C. H. BILL.

Crayon Mold. Section Mold.

No. 209,154. Patented Oct. 22, 1878.

Fig. 1.

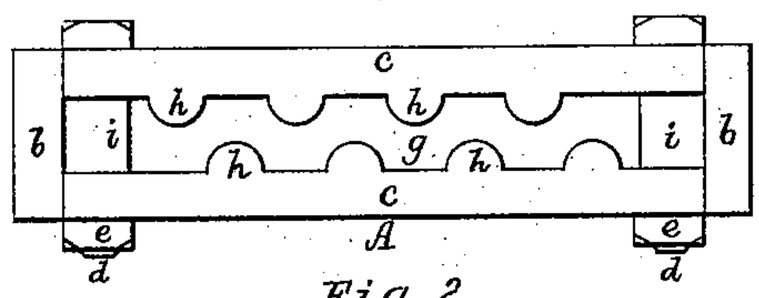


Fig. 2.

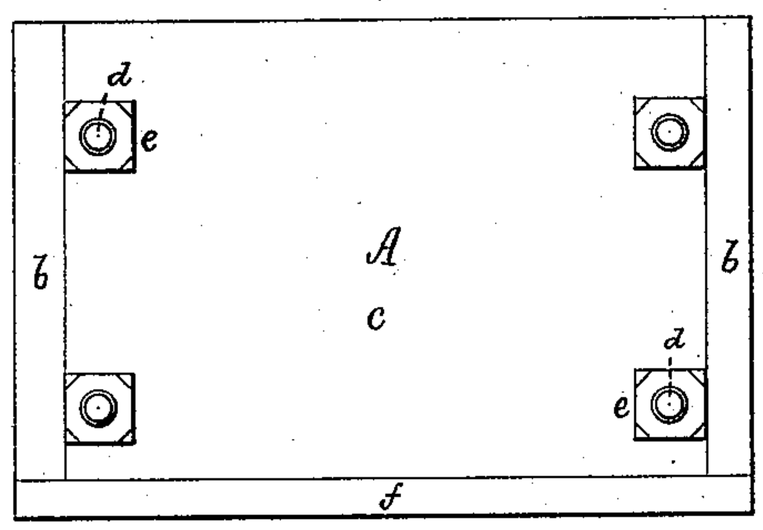


Fig. 3.

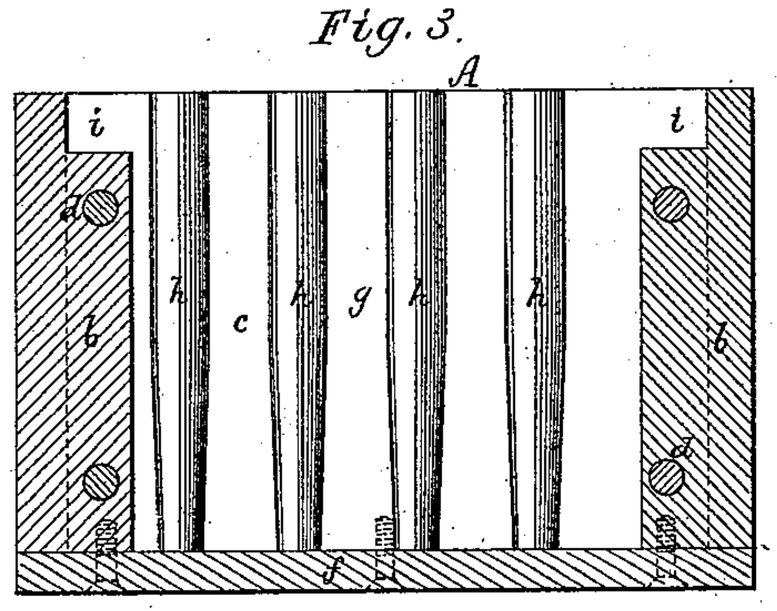


Fig. 4.

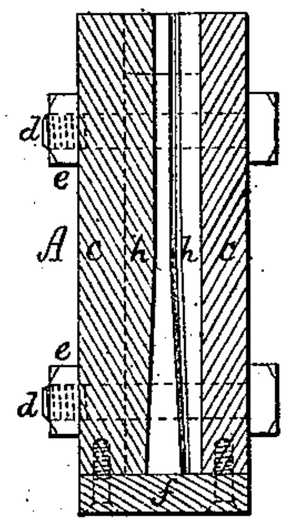


Fig. 5.

