

Cloudman & Coffin, *Composing Stick.*

No 108451.

Patented Oct. 18. 1870.

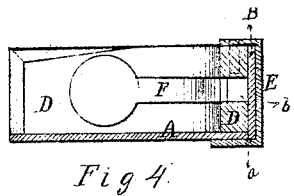


Fig. 4.

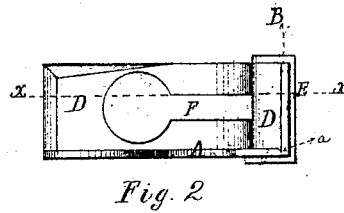


Fig. 2.

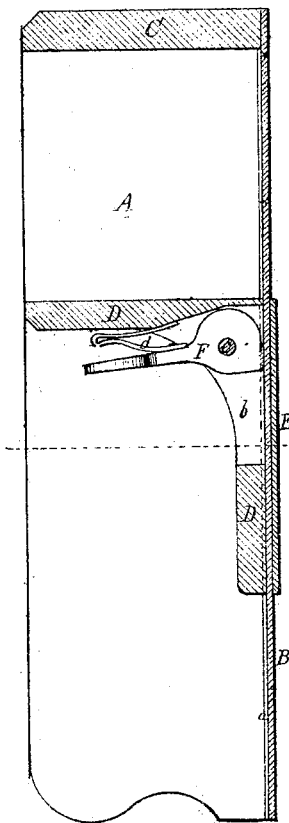


Fig. 3.

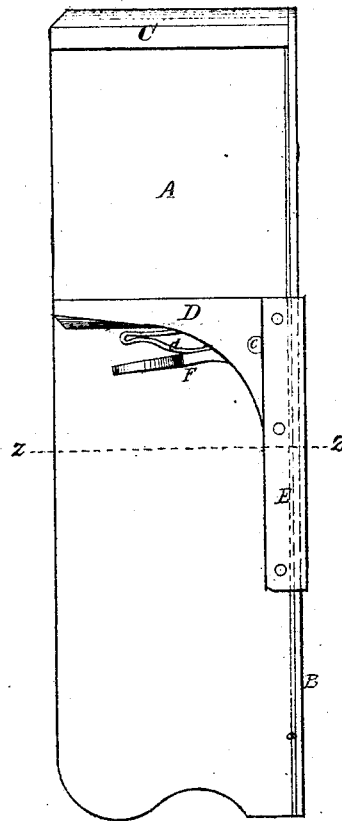


Fig. 1.

Witnesses.
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United States Patent Office.

AUGUSTUS F. CLOUDMAN, OF BROOKLYN, NEW YORK, AND GEORGE W. COFFIN, OF CHARLESTOWN, MASSACHUSETTS.

Letters Patent No. 108,451, dated October 18, 1870.

IMPROVEMENT IN COMPOSING-STICKS.

The Schedule referred to in these Letters Patent and making part of the same.

We, AUGUSTUS F. CLOUDMAN, of Brooklyn, in the county of Kings and State of New York, and GEORGE W. COFFIN, of Charlestown, in the county of Middlesex and State of Massachusetts, have invented an Improved Printers' Composing-Stick, of which the following, taken in connection with the accompanying drawing, is a specification.

Nature and Objects of the Invention.

Our invention relates to the means employed to secure the movable jaw to the back of the stick; and

It consists, first, in the formation of a groove in the bottom, said groove being located in the angle formed by bending up the back, into which fits a tongue formed upon the lower side of the movable jaw; and it also consists in the use, in combination with the above tongue and groove, of a clasp, formed by riveting a piece of sheet metal to the top of the movable jaw, and bending it down outside of the back, and under the bottom of the stick, so as to completely surround the back of the stick, and form an L-shaped slot, extending the whole length of movable jaw, into which the back of the stick slides.

It consists, in the second place, in the use of a pawl-lever to clamp the movable jaw, said pawl-lever being pivoted to the jaw in a horizontal position, and nearly parallel to the projecting arm of the jaw, so as to move in a plane parallel to the bottom of the stick, the toe or point of the short arm of the lever resting against the inner surface of the back of the stick.

Description of the Drawing.

Figure 1 is a plan of our improved composing-stick;

Figure 2 is an end view;

Figure 3 is a longitudinal section on the line xx , on fig. 2; and

Figure 4 is a transverse section on line zz , on fig. 1.

General Description.

A is the bottom, and B the back of the stick, formed from one piece of sheet-steel, bent at right angles, and having the groove a formed in the angle so made.

C is the fixed jaw of the stick, and

D is the movable jaw, having a tongue formed upon its lower side to fit the groove a , as shown.

E is a piece of sheet-steel riveted to the upper side of the jaw D, and bent down outside of the back and under the bottom of the stick, to hold the parts together.

The jaw D has a mortise, b , cut through it, parallel to the bottom, in which is placed the pawl-lever F,

pivoted upon the pin c , and having the spring d secured to its outer arm, and resting against the projecting arm of the jaw D, said spring serving the purpose of forcing the toe of the pawl F against the back of the stick, in a perfectly obvious manner.

The short arm of the pawl-lever is so constructed that the point or toe of the pawl, where it touches the back of the stick, shall be at such an angle to a line drawn through the center of its axis, and perpendicular to the back of the stick, that when it is forced in contact with the back, by the action of the spring d , any attempt to move the jaw D in a direction to make the distance between it and the fixed jaw C greater, will cause the pawl to bite the harder, and resist all attempts to move the jaw D in that direction, without first releasing the pawl by pressing upon the long arm of the same, so as to compress the spring d .

The point of the pawl D is provided with teeth, to assist in securing a grip.

The groove a and the tongue on the bottom of the jaw D, fitting into the same, help to secure the jaw to the back, and prevent the strain of holding the jaw from bending the light clasp E, and thus enables us to use a much lighter clasp than we otherwise could.

It is obvious that the groove a , and the tongue to fit the same, may be used with other varieties of clasps and clamping devices than those shown, as, for instance, the clasp, instead of embracing the whole back of the stick, might be made to embrace a lip formed upon the upper edge of the back of the stick, and a set-screw might be used to clamp the jaw to the back in the usual manner, in combination with the clasp and the groove a , shown and described.

We do not, therefore, wish to confine ourselves to the particular combination and arrangement of the parts shown.

Having thus fully described our improved stick,

What we claim as our invention, and desire to secure by Letters Patent of the United States, is—

1. The pawl-lever F, constructed, arranged and operating substantially as described, for the purpose specified.

2. The clasp E, the movable jaw D, and the groove a , all constructed and arranged as set forth, in combination with any suitable clamping device, substantially as described.

Executed at Boston this 26th day of April, 1870.

AUGUSTUS F. CLOUDMAN.

GEORGE W. COFFIN.

Witnesses:

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N. C. LOMBARD.