

(No Model.)

C. M. BUSCH.
 LINOTYPE FOR TABULAR WORK.

No. 533,346.

Patented Jan. 29, 1895.

FIG. 1.

FIG. 1.

| LIST | | | |
|------|-----|----|--------------|
| d | 400 | | Lincoln..... |
| | 100 | | One..... |
| a | | 30 | Two..... |
| | 600 | | Three..... |
| | | 40 | Four..... |
| | 201 | 20 | East..... |
| a | | 10 | One..... |
| | 40 | 20 | Two..... |
| | 100 | 10 | Town..... |
| a | | 31 | One..... |
| | 140 | | Two..... |
| | | 15 | Three..... |
| | 20 | | West..... |
| | | 31 | One..... |
| d | 100 | 15 | Two..... |

FIG. 2.

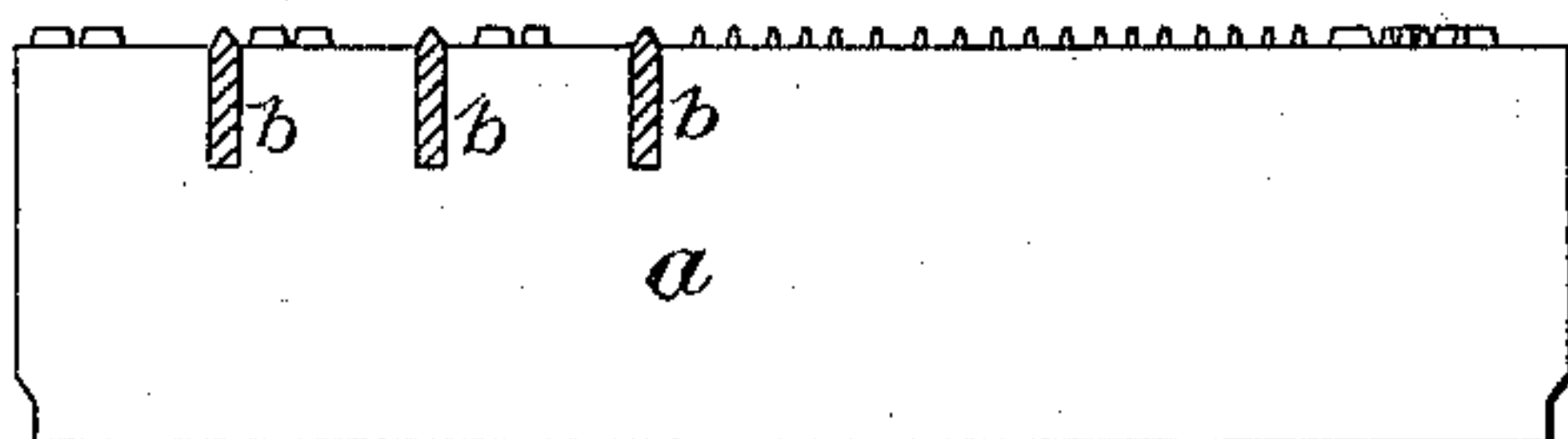


FIG. 3.

