(No Model.)

D. REID.

MEANS FOR SECURING STEREOTYPE PLATES.

No. 410,923. Patented Sept. 10, 1889.

Fig. 1.

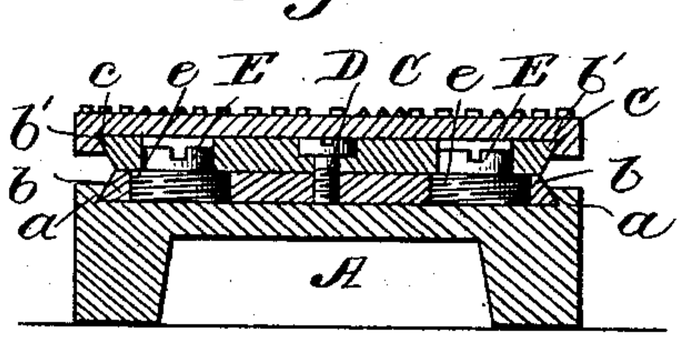


Fig. 2.

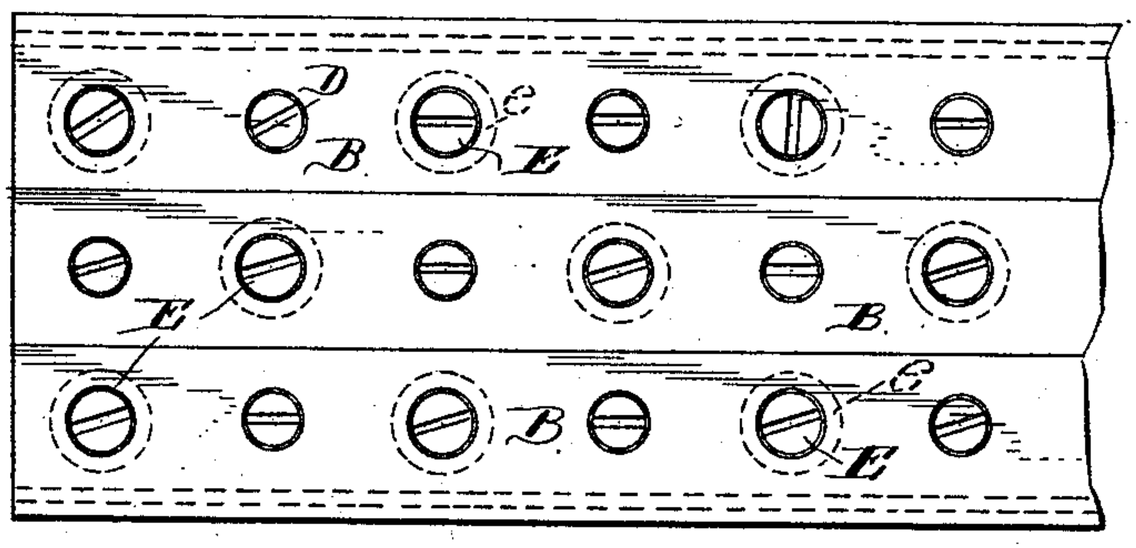


Fig. 3.

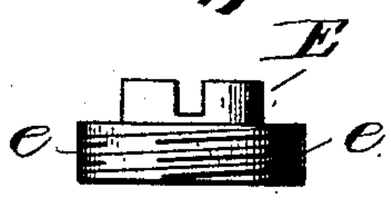
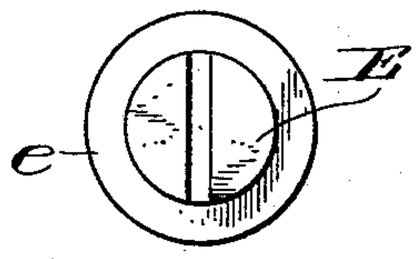


Fig. 4.



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UNITED STATES PATENT OFFICE.

DAVID REID, OF MELBOURNE, VICTORIA.

MEANS FOR SECURING STEREOTYPE-PLATES.

SPECIFICATION forming part of Letters Patent No. 410,923, dated September 10, 1889.

Application filed August 13, 1888. Serial No. 282,601. (No model.) Patented in Victoria July 6, 1888, No. 5,953; in New South Wales July 9, 1888, No. 768; in New Zealand July 26, 1888, No. 3,134, and in England August 11, 1888, No. 11,621.

