(No Model.)

S. H. HORGAN.

PRINTING PLATE AND BLOCK.

No. 478,749. Patented July 12, 1892.

Fig. 1.

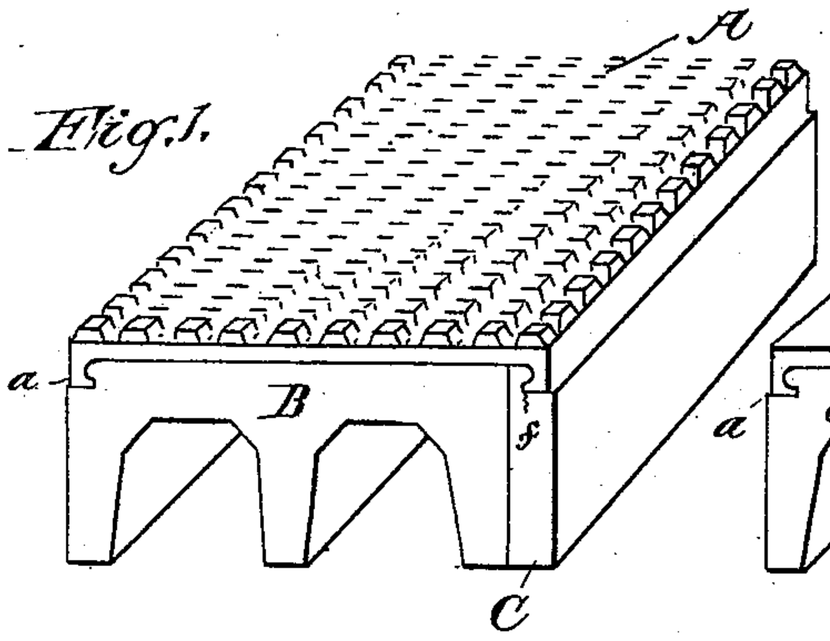


Fig. 2.

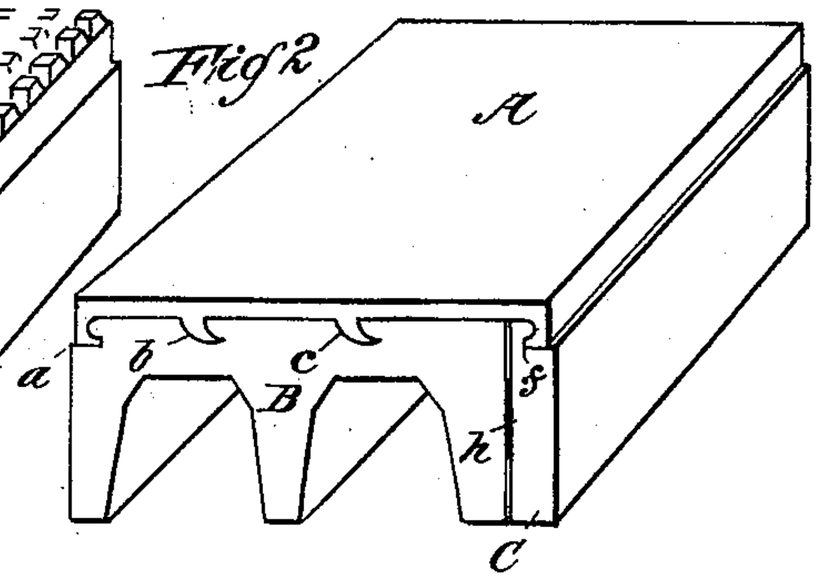


Fig. 3.