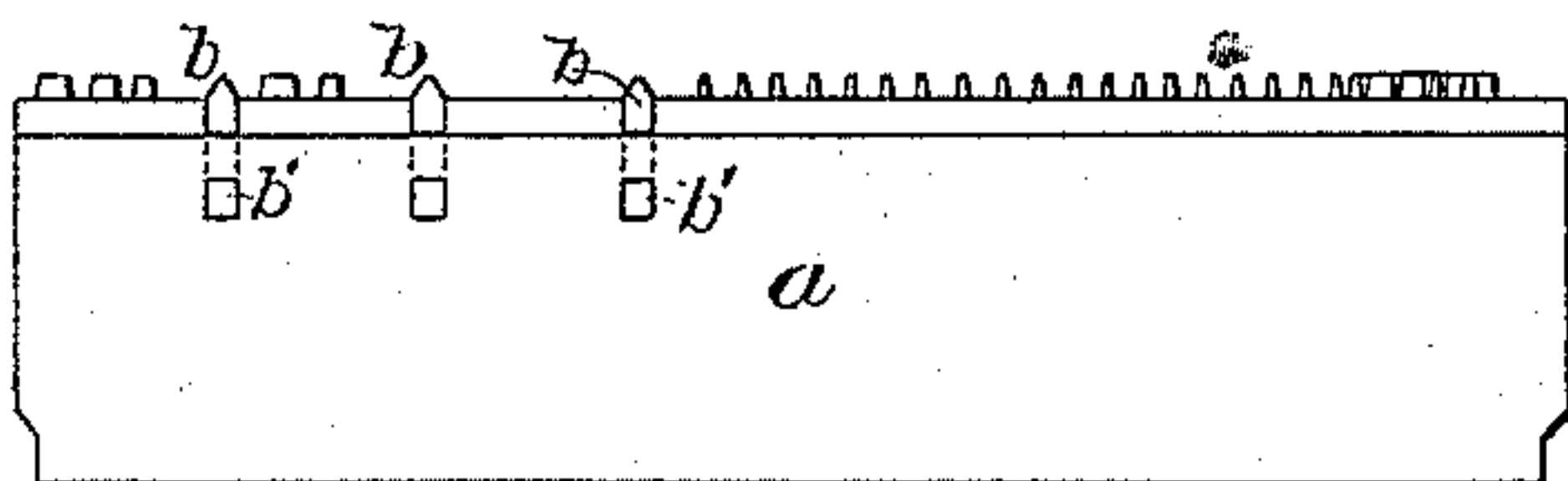


FIG. 4.

