F. H. RICHARDS.

TYPE BAR AND TYPOGRAPHIC FORM.

APPLICATION FILED DEC. 13, 1902.

942,102. Patented Dec. 7, 1909.

Fig. 1.

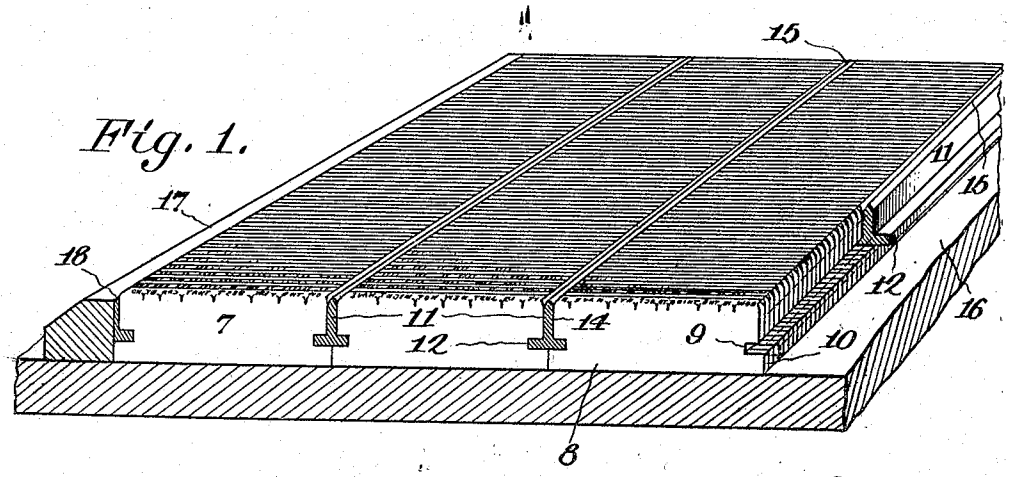
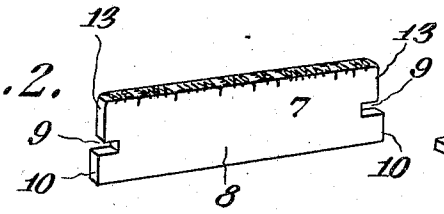


Fig. 2.



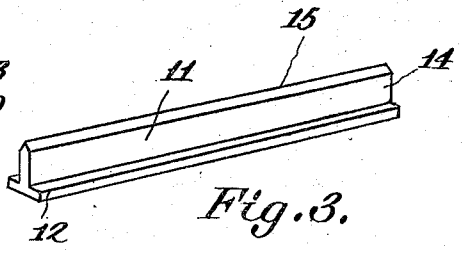


Fig. 3.

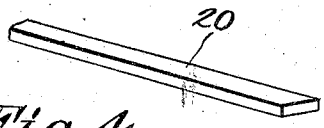


Fig. 4.

Fig. 5.

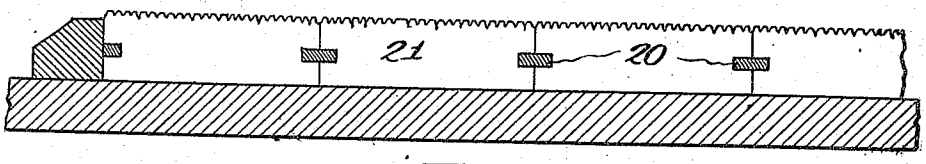


Fig. 6.

Witnesses:

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FRANCIS H. RICHARDS, OF HARTFORD, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO AMERICAN TYPOGRAPHIC CORPORATION, A CORPORATION OF NEW JERSEY.

TYPE-BAR AND TYPOGRAPHIC FORM.

942,102. Specification of Letters Patent. **Patented Dec. 7, 1909.**

Application filed December 13, 1902. Serial No. 135,060.

To all whom it may concern:

Be it known that I, FRANCIS H. RICHARDS, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Type-Bars and Typographic Forms, of which the following is a specification.

This invention relates to typebars and typographic forms and has for an object to provide an improved construction of typebar, sometimes designated linotype, and an improved interlock and column rule whereby the bars may be efficiently assembled or made up into forms.

This invention is related in a general way to that disclosed in my applications for United States Patents Serial No. 73,640, filed August 29, 1901, and Serial No. 76,033, filed September 21, 1901. In the present instance, however, the construction of the typebar or linotype is somewhat different and a novel form of rule and interlock as well as a different interrelation of the parts of the form provided.

In the drawings accompanying this specification, Figure 1 is a perspective view of a number of columns of composition each comprising a series of individual typebars disposed side by side and locked together, the several parts in the columns with each other and the several columns to one another, with a rule between the several columns. Fig. 2 is a perspective view of a typebar constructed to enable the same to be connected or locked to the other members in the form, of which it constitutes an element. Fig. 3 is a similar view of a rule and interlock. Figs. 4, 5 and 6 are views similar to Figs. 3, 2 and 1, respectively, illustrating, however, a locking member unprovided with a column rule.

For the purpose of enabling a typebar to be connected with other typebars in a column of assembled bars and such column connected to others, each bar is so formed, in carrying the present improvements into practice, as to enable it to be engaged by a properly formed locking member or key insertible into place and when so placed extending transversely of the line of length of the individual bars at the side of the column thereof. This interlocking of the bars one with the other is therefore effected by providing a suitably formed locking member which may extend from end to end of the column at the ends of the assembled bars, such member being in the nature of a locking strip adapted to be engaged by the suitably formed end portions of the bars; it may, if desired, support a column rule for ruling between the columns in addition to having a portion for interposition between the adjacent ends of bars in juxtaposed columns.

