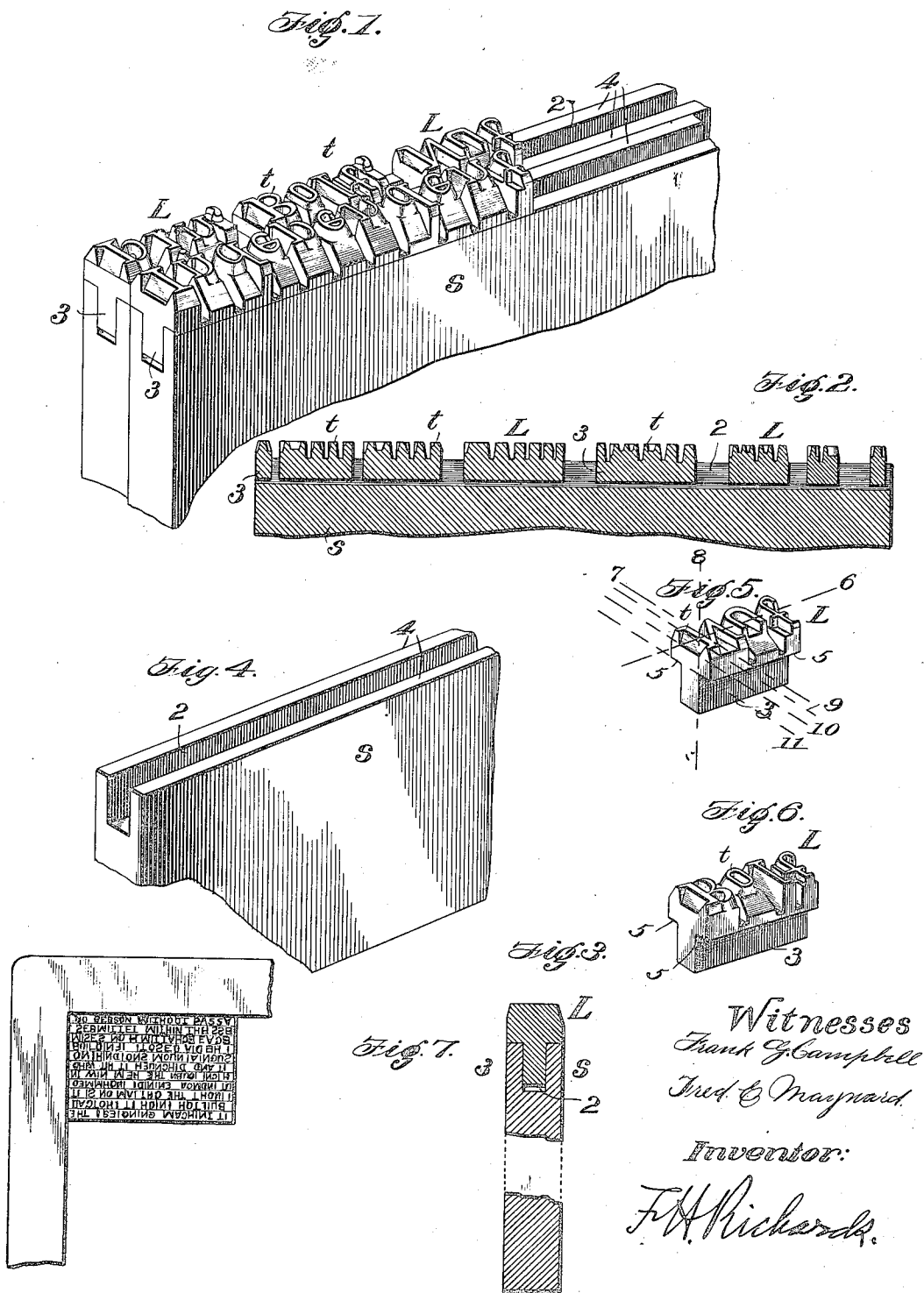




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UNITED STATES PATENT OFFICE.

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TYPE-BAR AND TYPOGRAPHIC FORM.

