No. 694,141. Patented Feb. 25, 1902.

D. F. DALEY.

LINOTYPE.

(Application filed Dec. 5, 1901.)

(No Model.)

Fig. 1.

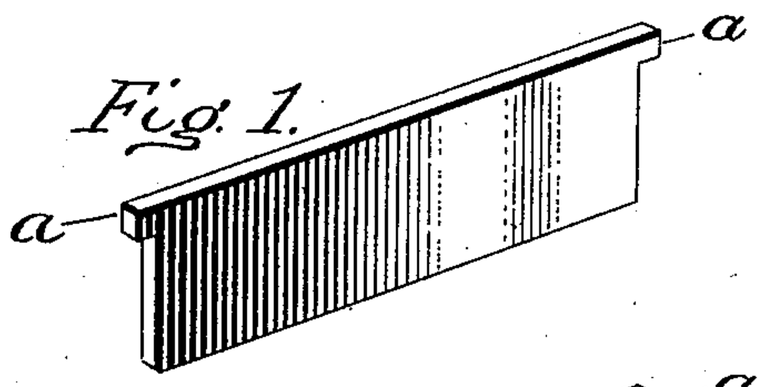

Fig. 2.

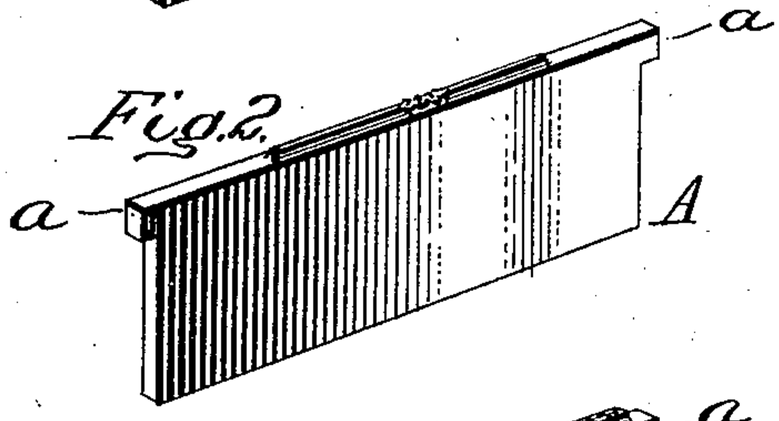

Fig. 3.

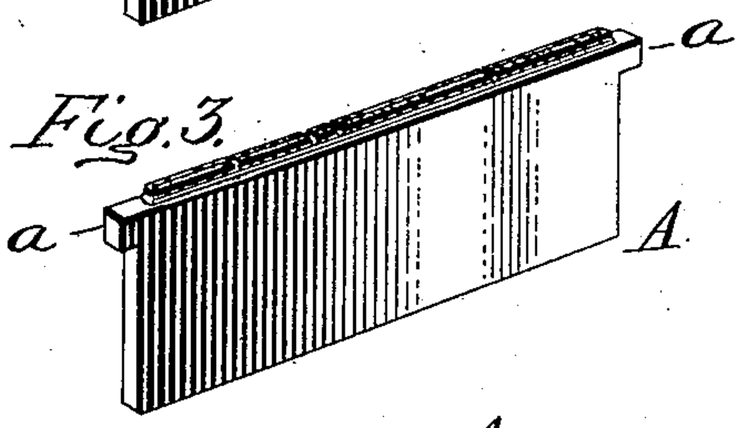

Fig. 4.

