No. 694,269. Patented Feb. 25, 1902.

Z. HALACINSKI.

DEVICE FOR COMPOSING AND CASTING TYPE LINES.

(Application filed July 2, 1901.)

(No Model.)

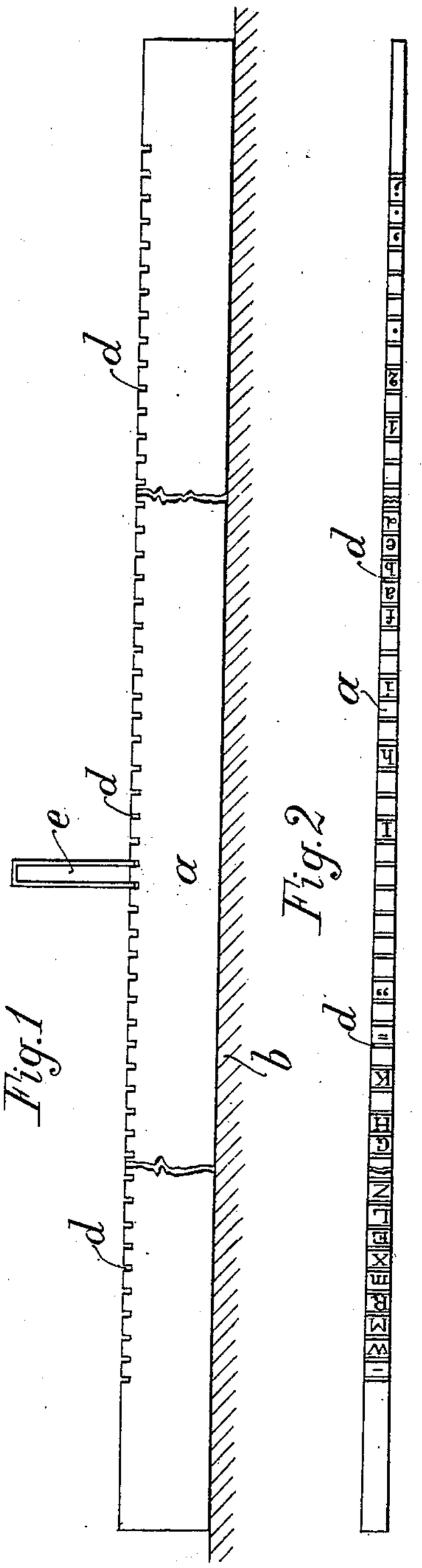

Fig. 1.

Fig. 2.

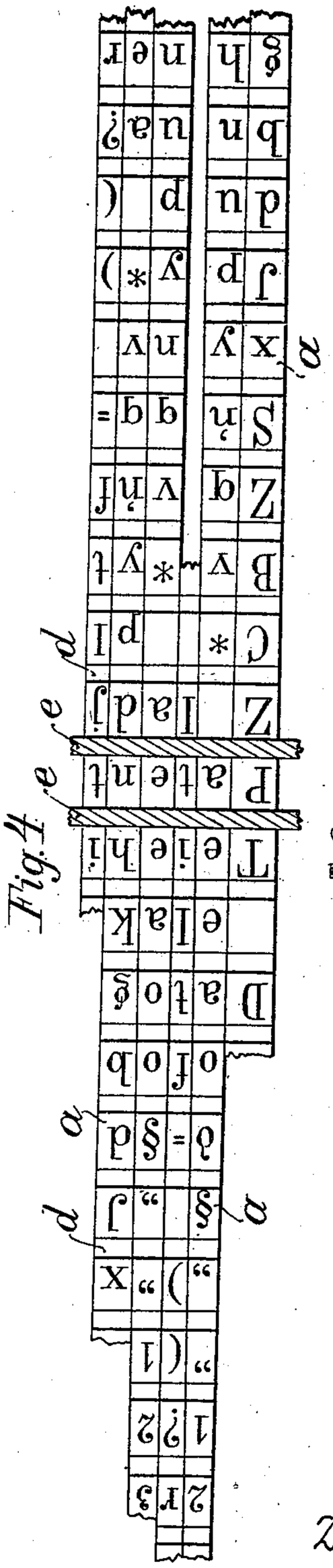

Fig. 4.