In the construction set forth in Figs. 1 to 3, inclusive, the typebars, designated in a general way by 7, are illustrated as comprising a body portion 8, having notches 9 in each end thereof and end portions 10 adapted to abut against the ends of contiguous typebars; in these notches an interlock or key, designated in a general way by 11, may be placed, the same comprising a strip 12 which fits into the notches 9.

Above the notches the end portions 13 of the bars are of less projection than the end portions 10; these end portions 13 abut, when the bars are assembled or imposed against the wing or web 14 of the locking member or strip. The wing or web 14 is shown as supporting a rule 15 for printing a line between the columns. The composition is indicated as made up in a "large form", and resting upon a supporting plate 16, partly broken away. A portion of a chase 17 is also indicated. At the side of the form contiguous to the chase a locking strip 18 is shown, which in the present instance is substantially L-shaped in cross-section, and unprovided with a column rule. If desired, however, the locking members may all be constructed without a web and hence without a column rule; such is the construction set forth in Figs. 4 to 6, inclusive, wherein the locking members comprise a plane bar 20, which is adapted for use with a typebar such as that designated by 21. Each end of the bar will ordinarily have a notch 23 therein, which notches form, when the composition is made up, a continuous channel transverse to the individual bars and parallel with the columns.

By this construction an improved and efficient rule is provided and the imposed matter may be securely locked together, each bar being interlocked with every other bar in the form, each bar being locked to every other bar in the column, each bar in a column being locked to the other columns in the form, and each column being locked to

every other column in the form. The ends of the typebars of one column abut against the ends of the bars in an adjacent column, except where such ends abut against the interlock or rule-forming web.

The notches in the ends of each of the bars are illustrated as having their upper and lower faces parallel with the plane of the printing face of the bar. This prevents independent upward or downward displacement of the bar and it also prevents the end of one column from moving out of the plane of the adjacent column.

Having thus described my invention, I claim—

1. The combination with a column of typebars, each bar of which is recessed at each side, of a column of typebars adjacent thereto, the ends of which are also recessed, the ends of the bars of one column abutting the ends of the bars in the other column so that said recesses form a channel, and an interlocking element lying in said channel uniting the said columns and having an upward projecting ruling edge.

2. The combination with a column of typebars, each bar of which is recessed at each side, of a column of typebars adjacent thereto, the ends of which are also recessed, the ends of the bars of one column abutting the ends of the bars of another column, whereby the recesses form a channel, and an element lying in said channel interlocking and uniting said columns and having an upwardly projecting portion suitably formed to form a column rule.

3. The combination with a column of typebars, of a column of typebars adjacent thereto, the ends of the bars at the adjacent sides of the respective columns being recessed, said recess forming channels in the columns having their upper and lower faces parallel with the plane of the printing face of the bar, and an interlock lying in each of said channels, portions of the ends of the bars of one column abutting portions of the ends of the bars of the other column and portions of the ends of the bars of each column abutting the interlock.

4. The combination with a column of typebars, of a column of typebars adjacent thereto, portions of the ends of the bars of one column abutting portions of the ends of the bars of the other column; a channel in the end of each column and comprising notches in each bar; an interlock lying partly in each channel; and having a web for interposition between portions of the adjacent ends of each column, other portions of said adjacent ends abutting one another and a rule upstanding from said web.

5. The combination with a column of typebars having an extension at the lower portion of each end thereof and a recess above said extension, of another column of typebars adjacent thereto and whose ends are likewise formed, the bars of one column abutting portions of the bars at the end of the other column and forming a channel parallel to the longitudinal axis of the bars, and other channels transverse to said first mentioned channel, and an interlocking member located in said channels.

6. The combination with a column of typebars having an extension at the lower portion of each end thereof and a recess above said extension, of a column of typebars adjacent thereto and whose ends are likewise formed, the bars of one column abutting portions of the bars at the end of the other column and forming a channel parallel to the longitudinal axis of the bars, and other channels transverse to said first mentioned channel, and an interlocking member located in said channels and comprising a base portion having an upwardly extending web.

7. The combination with a column of typebars having an extension at the lower portion of each end thereof and a recess adjacent to said extension, of a column of typebars adjacent thereto and whose ends are likewise formed, the bars of one column abutting portions of the bars at the end of the other column and forming a channel parallel to the longitudinal axis of the bars, and other channels transverse to said first mentioned channel and an interlocking member T-shaped in cross-section and located in said channel and comprising a base portion having an upward extending web, said upwardly extending web being provided with a ruling edge.

8. The combination with a column of type bars, of a column of type bars adjacent thereto, the ends of the bars at the adjacent sides of the respective columns being recessed, said recesses in each column forming a longitudinal channel, and an interlock lying in each of said columns, portions of the ends of the bars of one column abutting portions of the ends of the bars of the other column and portions of the ends of the bars of each column abutting the interlock.

Signed at Nos. 9–15 Murray street, New York, N. Y., this 12th day of December, 1902.

FRANCIS H. RICHARDS.

Witnesses:
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JOHN O. SEIFERT.