

No. 694,788.

Patented Mar. 4, 1902.

J. R. ROGERS.

JUSTIFYING DEVICE FOR LINOTYPES.

(Application filed Nov. 28, 1901.)

(No Model.)

Fig.1. a Fig.2. Fig.3. Fig.4. Fig.5.

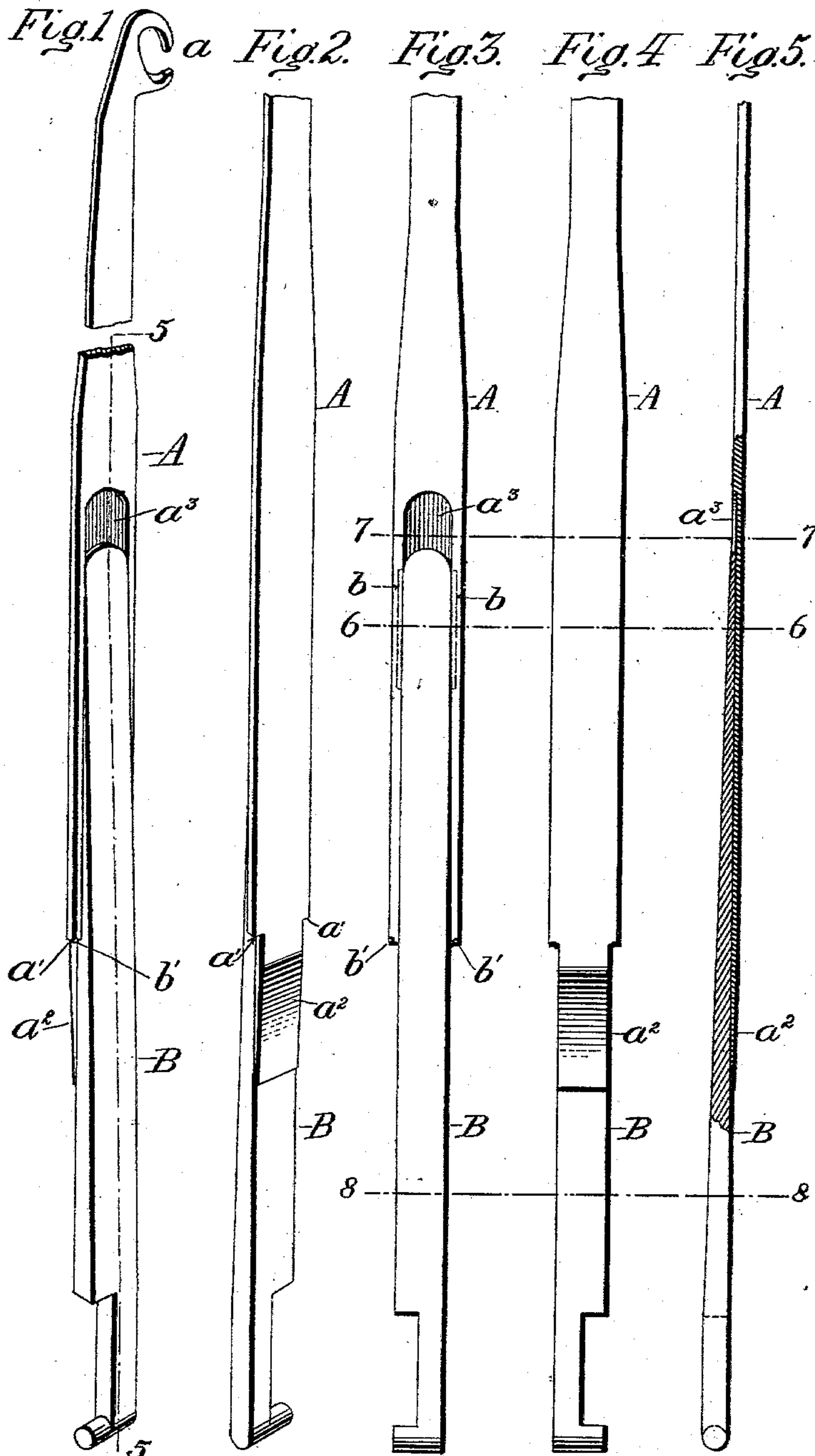


Fig.6.

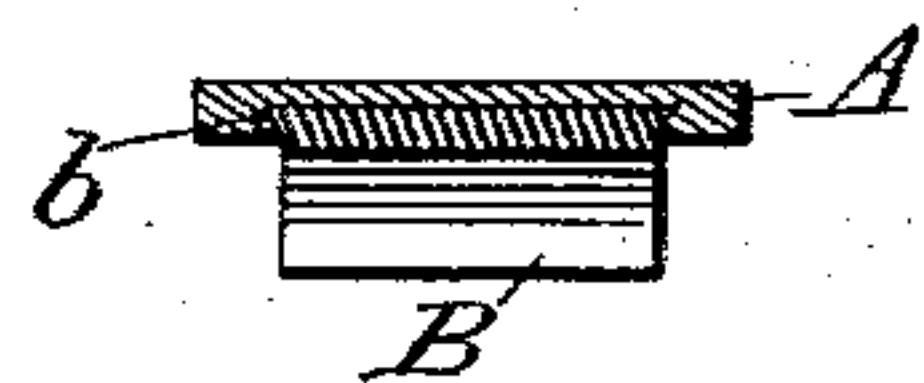


Fig.7.

