(No Model.)

J. B. BOYD.

PRINTER'S RULE.

No. 260,084. Patented June 27, 1882.

Fig. 1.

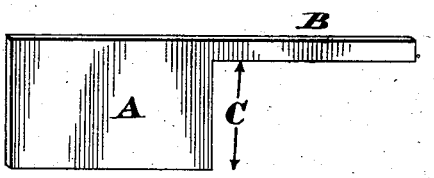
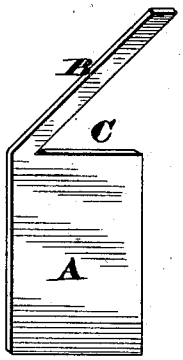
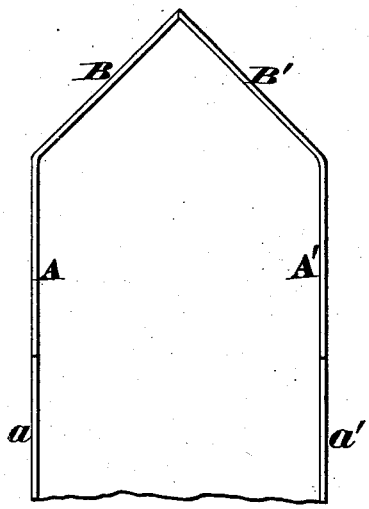


Fig. 3.

Fig. 4.

Fig. 2.





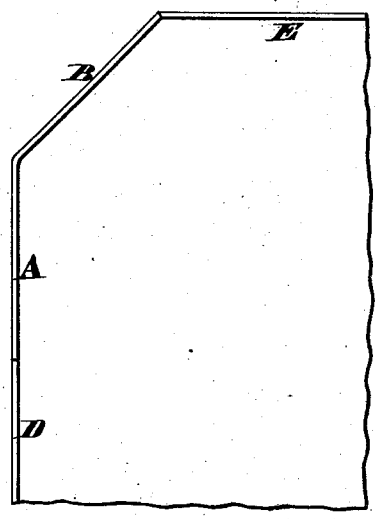
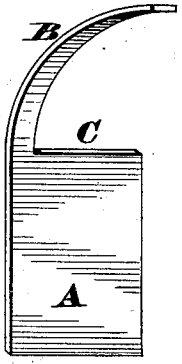
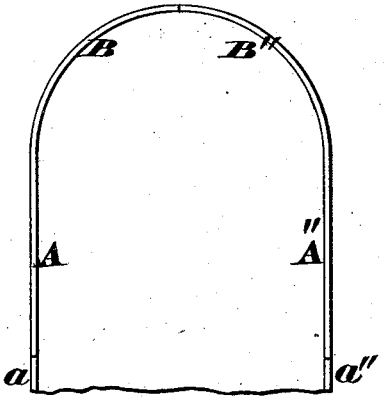


Fig. 5.

Fig. 6.

Fig. 7.





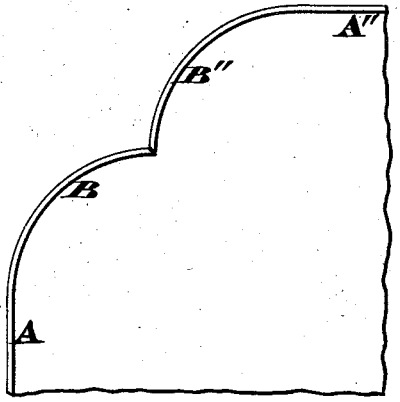
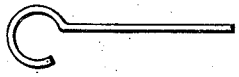
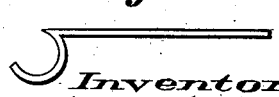


Fig. 8.

Fig. 9.

Fig. 10.





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UNITED STATES PATENT OFFICE.

JOSEPH B. BOYD, OF CINCINNATI, OHIO.

PRINTER'S RULE.

SPECIFICATION forming part of Letters Patent No. 260,084, dated June 27, 1882.

Application filed April 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH B. BOYD, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Printers' Rules, of which the following is a specification.

