(No Model.)

W. T. BARNUM.

ELECTROTYPE BLOCK.

No. 520,981. Patented June 5, 1894.

Fig. 1

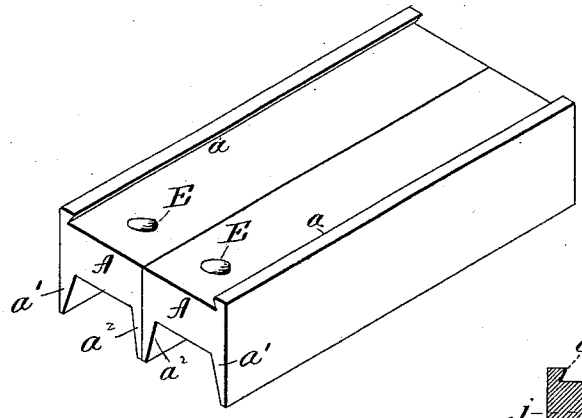


Fig. 2

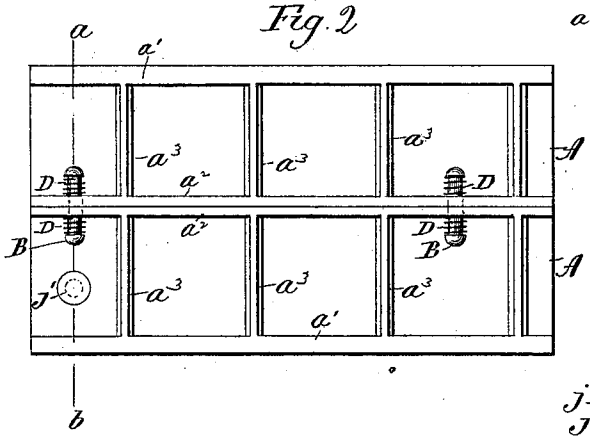


Fig. 3

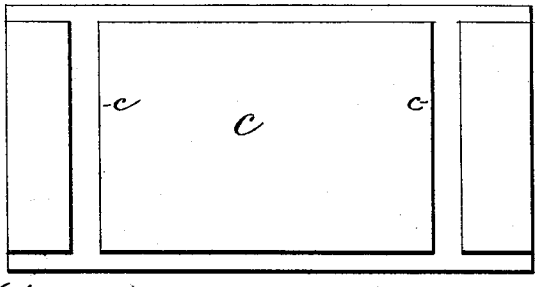


Fig. 4

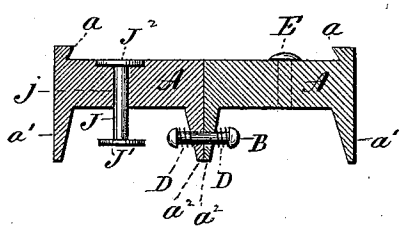


Fig. 5

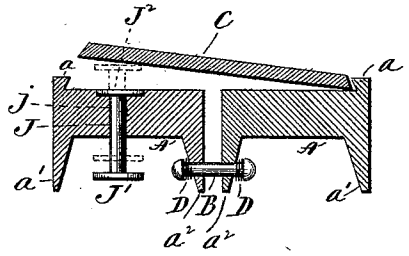
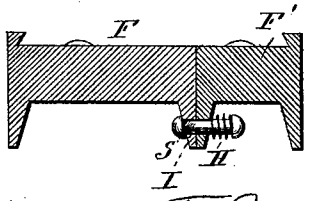


Fig. 6



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WILLIAM T. BARNUM, OF NEW HAVEN, CONNECTICUT.

ELECTROTYPE-BLOCK.

SPECIFICATION forming part of Letters Patent No. 520,981, dated June 5, 1894.

Application filed May 22, 1893. Serial No. 475,069. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM T. BARNUM, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Electrotype-Blocks; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of one form which an electro-type block constructed in accordance with my invention may assume; Fig. 2, a reverse plan view thereof; Fig. 3, a reverse plan view of the face-plate of the block; Fig. 4, a view of the block in vertical transverse section on the line *a*—*b* of Fig. 2; Fig. 5, a corresponding view showing the members of the body separated for the application or removal of the face-plate which is represented just above them; Fig. 6, a view in vertical transverse section of one of the modified forms which my improved block-body may assume.

My invention relates to an improvement in that class of electro-type blocks in which the body and face portion of the block are made independently, and secured together without solder, the object being to produce a simple, convenient and effective device.

With these ends in view my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claim.