952,639.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed June 20, 1901, Serial No. 65,307. Renewed August 17, 1909. Serial No. 513,350.

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-Bar and Typographic Forms, of which the following is a specification.

This invention relates to typebars of composite construction, and has for its object to provide a typebar of this character embodying in combination with a support or typebar body a series of type-heads in the form of word-types or logotypes in adjustable engagement with the edge of such body, and the invention embraces as a further feature a typographic form in which is comprised a plurality of such typebars.

In the manufacture of a typebar according to the present improvement the type-heads, whether the same have but a single type or include a plurality of types, are formed by some suitable method to constitute integral heads so constructed with relation to the edge of a suitable support or typebar body as to engage therewith in a manner to permit the movement of the individual heads lengthwise of the body for the purpose of effecting the regulation or justification of the total length of the line of types comprised in the typebar. When a typographic form, moreover, is made up from such bars, or, at least, has some of its matter composed therefrom, particular advantages result in that not only does there exist a capacity for effecting the justification and regulation of the matter on the edge of each typebar body, but it is also possible to alter the appearance of the form as a whole.

The present drawing illustrates a typebar and an assemblage of the same embodying the present improvements, and in this drawing, Figure 1 is a perspective view upon an enlarged scale of a portion of a number of assembled and partially formed typebars which are constructed according to the present invention. Fig. 2 is a longitudinal section of the present typebar. Fig. 3 is a cross-section of the same, the plane of the section being transverse to the line of length of the bar and the portion thereof intermediate the top and bottom edges of the bar being omitted. Fig. 4 is a perspective view of a portion of a typebar body or support

adapted to form one of the component parts of the present composite typebar. Figs. 5 and 6 are perspective views of different word-types or logotypes which are so constructed as to adapt them to be slidably engaged with the support shown in Fig. 4; and Fig. 7 is a plan view of a number of assembled typebars constituting a typographic form.

Similar characters of reference designate corresponding parts in all figures.

In manufacturing the present word-types or logotypes, designated generally and without preference herein by L, some appropriate mechanism will be utilized for the purpose. By whatever mechanism or in whatever manner the logotypes are made they will usually be formed from a suitable blank of type-metal, and embody one or more types *t* integrally connected with the material of the logotype-head to form a series of types adapted to make, generally, a word impression in the typographic art. While I do not confine myself to any particular method of forming the composed types embodied in each logotype, such may readily, however, be produced by the compression of a proper blank by a series of selectively-located dies which, as they are successively brought into engagement with the respective portions of a blank, produce each respective type as the result of a relative subsidiary motion imparted to the type-making members during the advance of the die into the material of the blank. Such a method of producing types is set forth in United States Letters Patent No. 919,220, issued to me on April 20, 1909. The logotypes may, moreover, be formed consecutively from a continuous and proper blank which is severed into appropriate lengths to make logotypes engaged with the support, as described in my first hereinbefore-mentioned application.

The typebar body or support, designated in a general way herein by S, is of proper dimension and material, and one edge thereof will ordinarily be constructed to engage with the series of logotype-heads. In the form of typebar illustrated in the drawing attached to the present specification, the support S is shown as provided with a longitudinal, substantially parallel-sided slot or groove 2 formed in one of the longitudinal edges of the support and extending length-

wise thereof. When the support is so constructed, each head L is most advantageously provided with a corresponding parallel-sided tongue 3 adapted to fit the slot 2 and thus permit the engagement of the logotypes with the support. When engaged one with the other in this manner a logotype may be readily disengaged from the support and lifted out of the engaging slot, permitting thus a word to be removed from any portion of the line of types without disturbing any other portion, as in effecting author's corrections, for instance. When slidably engaged one with the other, as contemplated in the present typebar, the logotypes may be adjusted along the support by suitable mechanism or otherwise and the spaces regulated to secure a proper justification or filling out of the line by the series of logotypes comprised in each bar.