My invention comprises a great variety of peculiarly-constructed rules wherewith any printer can readily set up very attractive and symmetrical borders, corner-pieces, &c., although such ornaments may be quite complicated in arrangement. Heretofore these ornaments have been formed by bending an ordinary rule to the desired angle or curve; but such an expedient is very tedious and unsatisfactory, especially if a heavy rule is employed, as few printing-offices are provided with proper appliances for this purpose. Furthermore, after one rule has been bent it is almost an impossibility to shape another precisely like it for the opposite side or end of the border or corner-piece, and hence two rules thus formed seldom present a symmetrical appearance, although considerable time may have been consumed in setting them up. To overcome these difficulties I make use preferably of a comparatively short rule, having a tongue or projection at either or both ends, which tongue is bent or curved or otherwise permanently deflected laterally, and is adapted to clear the spaces or quadrats employed for retaining the type in their proper position in the form. These tongues, being bent, curved, or otherwise formed by suitable dies, swages, or other appliances, will retain their shape for an indefinite period of time, and, being made by machinery, any pattern can be reproduced as often as desired, thereby insuring the utmost uniformity and regularity of appearance of the ornaments composed with my rules, as hereinafter more fully described, and pointed out in the claim.

In the annexed drawings, Figure 1 is a perspective view, showing the first step in constructing my improved form of printer's rule. Fig. 2 is another perspective view of the rule, but showing the tongue of the same inclined at an angle of forty-five degrees. Figs. 3 and 4 are plans showing two different combinations of this form of rule. Fig. 5 is a perspective view, showing the rule-tongue bent to a quarter-circle. Figs. 6 and 7 are plans showing two different combinations of this form of rule. Figs. 8, 9, and 10 are plans of various modifications of my invention.

A represents an ordinary metallic rule of any suitable size and shape, said rule being constructed with a tongue or narrow terminal projection, B, the space C beneath this tongue being sufficient to admit the "quads" used in all printing-offices, &c. This tongue B, which may be of any suitable length, is capable of being permanently curved or bent laterally to any desired angle or degree. As seen in Fig. 2, the tongue is inclined at an angle of forty-five degrees, although a greater or less angle may be formed, if desired. One rule having been thus bent, and another one, A′ B′, being inclined in an opposite manner and the two brought together, the border seen in Fig. 3 is produced, additional rules *a a′* being set up in line with the rules A A′ for the purpose of increasing the length of the border or other ornamental piece.

As represented in Fig. 4, the rule A and tongue B abut respectively against an end rule, D, and top rule, E.

Various other combinations of the angularly-disposed tongues will readily suggest themselves to a printer or manufacturer of printers' supplies.

As seen in Fig. 5, the tongue B is curved to a quarter-circle, and by simply combining this rule A B with another one, A″, having its tongue B″ curved in an opposite direction, a border with a semicircular end is formed, the length of said border being indefinitely increased by extra rules *a a″*.

As seen in Fig. 7, the rules A B A″ B″ are arranged to produce another different form of curved border; but, if preferred, the rule A″ B″ may be omitted and the rule A′ B′ be inserted in its place; or the angular and curved tongues may be arranged so as to produce various other combinations.

Figs. 8, 9, and 10 represent but three of an almost endless variety of shapes that may be imparted to the tongues, thus showing that my invention is not to be limited to any special forms or combinations of the same.

As the space C beneath tongue B is suffi-

cient to admit the ordinary quads, it is evident the tongue will clear the latter and not rest thereon. These rules can be made in large quantities at a mere nominal cost, and can be furnished with such bent or curved tongues as may be demanded by the trade. Consequently printers will have nothing to do but to arrange the rules to suit their fancy, the labor of bending or otherwise shaping the tongues having been previously accomplished.

As curves, sweeps, angles, and other ornaments are generally employed at the corners of borders, &c., the rule proper, A, may in most cases be comparatively short, although it can be made of any desired length, with a tongue at both ends.

When a very complex form of tongue is made—as, for example, a zigzag or a continuous corrugation—said tongue may be soldered to the rule at suitable intervals; or the tongue, instead of being integral with the rule proper, may be soldered or brazed thereto.

In most cases my invention will be employed in connection with "labor-saving rules," as such appliances will allow the permanently-deflected tongues to be used to the greatest advantage.

I claim as my invention—

The printer's rule A, having a narrow tongue, B, permanently bent, curved, or otherwise laterally deflected, for the purpose stated, sufficient space C being allowed beneath said tongue to clear the quads, as herein described.

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

JOSEPH B. BOYD.

Witnesses:
JAMES H. LAYMAN,
SAML. S. CARPENTER.