To all whom it may concern:

Be it known that I, DAVID REID, publisher, a subject of the Queen of Great Britain, residing at No. 112 Flinders Lane, East, in the city of Melbourne and British Colony of Victoria, have invented a new and useful Improved Means for Securing Stereotype-Plates to their Base-Blocks, (for which I have obtained Letters Patent in Great Britain, dated August 11, 1888, No. 11,621; in Victoria, dated July 6, 1888, No. 5,953; in New South Wales, dated July 9, 1888, No. 768, and in New Zealand, dated July 26, 1888, No. 3,134,) of which the following is a specification.

This invention relates to an improved means for securing stereotype-plates to their base-blocks; and it refers more particularly to that method of or means for securing stereotype-plates to their base-blocks wherein a key is employed which in section forms a double dovetail, the upper dovetail of which is fitted into a corresponding groove on the under or back side of the stereotype-plate, while the lower dovetail is fitted into a correspondingly-shaped groove on the upper face of the base-block; but I have found in practice that this arrangement for securing stereotype-plates to their base-blocks is defective in some respects, inasmuch as it is incapable of adjustment. Now, according to my present invention I still retain the double-dovetail key, but I make it in two or more thicknesses, and the upper part of it in two or more strips lengthwise, and I so connect the upper part of the key with its lower part as to make it susceptible of adjustment, so as to provide for any possible inequality in the face of the stereotype-block. By making it in strips lengthwise I am enabled to more accurately adjust any part of the face of the plate which requires adjustment, and the best means I have found for effecting the vertical adjustment of the upper plates of the key, and consequently of the face of the stereotype-plate, is by means of two sets of screws, the one of which connects the upper plates to the lower plates of the key, and the others of which form the supports for the upper plates and constitute the means for adjusting it. This will be better understood on reference to my drawings, in which—

Figure 1 is a transverse vertical section of a stereotype-plate, adjustable double-dovetail key, and base-block constructed according to my invention. Fig. 2 is a plan of the adjustable double dovetail key hereinbefore mentioned. Figs. 3 and 4 are respectively an elevation and a plan of one of the screws for vertically adjusting the upper part of the key.

That part of the drawings which is indicated by the letter A represents the base-block formed with an undercut dovetail groove *a*, to receive the lower dovetail *b* of the key B, while the upper dovetail *b'* of same fits into the undercut dovetail groove *c* in the under side of the stereotype-plate C.

D D represent ordinary screws holding the upper and the lower plates of the key together, while E E represent the adjusting-screws, formed, as shown, with a shoulder *e* to bear against the under side of the upper portion of the key B, whereby its thickness may be readily adjusted by reason of the said screws raising the strips of which the upper portion of the key B is constructed, as shown.

The operation of my invention is as follows—that is to say, assuming that the printing comes up faint at any part, thereby indicating that the stereotype-plate is not perfectly flat, then it is only necessary, first, to slacken the screws D at or about the faint part, then to unscrew the adjusting-screws E at or about the same part, so as to raise their shoulders, and thus raise that part of the upper portion of the key so as to correct the inequality in the printing-plate. An alternative method of adjusting the face of the stereotype-plate is to dispense with the adjusting-screws E and to use thin metal liners or wedges between the upper and lower plates of the key; but I prefer to use the screws E. Further, this adjustment may be also effected even if the upper part of the key be made of one plate, instead of two or more; but I prefer to make such upper part of the key in three strips or widths, as shown.

Having now particularly described and ascertained the nature of my invention and in what manner the same is to be performed, I declare that what I claim as my improved means for securing stereotype-plates to their base-blocks is—

1. An adjustable double-dovetail key B,

consisting of an upper and a lower part suitably connected together, substantially as herein described and explained.

2. An adjustable double-dovetail key consisting of an upper and lower section, in combination with adjusting-screws E, having an annular shoulder or flange upon which the upper section rests, said screws working in threaded bearings formed in the lower sections, substantially as and for the purposes specified.

3. An adjustable-dovetail key for securing stereotype-plates to their base-blocks, composed of two sections, one of which is formed of a plurality of longitudinal strips, and means, substantially as described, for adjusting one of said sections, substantially as and for the purposes specified.

4. The combination, substantially as herein described, with a base-block and stereotype-plate, of an adjustable double-dovetail key for securing the plate to the block, said key being composed of a lower section provided with screw-threaded openings, and an upper section formed of a plurality of longitudinal strips provided with unthreaded openings of less diameter than those in the lower section, in combination with adjusting-screws having a threaded portion of the same diameter as the threaded bearings in the lower key-section, and a head of less diameter than the openings in the upper section to form a shoulder upon which the strips of said upper section rest, substantially as and for the purposes specified.

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