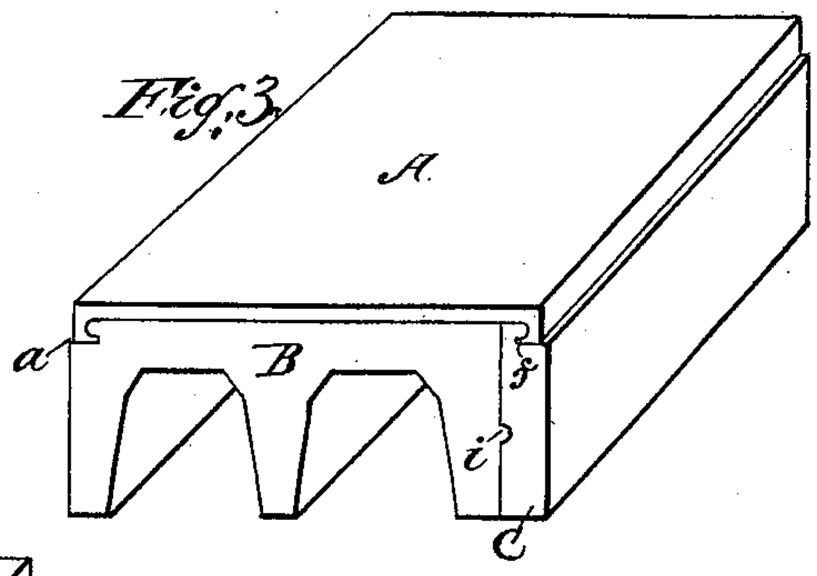


Fig. 4.

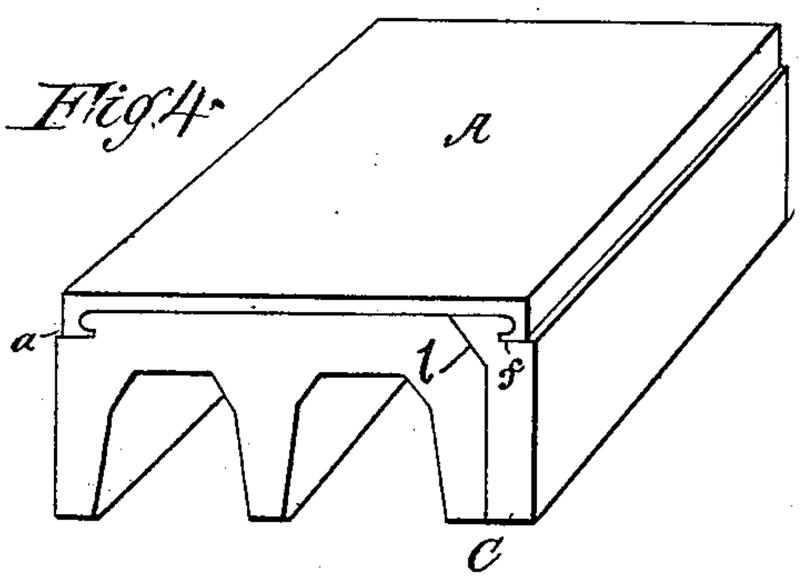
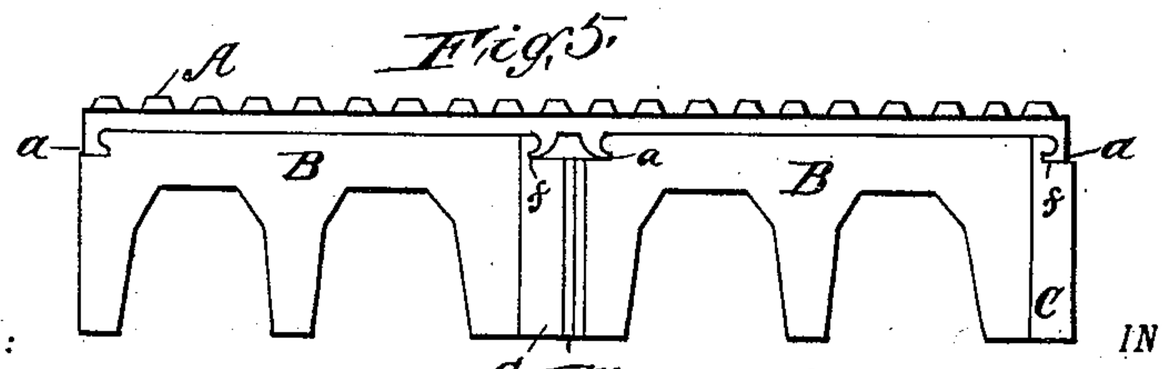


Fig. 5.