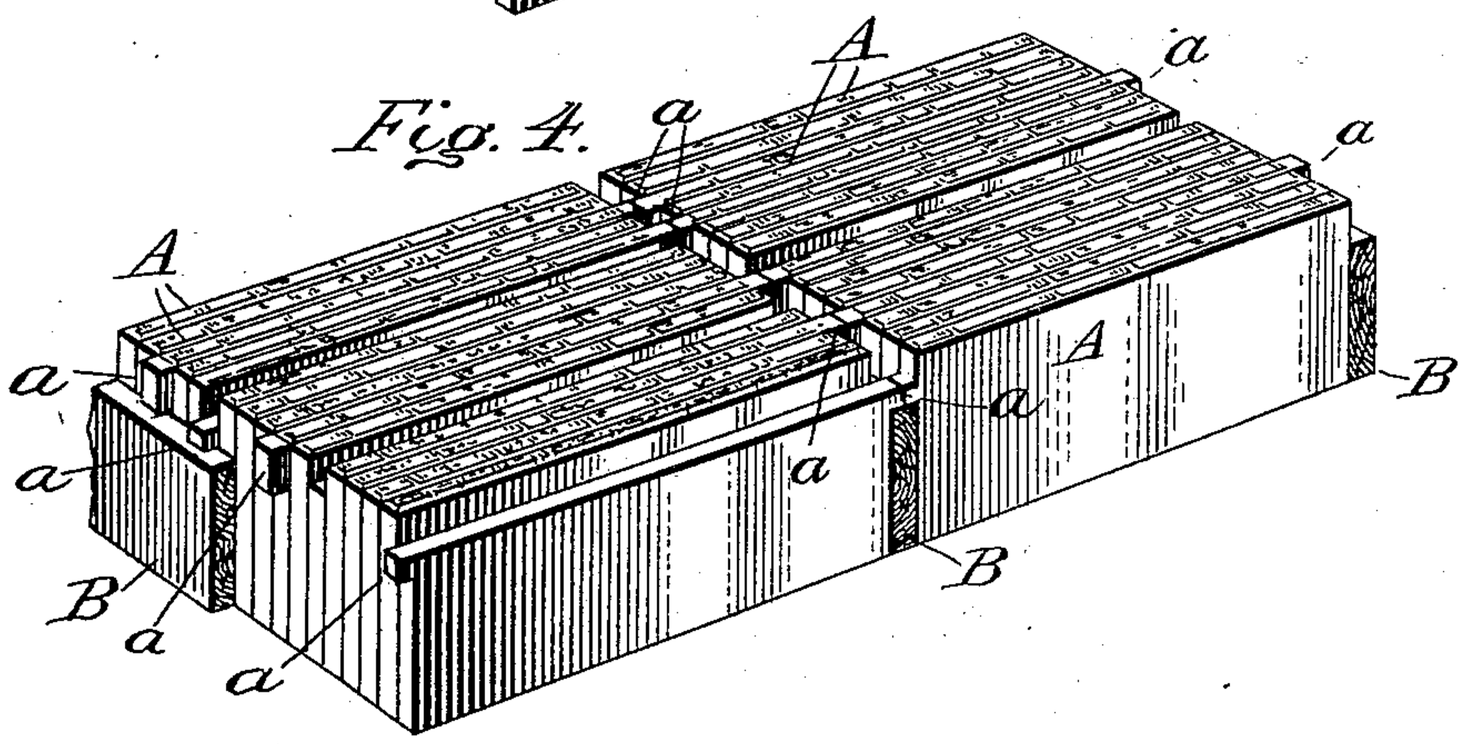

Fig. 5.

Witnesses

C. C. Burdine.

F. A. Kemp

Inventor

D. F. Daley

By Phis. T. Dodge Attorney

UNITED STATES PATENT OFFICE.

DANIEL F. DALEY, OF BROOKLYN, NEW YORK, ASSIGNOR TO MERGENTHALER LINOTYPE CO., A CORPORATION OF NEW YORK.

LINOTYPE.

SPECIFICATION forming part of Letters Patent No. 694,141, dated February 25, 1902.

Application filed December 5, 1901. Serial No. 84,724. (No model.)

To all whom it may concern:

Be it known that I, DANIEL F. DALEY, of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Linotypes, of which the following is a specification.

In practice it is found that when a flat form composed of linotypes or printing-slugs with reglets or rules between the columns or pages is used in a rapidly-running press there is occasionally a tendency of the reglets to work upward between the ends of the linotypes to such height that they receive ink and carry it to the paper or of the rules to work upward in like manner above the proper printing-level. It is the aim of my invention to overcome this difficulty and hold the reglets or their equivalents down in place in the form.

