(No Model.)

W. H. GOLDING.

COMPOSING STICK.

No. 347,591. Patented Aug. 17, 1886.

Fig. 1.

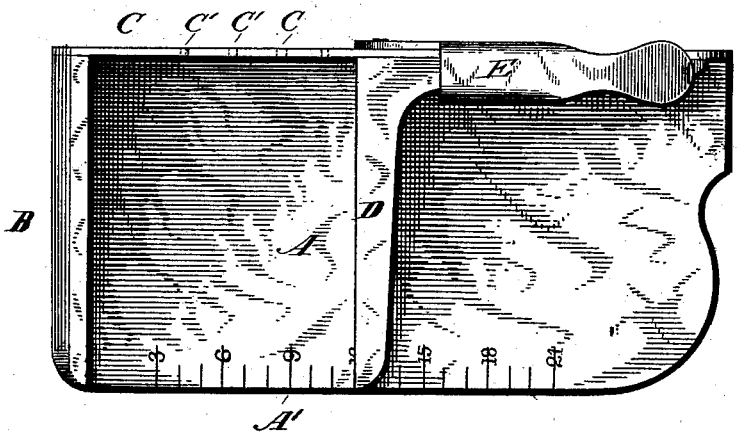


Fig. 2.

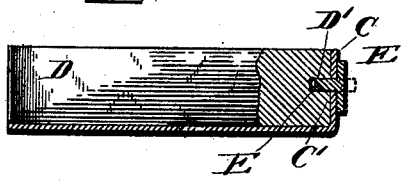


Fig. 3.

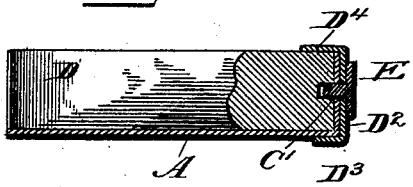


Fig. 4.

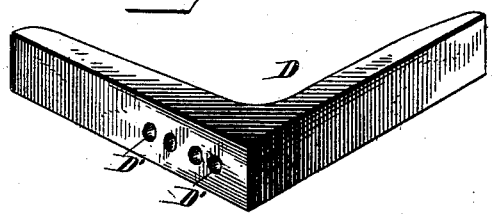


Fig. 5.

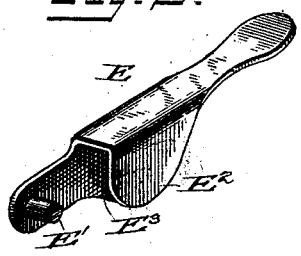
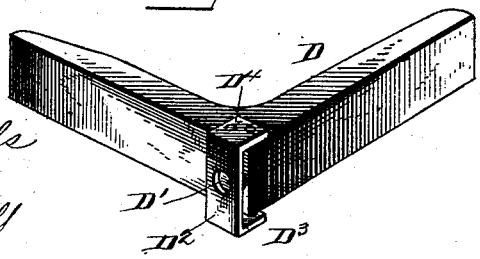


Fig. 6.



WITNESSES:

L. C. Hills

Wm. S. Duvall

INVENTOR

Wm H Golding

BY E. B. Stocking

ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM H. GOLDING, OF CHELSEA, MASSACHUSETTS.

COMPOSING-STICK.

SPECIFICATION forming part of Letters Patent No. 347,591, dated August 17, 1886.

Application filed November 2, 1885. Serial No. 181,674. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GOLDING, a citizen of the United States, residing at Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Composing-Sticks, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to composing-sticks of that class in which the knee is adjustably and removably secured by means of a pivoted clasp adapted to embrace the knee and wall of the stick in such manner as to firmly bind the two together; and the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a plan of a composing-stick constructed in accordance with my invention. Fig. 2 is a transverse section through the pivot of the lever, a portion of the knee being shown in end elevation. Fig. 3 is a similar view of a modification. Fig. 4 is a perspective of the knee. Fig. 5 is a perspective of the lever, and Fig. 6 is a perspective of the knee employed in the modification illustrated in Fig. 3.

Like letters indicate like parts in all the figures.

A represents the bottom, B the end wall, and C the back of a composing-stick, formed in this instance of sheet metal, and provided with a series of holes, C′, in the back.

D represents the knee, which is provided with a series of holes, D′, in that branch thereof which is arranged against the back C of the stick.