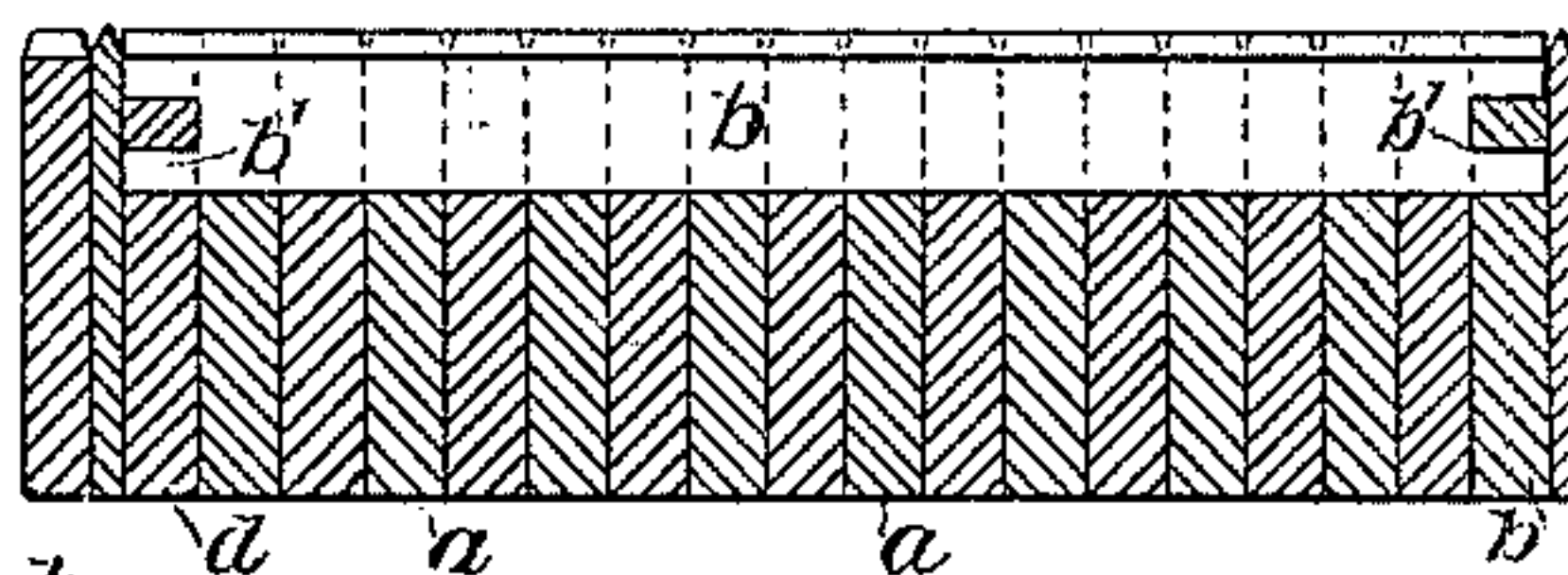
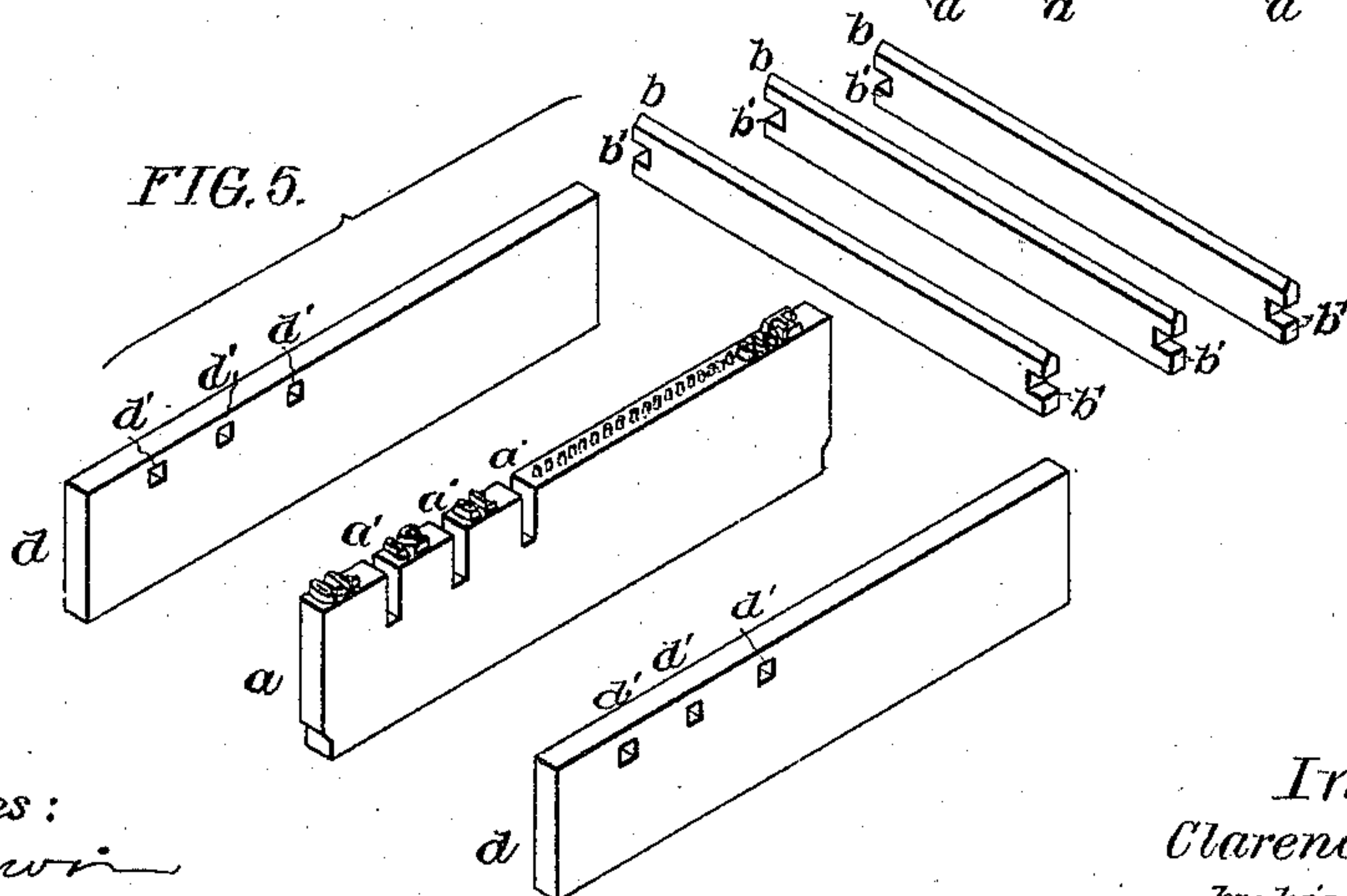


FIG. 5.