As shown in Figs. 1, 2, 4 and 5 of the drawings, my improved block body consists of two corresponding longitudinal members or parts A A, each having a longitudinal under-cut rib *a*, extending throughout the outer edge of its upper face, a depending longitudinal flange *a'* extending throughout the length of its outer edge, and a corresponding flange a^2 extending throughout the length of its inner edge. The inner edges of the two members are made square to adapt them to fit together. Transverse webs a^3 extending between the inner and outer flanges of the respective members or parts, are provided for strengthening the same, without materially increasing their weight. The two members thus described are coupled together by transverse connections, which, as shown in Figs. 2, 4 and 5 of the drawings, consist of two pins B B, extending transversely through perforations formed in the inner flanges of the respective members, and headed at each end. These pins couple the two parts or members together with a capacity for lateral movement toward and away from each other, for the application and removal of the face-plate C, of the block to the divided body thereof, the pins being adapted in length to permit the said members to be sufficiently separated to allow the face-plate to pass directly down between their under-cut ribs *a a*, and to be removed in like manner. But although the pins permit the parts or members of the body to be moved laterally, they do not allow them to have relative longitudinal movement to any extent, if at all. The edges of the face-plate C are beveled in the usual manner, to correspond to the under-cut ribs *a a* of the members of the body. By preference I also employ springs to coact with the said parts or members of the body and their transverse connections. As shown in the said figures of the drawings, I have employed spiral springs D, applied to the projecting ends of the pins B B, so that they exert a constant effort to draw the parts or members of the body together. When the said members are laterally separated for the application or removal of the face-plate C, the springs will be compressed, as shown in Fig. 5 of the drawings. I do not, however, limit myself to the use of springs, nor to springs constructed and arranged as described. I might, for instance, use a flat sheet-metal spring interposed between the two members so as to normally push them apart, instead of normally drawing them together.

To prevent the plate from longitudinal movement upon the body of the block, each member thereof is provided with a retaining point or button E E, projecting slightly above its upper face near one of its ends, while the under face of the plate C, is constructed with transverse grooves *c c* to receive the said retaining points or buttons which take into one groove or the other according to the way the plate is placed upon the two-part body and prevent the plate from endwise movement.

It need not be said that the lateral movement of the plate is prevented by the under-cut ribs *a a* of the two members of the block.

I do not limit myself to any particular construction for the retaining points or buttons E E, which may be small round tacks or screws inserted into suitable holes formed for them in the blocks.

In Fig. 6 of the drawings, I have shown a block body in which its two longitudinal members F F′ are not of the same size, the division of the block in this case being to one side of its longitudinal center. The transverse connection for the members of this block is shown to be a pin G, having a head at each end, and provided with a single spiral spring H, encircling one of its ends. The operation of this block is the same as that of the block first described.

The pins employed for connecting the members of the block body, may be loose at both ends, as indicated in Figs. 2, 4 and 5 of the drawings, or they may be fixed at one end into one of the members, as indicated in Fig. 6 of the drawings, which represents the pin secured by solder I at one end, its other end being free.

A push-button is combined with the body or base of the block to assist the compositor in detaching the face-plate therefrom, for the plate often sticks and adheres to the block with great persistence. As herein shown the push-button consists of a cylindrical stem J, located in a vertical opening *j*, formed in one of the two members or parts of the divided block, the stem having free longitudinal movement in the said opening, and being provided at its respective ends with heads J′ J^2, the upper face of the said part of the block having a circular recess *j′* to receive the head J^2 referred to. The stem J is made long enough so that by pressing upward on the head J′, the head J^2 will be lifted considerably above the upper face of the said member against the face-plate C, which is thus raised, as shown in Fig. 5 of the drawings. The said push-button may be constructed and arranged otherwise than as shown, and still have the same office. I do not limit myself to its use, but it will be found very convenient. Each member of the block may have one or more if desired.

I am aware that electro-type block bodies have heretofore been composed of two longitudinal members so coupled together by means of screws or springs that they are permitted a lateral movement toward and away from each other for the reception and removal of the face-plate, and I do not therefore claim that construction.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A longitudinally divided electro-type block-body, composed of two longitudinal members, each having a longitudinal rib at the outer edge of its upper face, and each having two longitudinal flanges respectively depending from its inner and outer edges, means applied to the depending inner flanges of the respective members for loosely connecting them so as to permit their lateral movement toward and away from each other, one or more springs co-acting with the said members to draw them together, and a face-plate adapted to bear upon the upper faces of the respective members, engaged by the ribs formed at the outer edges of the same, and constructed to be held against endwise movement on the members, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM T. BARNUM.

Witnesses:
GEO. D. SEYMOUR,
FRED C. EARLE.