E represents the clamping-lever, which is provided with a pivot, E′, and with a binding-clamp, which consists of two projections, E^2 and E^3, that serve to embrace the back of the stick and a branch of the knee. The lever E is in this instance formed of sheet metal, preferably steel, bent to the form shown, and having its projections E^2 E^3 slightly inclined toward each other at their free ends; or it may be arranged parallel with each other and slightly tapered upon their inner surfaces, whereby in the first instance, the material being light and resilient, the projections will snugly clasp the back and knee by reason of their resiliency, and in the second instance, with proper fitting, the said projections, being of heavier material and rigid, will also firmly bind the parts together when embraced by said projections.

As a further modification which would present itself to persons skilled in the construction of articles of this class, the branch of the knee embraced by the projections on the lever may be slightly wedge-shaped in vertical cross-section, so that as the lever is depressed the projections will firmly bind the knee to the stick.

As thus far described, it will be seen that the lever is entirely removable from the stick and the knee, so that by moving the latter within the former, to cause any one of the holes D′ therein to register with a hole, C′, in the back of the stick, the pivot E′ of the lever may be passed through the hole C′ of the back into a hole, D′, of the knee, which registers therewith, the lever at such time being elevated at its free end, so that both of the projections are above the top of the knee and back, and so that by depressing said free end of the lever, it moving upon its pivot, the said projections serve to bind the knee in the position selected.

Heretofore in composing-sticks of this class the lever has been pivoted to the inside of that branch of the knee which comes in contact with the back of the stick, and therefore the clamping projections were necessarily located at a greater distance from the face of the transverse branch of the knee than in my invention. It is apparent that the nearer the clamping projections are to the working-face of the knee the more firmly will the latter be held in operative position and against springing away from the back when pressure is applied to the outer end of the transverse branch of the knee. Such an action of the knee is more apt to occur when the stick is nearly filled and when the lines are somewhat crowded. Now, in order to further strengthen the knee against such displacement, I may apply thereto a loop, D^2, which shall embrace the back and extend beneath the bottom A of the stick, as at D^3, Fig. 3. The upper end of the loop may be secured by rivets or otherwise to the top of the knee, as at D^4. The loop is provided with a hole, D′, to receive the pivot E′ of the lever.

In this construction the lever may or may not, as desired, be permanently pivoted in the hole D′ of the loop, in which case the hole C′ in the back of the stick may be dispensed with; but when a graduated scale, as A′, is provided on the bottom A of the stick, and when the holes C′ are arranged in relation to said scale, the removable lever E is advantageous in setting the stick to varied widths of column, the graduations of the scale and the relative locations of the holes C′ being adapted for variations of picas or half-picas in length of line to which the knee may be set. Further or intermediate variations in the location of the knee may be secured by the series of holes D′ therein; so, also, may a hole be formed in the knee opposite the hole D′ in the loop thereof, in which case the pivot of the removable lever may be inserted through the loop and through the back and into the knee, whereby I still retain the advantage of a close disposition of the clamping projections to the working-face of the knee, as before described.

It will be noticed that the lever E is of such a form that when closed no part thereof projects materially from the knee or stick, and that therefore it does not act as an obstruction to convenience in use, while at the same time it may be readily raised to unlock the knee. The entire lever, with the exception of its pivot, may be struck up from a single piece of metal.

It is apparent that the pivot E for the lever may be affixed to the knee and projected through any of the holes in the back C, so that the lever, being provided with a hole at its pivot end, can be placed upon the projecting pivot and swung down to clamp the parts, as hereinbefore described.

Having described my invention, what I claim is—

1. The combination, with the body of a composing-stick and its knee, of a knee-clamping lever pivoted outside of the stick and in advance of the rear wall of the transverse branch of the knee, substantially as specified.

2. The combination, with the body of a composing-stick and its knee, of a lever having clamping projections adapted to embrace a branch of the knee and the back of the stick, and pivotally connected with the knee from the outside of the stick, whereby the clamping projections are brought in closer proximity to the working-face of the knee, substantially as specified.

3. In combination with the body of a composing-stick having a series of holes in its back, a removable clamping-lever, a knee, and a pivot for the lever, passing through the back, substantially as specified.

4. The combination, with the body of a composing-stick having a series of holes in its back and a graduated scale, of a knee having holes and a removable lever having a pivot adapted to enter the holes in the back and that in the knee, whereby predetermined adjustments of the knee may be effected, substantially as specified.

5. The combination of the stick A, having a series of holes, C′, in the back C thereof, the knee D, having the holes D′, and the removable lever E, having the projections E^2 E^3, and beyond the latter projection the pivot E′, substantially as specified.

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

WILLIAM H. GOLDING.

Witnesses:
W. G. EVERT,
CHAS. F. TENNEY.