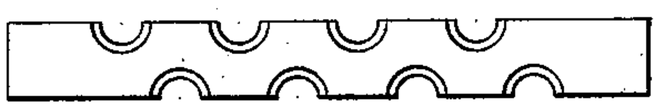
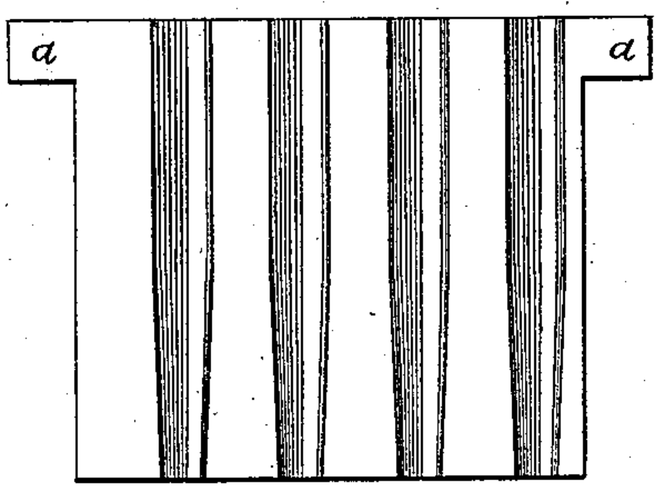


Fig. 6.



Witnesses

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Inventor.

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UNITED STATES PATENT OFFICE.

CHARLES H. BILL, OF WALTHAM, MASSACHUSETTS.

IMPROVEMENT IN CRAYON-MOLD-SECTION MOLDS.

Specification forming part of Letters Patent No. **209,154,** dated October 22, 1878; application filed September 25, 1878.

To all whom it may concern:

Be it known that I, CHARLES H. BILL, of Waltham, of the county of Middlesex and State of Massachusetts, have invented a new and useful Crayon-Mold-Section Mold; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a front elevation, Fig. 3 a longitudinal section, and Fig. 4 a transverse section, of such mold. Fig. 5 is a top view, and Fig. 6 a side elevation, of the article to be formed by such mold, such article being usually made of plaster-of-paris or some other suitable material.

Heretofore in making molds for casting chalk crayons it has been customary to compose them of a series of thick plates laid side by side, clamped together, and so bored that each crayon-matrix extended into two next adjacent plates, each mold section or plate when completed having the form substantially as shown in Figs. 5 and 6.

The purpose of my invention is to effect the manufacture of such mold-sections in a different and much cheaper manner, which I accomplish by casting them in a mold constructed as represented—that is to say, with a matrix or receiving-chamber provided with curved and tapering ribs, each corresponding in shape to one of the half portions of a crayon divided longitudinally into two equal parts. Such mold also has cavities for forming the ears *a a* of the crayon-mold section.

In the drawings, A denotes the mold, which is a long and narrow metallic box, open at top and closed at bottom. Each end portion *b* is rabbeted to receive the side plates, *c c*, which are secured to it by screws *d* and nuts *e*. The bottom plate, *f*, I usually fasten in place by screws going through it into the side plates.

The internal part or space *g* in the box I term the "matrix," each of its opposite sides being provided with a series of curved and tapering ribs, *h*, as above mentioned, arranged at equal distances apart, those of one series being opposite the spaces between those of the opposite series. Each of these ribs is a semicylinder for about half its length from its top, and thence tapers to its lower end. Furthermore, there is in the mold two cavities or auxiliary chambers, *i i*, which lead out of the matrix at opposite ends and at the upper part thereof, such being for casting or forming the ears *a a*, as above mentioned.

In using the mold the substance to compose the crayon-mold section is in a molten, plastic, or liquid state, to be inserted or run into the matrix until it and the cavities *i i* may be filled. After such substance may have become set or hard the mold may be taken apart sufficiently to enable the casting to be extracted from it.

I am aware that molds for casting cylinders have been made with semicircular recesses in each half, so that when the two halves or sections of the mold were put together the recesses of one come opposite those of the other, and the parts between the recesses of one touched those between the recesses of the other; all of which differs from my invention or crayon-mold-section mold, in which there is a matrix and ribs arranged therein, so that the casting produced by such mold becomes a single solid, recessed on its opposite side.

I claim—

1. The crayon-mold-section mold, composed of the side, end, and bottom plates, *b b c c f*, and having the matrices *g*, and the two sets of ribs *h*, arranged therewith, as set forth.

2. The crayon-mold-section mold, substantially as described, provided with the ear-matrices *i i* and the ribs *h*, arranged with the matrix *g*, or main chamber of said mold, as set forth.

CHARLES H. BILL.

Witnesses:
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