

D. B. Dorsey & E. Mather's Type Setting.

N^o 30211.

Patented Oct. 2. 1860.

Fig. 1.

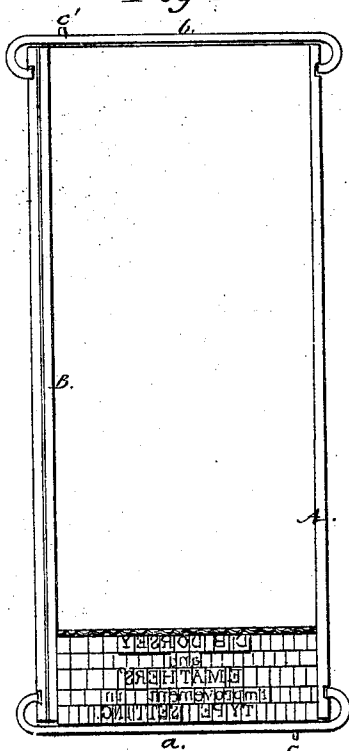


Fig. 2.

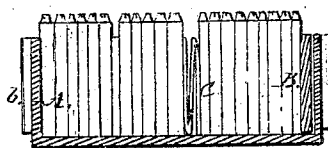
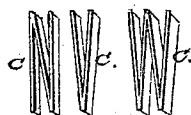


Fig. 3.



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UNITED STATES PATENT OFFICE.

D. B. DORSEY AND E. MATHERS, OF FAIRMOUNT, VIRGINIA.

SETTING TYPE.

Specification of Letters Patent No. 30,211, dated October 2, 1860.

To all whom it may concern:

Be it known that we, D. B. DORSEY and E. MATHERS, both of Fairmount, in the county of Marion and State of Virginia, have invented certain new and useful Improvements in Setting Type; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents a plan or top view of our invention. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a detached perspective view of some of the spring spaces, which we use for making the lines self-justifying.

Similar letters of reference in the three figures indicate corresponding parts.

The object of this invention is, first, to facilitate the handling of composed matter, without danger of knocking it into pi. This we propose to do by the employment, for the purpose of setting up the type, of a permanent column-galley, where it shall remain until distributed. And in order to more perfectly obtain this object, we have added movable end rules and justifying rules, whereby we also effect great facility in taking proofs and correcting matter.

To enable those skilled in the art, to make and use our invention, we will proceed to describe it, with reference to the drawing.

A, represents one of our column-galleys, arranged with the movable end rules, *a*, *b*. Both these end rules are made to slip over the sides or flanges of the galley, so that the same, when crowded down, remain firmly in their places, and that they can be removed without trouble. When the type is to be set up, one of the end rules is slipped on and the compositor proceeds as with an ordinary stick. When the galley is full, the other end rule is slipped on, and if necessary a lead or two put in, to secure the type firmly enough to take proof. When the form is made, the end rules are taken off in succession, as the galleys are arranged in their proper places in the column. The galleys must of course be made of such length that a certain number of them, according to taste and convenience, shall form a column. The columns may be justified in the usual way.

If it is desired to move the type from one galley to the other, and if the matter be set with the ordinary solid spaces, it will be

necessary to use the loose side rule or justifying rule B. This rule is to be placed in the galley resting against its side flange and the types are set up as if it were not there. Then, when some of the matter is to be moved, this justifying rule is slipped out of each galley, and the type pushed up as usual, after which the rules are to be replaced.

As for "column rules" they may be either very thin rules placed between the columns of galleys, or they may be thick, stout rules, filling the place between the types and above the flanges of the galleys up to the plane of the printing-face of the type, where they may terminate in the usual slight marking-edge.

The exact adjustment of the galleys in range, in the column, is secured by having dowel-pins and corresponding holes in the ends of each galley as shown at *c*, *c'*, *c''*, *c'''*, in Fig. 1. The head rule along the top of the page, and the foot-slugs along the bottom of the same are furnished with notches or apertures, to admit the free dowel-pins of the upper and lower ranges of galleys. These dowel pins are important, also, in ranging galleys out of the form for the purpose of shifting matter from one to another. Further this dowel pin arrangement has the effect, in the form, of uniting the several galleys firmly and in their proper position. After the galleys have all been ranged in the columns, and the columns themselves justified, a heavy foot-slug is to be put at the bottom of the type, in each lowest galley; then the foot and side rules are to be adjusted, and the forms locked in the usual way. By these means, the columns are locked from the side, and the lines of type (that is, the "matter" itself,) are locked from the bottom, so that the whole form will be far more secure than in the common way of setting type; and, at the same time, the form is made up with great facility.

In distributing the type, each galley can be taken up separately, the end rules having first been slipped on to prevent making "pi." Thus the type can be "thrown in" dry, which is another great advantage of our invention.

For the purpose of more easily justifying the lines, we employ spring spaces, C, made as clearly shown in Fig. 3. Thin pieces of sheet steel are bent in the form of a W, or N, or V, and hardened, giving them sufficient stiffness and elasticity to hold the

types in place, when inserted between them. In composing with these spaces, the matter is set up in the usual way, without compressing the springs, until the end of the line is approached. Then the accustomed eye of the compositor sees about what the remaining hiatus will admit, and, pushing back the types, he fills the gap with the selected letters. Then, taking out his composing rule, he slips it before the new line, and, releasing the latter from compression, the elasticity of the spaces fills up any deficiency; that is, it "justifies the line." Or, if an exigency should arise, in which the elasticity of the spaces would be insufficient to accomplish this, a few ordinary spaces, kept in a spare box for this purpose, can be slipped in, beside the springs, until the elasticity of the latter is sufficient to secure the line. It must be remarked, however, that our spring spaces can be applied only with our column-galley-sticks; because, without confinement, matter set up with spring spaces would scatter into "pi."

In "distributing," a little care will be necessary, to prevent the springs from making "pi." In breaking open the successive lines, the left thumb should be pressed firmly on the line next to where the first letters are

to be taken out. Then, taking out and distributing the latter, the elasticity can be gently relieved, and the danger will cease so far as that line is concerned. Thus every successive line can be managed without danger of making pi. When the spring spaces are used, the type can be moved from one galley to another without using the justifying rule, and the matter can be pushed up in the common way.

When it is desired, a movable holder or handle may be secured to the end of each galley, in order to facilitate the operation of setting up the types; and by making the end rules permanent, our galley will perfectly adapt itself to book-printing.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent is—

The employment of a permanent column-galley A, arranged with end rules *a*, *b*, and with a justifying rule B, substantially as and for the purposes herein set forth.

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Witnesses:

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