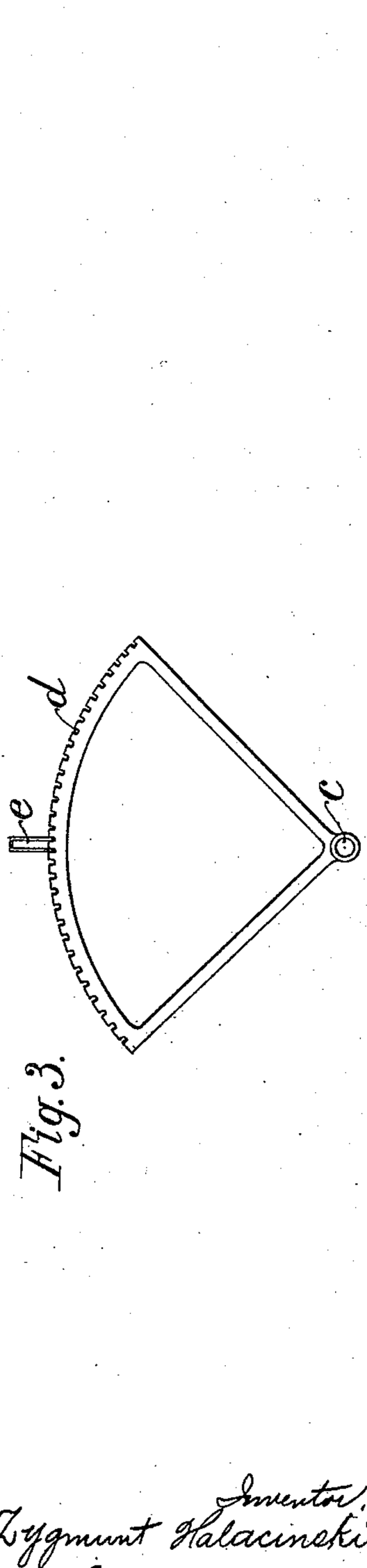

Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

ZYGMUNT HALACINSKI, OF LEMBERG, AUSTRIA-HUNGARY.

DEVICE FOR COMPOSING AND CASTING TYPE-LINES.

SPECIFICATION forming part of Letters Patent No. 694,269, dated February 25, 1902.

Application filed July 2, 1901. Serial No. 66,903. (No model.)

To all whom it may concern:

Be it known that I, ZYGMUNT HALACINSKI, a subject of the Emperor of Austria-Hungary, residing at Lemberg, in the Province of Galicia, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Devices for Composing and Casting Type-Lines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a device for composing and casting type-lines which differs from other known devices or apparatus intended for the same purposes in that the composing of the lines is effected not by juxtaposing separate types, but by the displacement of juxtaposed type-bars, each of which bears the entire alphabet as well as all other characters used in printing, such as numerals, marks of punctuation, &c. When a line is to be composed, these type-bars are displaced relatively to each other by hand or by means of any desired suitable key mechanism in such a manner that the letters which are forming the sentence or phrase are arranged in a straight line, whereupon this line is cast by means of a line-mold fixed upon the type-bars.

In the accompanying drawings are represented two modifications of type-bars for the improved line composing and casting device.

Figures 1 and 2 represent, respectively, a lateral view and a plan elevation of a straight type-bar. Fig. 3 shows a lateral elevation of an arc-shaped type-bar. Fig. 4 represents in a plan view several juxtaposed type-bars.

The types are arranged on bars *a*, arranged edgeway, each bar *a* containing all letters of the alphabet as well as all characters used in print. The type-bars may either be straight-shaped or arc-shaped. In the former case they are so arranged as to be displaceable upon a plate *b*, while in the latter case they are rotatable around an axis *c*. According to the length of the line which is to be formed several such type-bars are arranged one aside of the other. (See Fig. 4.) In order to compose a line, the said type-bars are moved either by hand or by means of a suitable key mechanism in such a manner that the types which are intended to form a line are arranged in a straight line. As the different types are of different widths, the type-bars are made tapering or wedge-shaped in the direction of their length, and the types are arranged according to the decreasing widths of the same, beginning from the thicker end of the bar and down to the narrower end of the same. As the direction in which the type-bars are tapering alternate in the successive bars, the middle lines of all type-bars will be always parallel to each other. In order to enable all the types of one line to be adjusted in a straight line, the bar is provided in the intervals between every two types with recesses *d*, into which the line-casting mold *e* engages with its longitudinal bottom edges when the said mold is fixed upon the line, and in this manner the types forming the line are brought in exact alinement. When the casting-mold is fixed, the line-bars, which are shiftable in the direction of the line, are made to approach each other by a lateral pressure, whereupon the line can be cast by the introduction of liquid metal into the mold. As soon as the cast metal has cooled down the mold is taken off from the type-bars and the formed cast line removed from the same, whereupon the following line is composed and cast in the manner above described.

I claim—

1. In combination, movable type-bars in juxtaposition, alternately tapered in opposite directions and having notches between the characters, and a type-line mold, the edges of which are adapted to take into said notches to aline the bars during casting, substantially as described.

2. In combination with a horizontal supporting-surface, of a plurality of straight type-bars, alternately tapered in opposite directions and having notches between the characters thereon, and a type-line mold, the edges of which are adapted to take into said notches to aline the bars during casting, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ZYGMUNT HALACINSKI.

Witnesses:
JOSEF RÜBSERCH,
C. B. HURST.