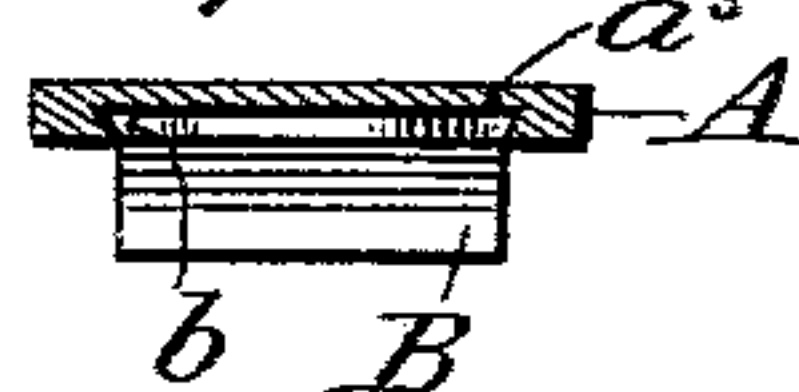
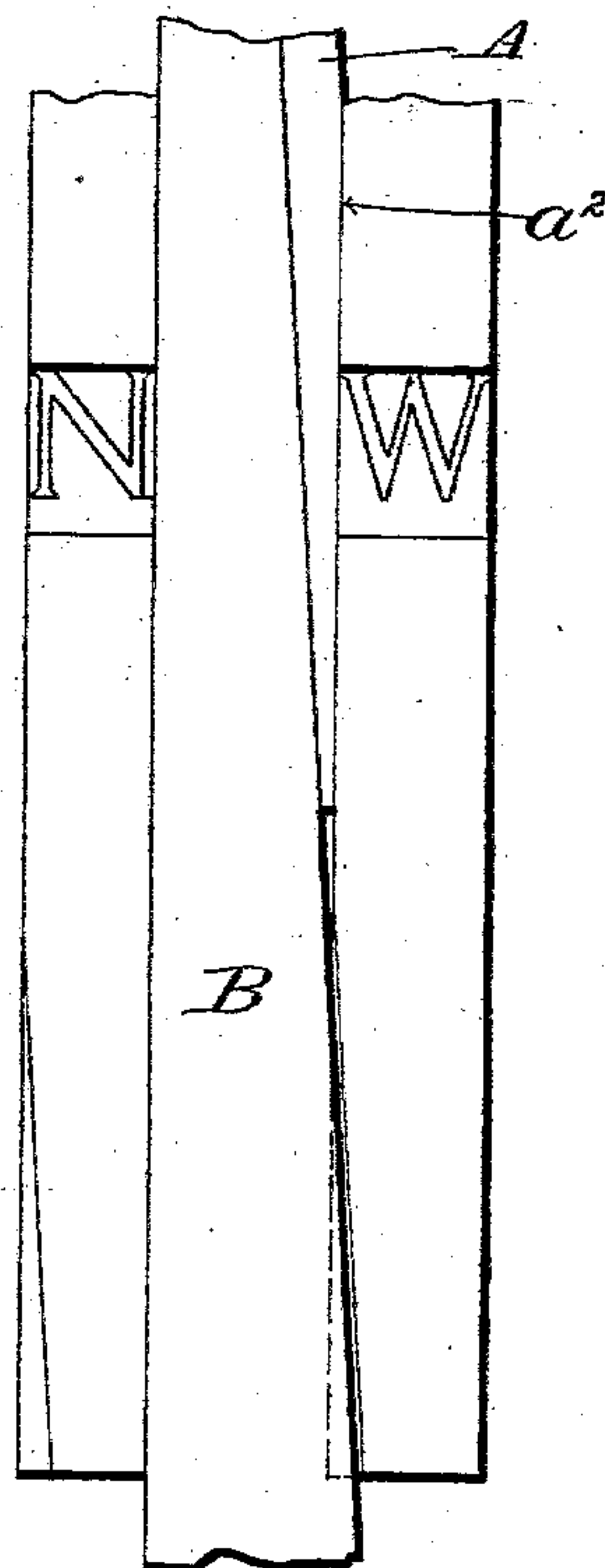


Fig.8.



Fig.9.



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JUSTIFYING DEVICE FOR LINOTYPES.

SPECIFICATION forming part of Letters Patent No. 694,788, dated March 4, 1902.

Application filed November 26, 1901. Serial No. 83,766. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. ROGERS, of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Justifying Devices for Linotypes, of which the following is a specification.

This invention relates to that class of justifiers or spacers for use in linotype-machines as elements in the composed line of matrices for the double purpose of expanding the composed line to a predetermined length and of cooperating with the matrices to close the face of the mold in which the slug or linotype is cast. It has reference more particularly to that class of justifiers in which two wedge-like members are arranged to slide one upon the other and is by its form and construction more particularly adapted for use in that class of linotype-machines in which the matrices and spacers are suspended from and arranged to travel on inclined wires or guides, as shown, for example, in United States Letters Patent No. 679,481.