To this end it consists in forming either the blank slugs, which are too low to print, or the slugs bearing type characters with end projections at the top, these projections being adapted to engage the reglet or rule in order to keep the same down.

Referring to the drawings, Figure 1 is a perspective view of a low blank slug with overhanging ends in accordance with my invention. Fig. 2 is a perspective view of a dash-rule of similar construction. Fig. 3 is a perspective view of a printing-slug or linotype. Fig. 4 is a perspective view of a portion of a printing-form having my improved slugs incorporated therein. Fig. 5 is a sectional view illustrating the improvement as employed in connection with a printing-rule.

Referring to Fig. 4, A A represent ordinary linotype-slugs, formed, as usual, with a series of printing characters on the upper edge and with vertical ends—in other words, of uniform length or measure from top to bottom. In using these slugs they are assembled side by side in page or column form, and between the columns—that is to say, between the ends of the slugs—reglets or rules B are introduced, the form as a whole being finally locked up tightly within an encircling chase or frame for use on the press. The reglets B are commonly made of wood and of a height much less than that of the slugs. In order to prevent these reglets from working upward, I provide any suitable number of slugs in the form with overhanging upper ends *a*, extending beyond the "measure" of the page or column, adapted to overlie the upper edge of the reglets, as shown in Fig. 4, in order to prevent them from rising in relation to the slugs. I may employ at points where a printing-surface is not required blank slugs, such as shown in Fig. 1, lower than the printing-slugs and not adapted to carry ink. Where dashes or other ornamental or special characters are to appear in the form, I may make the slugs of the usual printing-height, as shown in Fig. 2, and extend the ends to overlap the reglets, or the printing-slugs, having the characters thereon and made in all other respects of the ordinary form, may have their ends projected beyond the printing-surfaces, as shown in Fig. 3, to overlap the reglets. It is of course to be understood that the extended ends are under all ordinary circumstances lower than the printing-surface in order that they may not receive ink or transfer it to the paper.

In making up the form the elongated slugs may be introduced in any convenient positions and with greater or less frequency, as conditions may require. The form of the extended ends is not essential, provided only they are adapted to engage and hold down the reglet or rule.

In Fig. 5 I have illustrated the printing-rule intended to print a line between two columns or pages. In this case the extended ends engaging the rule are formed on the printing-slugs.

In the various forms shown the slugs are adapted to constitute members of a linotype-form and are therefore known in the art as "linotypes" or "linotype-slugs."

The slugs herein described may be produced in any suitable manner; but I prefer to cast them each in one piece of type-metal or its equivalent in a suitably-formed mold in a linotype or analogous machine.

The projections are particularly efficient when formed on the ends of the type-high or printing slugs, since the rollers, applying pressure to the upper edges of the slugs, keep them down in place in the form, causing them in turn to hold down the reglet or the rule in a positive manner.

It will be observed that the object of my

invention is to utilize the printing or type surface to keep the rules or reglets down in place, and that this is accomplished by utilizing the ordinary type-high linotypes, which are themselves kept down in place by the impression mechanism of the printing-press, to hold down the other members of the form.

Having described my invention, what I claim is—

1. A linotype-slug having an overhanging end projection at the upper edge below the printing-level, substantially as described.

2. A linotype-slug, having at the upper edge below the printing-level overhanging projections *a* extending beyond the body or measure of the slug, substantially as described.

3. In a linotype-form, the combination of reglets or rules and type-high linotype-slugs adapted to engage over the same and hold them down in place.

4. A type-high linotype having a printing-surface and end shoulders in combination with a reglet or its equivalent underlying said shoulders, whereby the printing-pressure applied to the linotype in use is caused to hold the linotype down in place, and the linotype in turn is caused to hold down the reglet.

In testimony whereof I hereunto set my hand, this 20th day of November, 1901, in the presence of two attesting witnesses.

DANIEL F. DALEY.

Witnesses:
L. A. ROOD,
P. J. KENDRICK.