By reference to the drawings it will be seen that each of the logotypes embodies three portions, namely a high type, a type head and the flange 3. The types, that is the active portion of the structure is relatively high in the direction perpendicular to the printing face. This not only is advantageous in printing directly from the types, but is also of peculiar value when the types are employed in making stereotype or other matrices. It will also be seen that the type head from the face 5 to the base of the type is relatively short in the same direction of height and that the combined height of the type and head is less than the width of the structure, that is, assuming its width to be transversely of the length of the line of type and parallel to the plane of the printing face, in other words in the direction of the height of the printed impression from such type. When the support and logotype are made in the manner herein indicated it will be seen that the faces 5 of the logotype rest upon the faces 4 of the support and owing to the shortness in a direction perpendicular to the printing face of the combined type and head this will bring the support for the sides of the logotype high up toward the printing face. It will afford ample support at each side of the logotype which will correspond with each end of the printing face at each type so that any tendency to tip upon an axial line running longitudinally of the logotype, that is in a direction longitudinally of the line of type, will be counteracted. The fact of the shortness of the type and type head also makes it possible to place a single character or letter upon a logotype and space this from others in the line. The tendency to tip upon an axis transverse of the length will then be minimized. For convenience of reference Fig. 6 has placed upon it certain lines indicating these directions, as for instance, the line 6 denotes in a general way

the length, line 7 the width and the line 8 the height of the types and type heads. The difference between the lines 9 and 10 indicates the height of the type, the difference between the lines 10 and 11 indicates the height of the type head and the difference between the lines 9 and 11 indicates the combined height of the type and head from the printing face to the face or support 5. This reduction of the height of the type and type head in a perpendicular direction is such that the tendency of the type to tip over is minimized to an extent sufficient to render this form of position practicable.

A slidable engagement of the logotypes with the respective typebar bodies or supports S affords a further advantage in that not only a capacity for the individual justification of the word-types in the typebar itself, but also a possibility for effecting the shifting or alteration of the position of one or more logotypes on a typebar with relation to one or more logotypes on an adjacent bar, thus enabling the typesetter to prevent the union or connection of the word spaces of adjacent bars one with the other, but also permitting him in a very large measure to control the appearance of the impression derived from the form when such an impression is viewed as a whole. This latter phase of the present improvements is especially intended for use in connection with the printing of books, magazines, etc., where, in the endeavor to produce an artistic effect the appearance of a mass of printed matter upon the eye of the reader is especially important and constitutes a factor requiring consideration in seeking to produce fine effects in typographic composition. This is best illustrated in Fig. 7 in which a number of assembled bars are shown. It is evident that, if such bars are constructed according to the present invention, then upon setting up the form and with or without the aid of a proof therefrom, such readjustment of the word-types may be made as will render the texture of the resulting impression in its effect upon the eye more thoroughly homogeneous.

Having described my invention, I claim—

1. A typebar for producing a justified line of types consisting of a type bar support and a series of spaced-apart logotypes, each comprising a type and short type head, the combined height of the type and head being less than the width of the logotype, and said logotypes being independently slidably engaged with the edge of said support.

2. A type bar embodying a type bar support having upon its edge a pair of supporting faces separated by an intervening channel, a series of spaced-apart logotypes each having a flange for interposition between said faces upon the edge of the sup-

port and having a face for engaging said supporting faces, and also having carried by said flange type heads and type shorter in height than in width.

5 3. A type bar composed of a body portion having a longitudinal groove in its edge and supporting faces upon each side of said groove, a series of spaced-apart logotypes each having a flange entering said groove, 10 a type head carrying said flange and having faces for engaging said supporting faces and a type carried by said head, the combined height of the type and head being less than the width thereof.

15 4. A typographic form comprising a plurality of typebars each of which consists of a typebar support and a series of spaced apart logotypes each comprising a type and short type-head, the combined height of the

type and head being less than the width 20 of the logotype, and said logotypes being independently slidably engaged with the edge of said support.

5. A typographic form comprising a plurality of typebars each of which consists of 25 a typebar support having a pair of supporting faces separated by an intervening channel, a series of spaced apart logotypes each having a flange for interposition between said faces upon the edge of the support, and hav- 30 ing a face for engaging said supporting faces, and also having, carried by said flange typeheads and type shorter in height than in width.

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