Witnesses:
F. D. Goodwin
J. Banner.

Inventor:
Clarence M. Busch
by his Attorneys

How out How on

UNITED STATES PATENT OFFICE.

CLARENCE M. BUSCH, OF HARRISBURG, PENNSYLVANIA.

LINOTYPE FOR TABULAR WORK.

SPECIFICATION forming part of Letters Patent No. 533,346, dated January 29, 1895.

Application filed September 27, 1894. Serial No. 524,246. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE M. BUSCH, a citizen of the United States, and a resident of Harrisburg, Pennsylvania, have invented certain Improvements in Setting up Linotype Tabular Work, of which the following is a specification.

The object of my invention is to utilize the matter composed and cast upon a linotype machine for tabular work. Heretofore it has been impossible to use linotype bars for this purpose as the vertical rule could not be set up so as to be cast in the bar. By my invention I can readily place the rules in the bars or slugs after the same have been cast.

Referring to the accompanying drawings, Figure 1, is a plan view of a tabular form illustrating my invention. Fig. 2, is a transverse section on the line 2—2, Fig. 1. Fig. 3, is a transverse section on the line 3—3, Fig. 1. Fig. 4, is a longitudinal section on the line 4—4, Fig. 1; and Fig. 5, is a perspective view showing a few of the parts detached.

The linotype bars or slugs are represented at *a*, said bars having on their faces the characters to be printed. The present bars are made on what is known as the Mergenthaler machine, the characters being set up in line and a casting or slug made therefrom, this casting being the slug *a* shown in the drawings.

In carrying out my invention, the characters are set up as shown, so that when the rules *b* are inserted one set of characters will be directly under another. If, for instance, the matter shown in Fig. 1, is set up, the slugs with the characters thereon are placed in line one under another and a saw kerf or series of saw kerfs *a'* made in the face of each slug, forming spaces for the reception of the rules *b*, the saws for making the slots in the slugs being of the same thickness as the rules, so that said rules when placed in position will snugly fit the slots.

The end slugs *d d* which are at the head and foot of the matter, as shown in Fig. 1, are perforated at *d'* for the reception of the lugs *b'* on the ends of the rules so that when the slugs and rules are in position as shown in Fig. 4, the rules are locked and are thus prevented from becoming detached from the form.

The rules *b* are ordinary brass rules cut to the length required and recessed at each end to form the lugs *b'* and I preferably extend

the upper portions of the rules over the end slugs so that they will join the head and foot rules.

While I have shown the head and foot slugs as blanks they may be provided with characters, when necessary, the same as the slugs *a*.

It will be readily seen that by my invention any tabular work can be executed on a linotype machine or any machine in which the characters are set up and cast in slugs. The rule can be cut to any length required, depending upon the form and while I prefer the arrangement shown for attaching the rules to the end slugs this method may be modified without departing from the main feature of my invention and the rules may simply rest in the slots in the bars, and the means for holding the rules in place may be greatly modified.

It will be understood that while I have described the rule as a plain dividing rule said rule may be ornamented in any manner, may be of any width and may have such characters thereon as desired.

I claim as my invention—

1. The combination in a form for printing, of a series of character slugs having one or more slots with one or more rules resting in said slots, substantially as described.

2. The combination in a form for printing, of a series of character slugs having one or more slots therein, with end slugs and one or more rules adapted to the slots and to the end slugs, substantially as described.

3. The combination in a form for printing, of the character slugs each having a slot in its face, perforated end slugs, and a rule having lugs at each end adapted to openings in the end slugs, substantially as described.

4. As a new article of manufacture, a linotype bar having one or more transverse slots in its face.

5. A printing form composed of a series of linotype bars each bar having one or more transverse slots in its face, which register with those of an adjoining bar so that a rule or other device may be inserted therein.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLARENCE M. BUSCH.

Witnesses:

HOWARD J. LUKENS,
B. J. O'CONNELL.