WITNESSES:

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PRINTING PLATE AND BLOCK.

SPECIFICATION forming part of Letters Patent No. 478,749, dated July 12, 1892.

Application filed November 28, 1887. Serial No. 256,288. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN H. HORGAN, of Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Printing Plates and Blocks, of which the following is a specification.

I will describe the improvement in detail and point out the novel features in claims.

In the accompanying drawings, Figures 1, 2, 3, and 4 are perspective views of printing-blocks embodying my improvement, and Fig. 5 is a sectional view of a printing-block also embodying my improvement and intended to show my improvement as applied to a printing-block wider than a single column.

Similar letters of reference designate corresponding parts in all the figures.

A designates a printing plate or shell. It may be made of any suitable material—as, for instance, type-metal, aluminium, celluloid, or vulcanized rubber. The base for the printing plate or shell is shown as made in two portions B C. Where a plate or shell of heavy material—such, for instance, as type-metal—is employed, the portion B of the base may be provided with a groove, into which one of the tracks *a* of the plate or shell may fit. (See Fig. 1.) If, however, the plate or shell be made of light or flexible material—such, for instance, as vulcanized rubber or celluloid—it may be found desirable to make additional provision for holding the plate or shell down to the base, and in Fig. 2 I have shown the portion B of the base as provided with other grooves, into which projections, as *b c*, on the plate or shell may be fitted. The portion C of the base may be provided at or near its upper outer end with a track or groove, and a portion of the plate or shell A may be so shaped as to fit into this track or groove. The base B C will preferably be made slightly wider than the plate or shell A, so that the column-rules will not press on the plate or shell when in the type-form. Of course the base may be made in three or even more pieces, and the two side portions of the base might be formed like the portion C. If for any reason the plate or shell should work loose on the base B C, all that would be necessary to remedy the defect would be to insert a strip *h*, Fig. 2, of paper or other material of proper size and thickness, between the parts B and C.

It may be found desirable in some cases to provide means for so connecting the portions B C of the base that they will not slip. To this end in Fig. 3 I have shown a projection *i* in one portion, as B, fitting into a corresponding recess on the other portion, as C. The portion C of the base may taper or flare inwardly at the upper end of the side next to the portion B, as shown at *l* in Fig. 4. In such case a suitable space for this tapering or flaring portion should be left in the portion B of the base.

In Fig. 5 I have shown my invention as applied where the plate or shell is made in one piece to cover more than one column. In such case all that is necessary is to fill the space ordinarily occupied by the column-rule with slugs or brass rules *m*.

In practice I prefer to make the plate or shell so that when it is applied to the base the base and plate or shell will fit tightly even before lateral pressure is applied to the base, and hence when the base is placed in position between the column-rules and lateral pressure is applied thereto the plate or shell will be held tightly upon the base, thereby obviating the objectionable springing upward of the plate or shell on the loosening of the plate or shell. This base further supplies an upper surface upon which the plate or shell may rest and enables the plate or shell to stand pressure during printing better than if the plate or shell possessed feet. I am enabled by my improvement to employ a very light and thin printing plate or shell in a very satisfactory manner.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a plate or shell having depending side flanges and a base therefor made in two unequal portions, each of said portions having a groove at its upper outer edge, substantially as specified.

2. As a new article of manufacture, a printing plate or shell made separate from and independent of the base to which it is intended to be applied, said plate or shell having its parts of greatest thickness at its extreme sides, said parts of greatest thickness pro-

jecting down from the under surface of the plate or shell and having recesses in the inner sides of said side projections, said plate or shell having other projections on its under surface adapted to fit into recesses in the base to which it is intended to be applied, substantially as specified.

3. The combination of a plate or shell having depending side flanges and projections on its under surface with a base therefor made in more than one piece, said base having grooves at its outer sides, into which the depending side flanges of the plate or shell will fit, and said base having other grooves in its upper surface, into which the projections on the under surface of the plate or shell will fit, substantially as specified.

STEPHEN H. HORGAN.

Witnesses:
JOSEPH T. MCCOOBERY,
ROBERT E. MCCOOBERY.