No. 635,651. Patented Oct. 24, 1899.

A. L. CAMPFIELD.

PRINTING TYPE.

(Application filed Dec. 18, 1897.)

(No Model.)

Fig. 1.

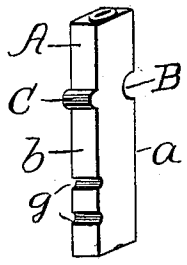


Fig. 2.

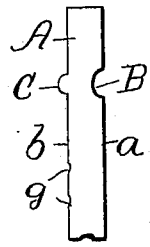


Fig. 3.

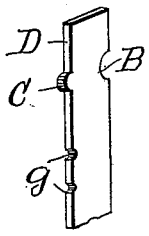


Fig. 4.

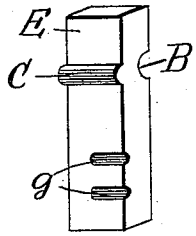


Fig. 5.

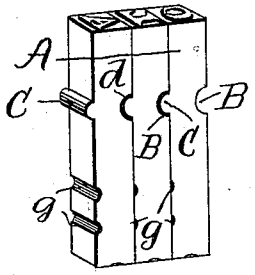


Fig. 6.

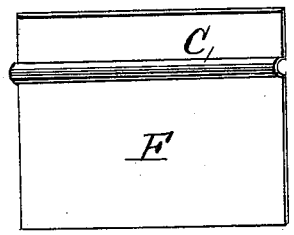


Fig. 7.

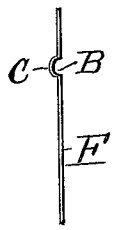
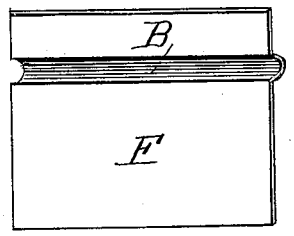


Fig. 8



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALFRED L. CAMPFIELD, OF CHICAGO, ILLINOIS.

PRINTING-TYPE.

SPECIFICATION forming part of Letters Patent No. 635,651, dated October 24, 1899.

Application filed December 18, 1897. Serial No. 662,437. (No model.)

To all whom it may concern:

Be it known that I, ALFRED L. CAMPFIELD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Printing-Type; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in the ordinary printing-type, and has for its object to provide the type with an interlocking device that will lock each letter and line of type in place and prevent the same from working loose and dropping out or being pulled out by the action of the press.

It will be understood that this improvement applies as well to spaces, quadrats, leaders, border, leads, slugs, brass rule, furniture, &c., whether made of metal, wood, or other materials.

In the drawings, Figure 1 is a view in perspective of a type-body embodying the improvement; Fig. 2, an elevation of the same; Fig. 3, a view in perspective of a space; Fig. 4, a similar view of a quadrat. Fig. 5 is a view in perspective of a number of the improved type set up. Fig. 6 is a view in perspective of a piece of a lead or brass rule; Fig. 7, an end view of the same, and Fig. 8 is a view in perspective taken opposite from that shown in Fig. 6.

A represents a printing-type, which is of the usual character, with the addition of the improved features. This consists in providing each individual type on the top *a* of the body with a transverse groove B, which may be conveniently located between the shoulder and foot of the type-body. On the bottom *b* of the body and diametrically opposite the transverse groove B is formed a transverse rib C. As the first line of type is set up in the composing-stick the grooves will all be on the top of the body and the ribs on the bottom. In setting up the second line the grooves in the type composing it will engage with the ribs on the type in the first line, and so on continuously, so that each line is locked in place, as well as each individual type, and also the form as a whole. The relative position of the grooves and ribs may be reversed and the ribs placed on the top and the grooves on the bottom, the interlocking feature being the same.

It will be noted that the groove is somewhat wider than the rib part, so as to leave a space *d*, Fig. 5, and provide for a slight endwise movement of the type in justifying. By reason of this space the type also loosely nest together and are set with the same facility as the ordinary type and without any inconvenience to the compositor.

The space-strip of metal D, Fig. 3, the quadrat E, Fig. 4, and the brass rule or lead F, Figs. 6, 7, and 8, embody the rib-and-groove features, so as to be in conformity with the type, the same reference characters being used to indicate the improved parts. *g* represents the usual nicks.

The groove and rib may be of any other shape in cross-section from the rounded form shown, and when the type is set the groove and rib will be continuous.

The advantages of this form of type are many. The matter when set up is easily and more quickly locked in the form. In justifying the lines need not always be perfect, as the type will always come to a close bearing on each other. There is not the least liability of any individual type being drawn out by the suction of the rollers or any space, quadrat, or lead working up in the form from the jar of the press or other cause. The liability of type dropping out when a stick is emptied on the galley or when set-up matter is moved from one place to another without being tied up is entirely obviated. The saving in chases will also be considerable, as it will only be necessary to apply just sufficient pressure to hold the form in the chase.

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

1. A printing-type, provided with a groove on the top of the body and a rib opposite thereto on the bottom, the ribs on one line of type being adapted to engage with the grooves

in the adjacent line, said groove being larger proportionately than the rib and engaging loosely therewith in providing for an endwise adjustment of the type.

2. A printing-type, provided in the body with a groove and rib located opposite each other, said groove being larger proportionately than the rib and engaging loosely therewith and providing for an endwise adjustment of the type.

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

ALFRED L. CAMPFIELD.

Witnesses:
L. M. FREEMAN,
L. B. COUPLAND.