Referring to the drawings, Figure 1 represents a perspective view of my improved spacer. Fig. 2 is a perspective view from the opposite side. Fig. 3 is a view of the spacer from one side; Fig. 4, a view of the same from the opposite side. Fig. 5 is a longitudinal vertical section on line 5 5 of Fig. 1. Figs. 6, 7, and 8 are cross-sections on the correspondingly-numbered lines of the preceding figures. Fig. 9 is a front edge view illustrating on a larger scale the justifier in operative relation to adjoining matrices.

Referring to the drawings, A and B represent, respectively, the body portion and the sliding wedge, which jointly constitute the spacing device. The body portion A is in the form of a long flexible shank or blade, having at the lower end a rectangular outline in cross-section and a width equally or substantially equal to that of the matrices with which it is to be used and having at the upper end a hook or eye a , by which it is suspended from the guides in the machine. The extreme lower end of the body is reduced in width edgewise below the shoulders a' a' . This reduced portion or neck a^2 from the shoulders a' to the lower end is the operative

portion of the body when the spacer is in use and is beveled on the outer side or reduced in thickness toward the lower end, as plainly shown in Fig. 9, or, in other words, is given a tapered or wedge form. The lower end of the body is provided on one side with a long shallow groove a^3 with undercut walls, or, in other words, of dovetail form.

The member B is in the form of a long wedge, having a width equal to that of the neck a^2 and groove a^3 and is of rectangular cross-section. At its upper end for a distance of half an inch, more or less, the wedge B is provided on its edges with lips b , (see Fig. 3,) adapted to fit loosely within the groove a^3 of the body, this connection serving to prevent the parts from being separated laterally, but permitting the wedge to slide freely upward and downward in relation to the body. In order to prevent the escape of the wedge and to hold it in suspension over the body when free, the lower edges of the groove are closed by compressing the metal at b' , so that the lips of the wedge cannot slide out of the groove.

The groove a^3 is of uniform depth, so that the adjacent side of the wedge stands in line with the body, while the opposite or outer side of the wedge stands in a divergent line parallel with the beveled face of the neck a^2 of the body. This neck and the portion of the wedge which is for the time being opposite thereto constitute jointly the operative or effective part of the justifier. In other words, these parts stand in the line between the matrices to effect the spreading or justifying action. As the wedge is pushed forward in relation to the body the space is increased in thickness at the operative point; but the outer surfaces—that is to say, the surface of the neck a^2 on one side and the surface of the wedge on the opposite side—retain at all times their parallelism. When the device is in use, the operative parallel faces stand in vertical lines between the matrices. As the face of the neck a^2 assumes the vertical position there will of course be some tendency to throw the upper end or shank of the body A to one side out of the vertical position; but as this movement is very slight and the upper end of the shank is flexible no difficulty is encountered in practice.

The front edges of the neck a^2 and the wedge B stand flush with each other and with the front edges of the matrices, so that they will, like the latter, fit tightly against the face of the mold to prevent the escape of the molten metal therefrom.

What I claim as my invention is—

1. A justifying device for a linotype-machine, consisting of the body portion A, having a neck a^2 beveled on one side, and the wedge-shaped member B, having its body portion of the same width as the neck, and its upper end mounted to slide in the body portion, substantially as described.

2. In a justifying device, a body portion A of uniform thickness, having a groove a^3 in one side and having a neck a^2 beveled on the opposite side, in combination with a wedge B, sliding at one end within the groove in the body and having at said end lips fitted in the undercut walls of the groove.

3. In a justifying device for a linotype-machine, a body portion A, having in one side a longitudinal groove with undercut side walls closed at the lower end, in combination with a wedge, having its body portion adapted to slide in said groove and its upper end provided with lips loosely engaging the undercut walls whereby the two parts are adapted to constitute jointly an expansible space with permanently-connected members, adapting it to be handled as a unit.

4. A spacing device consisting of the flexi-

ble shank A, with a suspending device at the upper end and with a longitudinal groove and a narrowed tapered neck at the lower end, in combination with the freely-movable wedge loosely suspended from the body by lips entering the groove, the body portion of the wedge being adapted to slide upward within the groove as described.

5. In a justifying device and in combination with a wedge, having lips at one end as described, the metal body having the tapered lower end and the groove with undercut walls to receive and guide the wedge, the walls being closed at the lower end to prevent the escape of the wedge, substantially as described and shown.

6. In a justifying device for a linotype-machine, a body portion reduced in width at the lower end to form a neck a^2 with parallel edges, said neck beveled or inclined on one side, in combination with a wedge, having a uniform width throughout its operative portion equal to the width of the neck, and having at the upper end lips fitted and arranged to slide freely in the groove in the body, substantially as shown.

In testimony whereof I hereunto set my hand, this 22d day of November, 1901, in the presence of two attesting witnesses.

JOHN R. ROGERS.

Witnesses:

JOHN R. ANDERSON, Jr.,
WM. A. YERZLEY.