patent the engagement and disengagement are effected by means of a screw which is located below the under side of the slide and operates a
25 plate which engages the under side of the body.

My present invention has for its object to render the construction free from any projecting parts below the slide, as well as more
30 compact and readily accessible; and to these ends my invention consists in certain novel features, which I will now proceed to describe and will then particularly point out in the claims.

35 In the accompanying drawings, Figure 1 is a top plan view of a composing-stick embodying my invention in one form. Fig. 2 is a bottom plan view of the same. Fig. 3 is a transverse sectional view, on an enlarged
40 scale, taken on the line *x x* of Fig. 1 and looking in the direction of the arrows. Fig. 4 is a similar view taken on the line *y y* of Fig. 1 and looking in the direction of the arrows, and Figs. 5 and 6 are detail views of the un-
45 der side of the stick-body in two modified forms.

Referring first to the preferred form of construction, which I have shown in Figs. 1 to 4, inclusive, 1 indicates the body of the
50 stick in the usual form of a flat plate provided at one end with the fixed end wall 2 and having the fixed back wall 3 extending along one of its longitudinal edges. It will

be observed that, as in the construction set forth in my prior Letters Patent hereinbefore referred to, the upper surface of the flat
55 body of the stick and the inner faces of the end and back walls of the stick are all smooth continuous surfaces free from projections, teeth, apertures, or indentations of any kind, 60
so as to present uniform and even surfaces both to the type and to the hand of the compositor.

4 represents the knee or slide, which is mounted to slide longitudinally upon the
65 stick and which is apertured to receive said body. Within the knee or slide there is mounted a plate 5, located above and adapted to bear upon the upper surface of the flat
70 body 1 of the stick. This plate is swiveled to the lower end of a screw 6, which is threaded through a lug 7, formed on the upper side of the knee or slide, the screw terminating
75 above said lug in a knurled head 8, by means of which said screw may be readily operated. It will be seen that by rotating said screw in the proper direction the plate may be pressed
80 against the upper surface of the body 1, thereby drawing up against the under side of said body 1 that portion of the slide which lies below the body 1, which portion is designated by the reference-numeral 9. It will
85 be understood, of course, that the aperture in the slide is of a height sufficient to permit this vertical movement.

In the form of construction under consideration the locking of the slide and stick-body after adjustment is effected in the same way as in the construction set forth in my prior Letters Patent hereinbefore referred to. The stick-body 1 is provided
90 near each of its lateral edges with a row or series of interlocking recesses 10, preferably in the form of grooves having inwardly-converging flat sides. The slide is provided
95 upon the upper side of the part 9 thereof which lies below the body 1 with two corresponding rows of interlocking projections 11, adapted to enter and engage the recesses of the body, these projections being provided
100 with correspondingly-converging flat sides and being cut away at their apex to permit them to accommodate themselves to the wear of the parts.

It will be seen that when the screw is
105 loosened the slide may be adjusted to any

desired point on the body of the stick, at which point it may be firmly locked by turning the screw so as to cause the plate to bear upon the top of the flat body of the stick, and thereby force the under part of the slide into engagement with the under side of said flat body, thus locking the slide in a position at right angles to the longitudinal axis of the stick. The structure thus presents all of the advantages set forth in my prior Letters Patent, and it will be seen that the adjusting-screw in my present construction is located on the upper side of the stick, where it is readily accessible, and that it does not increase the total or maximum vertical height of the stick, which is the height from top to bottom of the slide. Moreover, my present stick presents a practically smooth and uniform under side and is without any projecting parts below the slide, since the location of the adjusting-screw on the under side of the slide is avoided.

While I prefer to employ the interlocking means just described, comprising two rows of interlocking devices located along the lateral edges of the stick, I may employ the arrangement of these parts shown in Fig. 5, in which the interlocking recesses here designated by the reference-numeral 12 are formed in a single row along the central part of the under side of the body 1, being, however, of such a length as to extend well out toward the lateral margins of the body, and thus give in a great measure the same beneficial results as arise from the construction illustrated in Fig. 2. I also propose to employ the arrangement shown in Fig. 6, in which a single row of interlocking devices is employed, (indicated by the reference-numeral 13,) said row being located near one of the lateral edges of the body 1, the edge so provided being the edge farthest from the back wall 3, which will in a measure take the place of the omitted row of interlocking devices in holding the slide firmly in place. Of course it will be understood that the projections on the slide will correspond in location and character with the recesses in the body.

It will be observed that in the construction hereinbefore described fixed and rigid relations exist between those portions of the slide which serve to guide its movements and to lock it in position and that portion of the slide which constitutes its essential reason for existence—to wit, the upright defining-surface extending at right angles to the stick-body and back and constituting a contact-surface for defining the position of the type in the stick. The purpose of my construction is to maintain this type-supporting surface in its proper position, and this end I am enabled to attain with certainty and accuracy by reason of the fact that the slide is, in effect, a unitary body having permanent and fixed relations between its type-con-

tact surface, its guiding-surface, and its locking-surfaces.

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

1. In a composing-stick, the combination, with a stick-body having a smooth, continuous upper surface, of a slide movable longitudinally on said body, said slide being provided with a screw threaded therein and arranged to exert its pressure on the upper side of the stick-body and thereby force the under portion of the slide, which lies below the stick-body, against the under side of said stick-body, the under side of the stick-body and the upper side of the lower portion of the slide being provided with interlocking projections, said slide having its type-contact surface, its guiding-surfaces and its interlocking projections in permanent and fixed relations with each other, substantially as described.

2. In a composing-stick, the combination, with a stick-body having a smooth, continuous upper surface, of a slide movable longitudinally on said body, a plate mounted in said slide above the stick-body and movable toward and from the same, and a screw threaded in said stick-body and swiveled in said plate, whereby the under portion of the slide, below the stick-body, may be forced against the under side of the stick-body, the under side of the stick-body and the upper side of the lower portion of the slide being provided with interlocking projections, said slide having its type-contact surface, its guiding-surfaces and its interlocking projections in permanent and fixed relations with each other, substantially as described.

3. In a composing-stick, the combination, with a stick-body having a smooth, continuous upper surface, of a slide movable longitudinally on said body, said slide being provided with a screw threaded therein and arranged to exert its pressure on the upper side of the stick-body and thereby force the under portion of the slide, which lies below the stick-body, against the under side of said stick-body, the under side of the stick-body and the upper side of the lower part of the slide being provided with two sets of interlocking devices arranged near the lateral edges of the body and the ends of the slide, said slide having its type-contact surface, its guiding-surfaces and its interlocking projections in permanent and fixed relations with each other, substantially as described.

4. In a composing-stick, the combination, with a stick-body having a smooth, continuous upper surface, of a slide movable longitudinally on said body, a plate mounted in said slide above the stick-body and movable toward and from the same, and a screw threaded in said stick-body and swiveled in said plate, whereby the under portion of the

slide, below the stick-body, may be forced against the under side of the stick-body, the under side of the stick-body and the upper side of the lower part of the slide being provided with two sets of interlocking devices arranged near the lateral edges of the body and the ends of the slide, said slide having its type-contact surface, its guiding-surfaces and its interlocking projections in perma-

nent and fixed relations with each other, substantially as described.

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

REUBEN D. TITLE.

Witnesses:

E. O. HAGAN,
IRVINE MILLER.