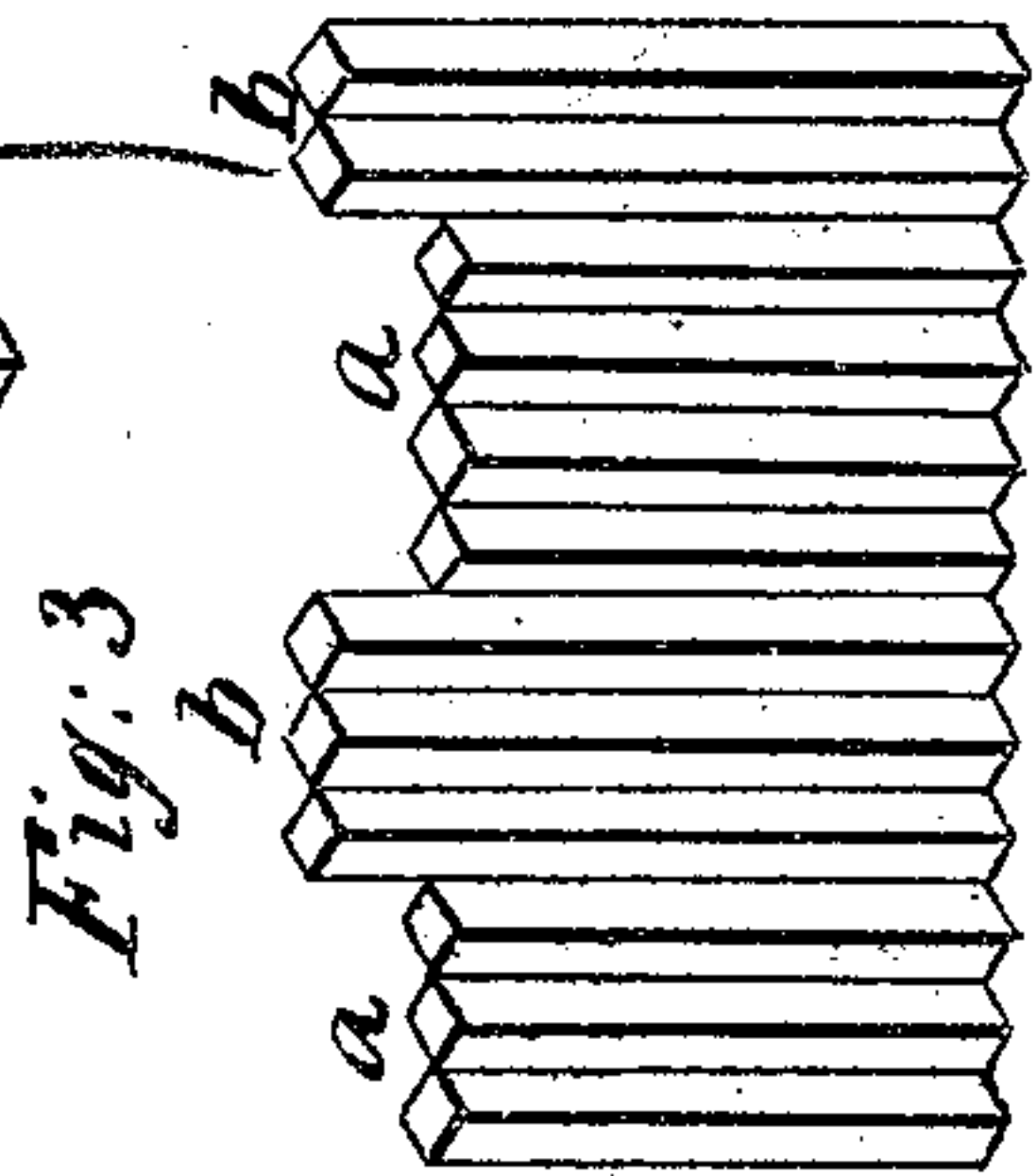
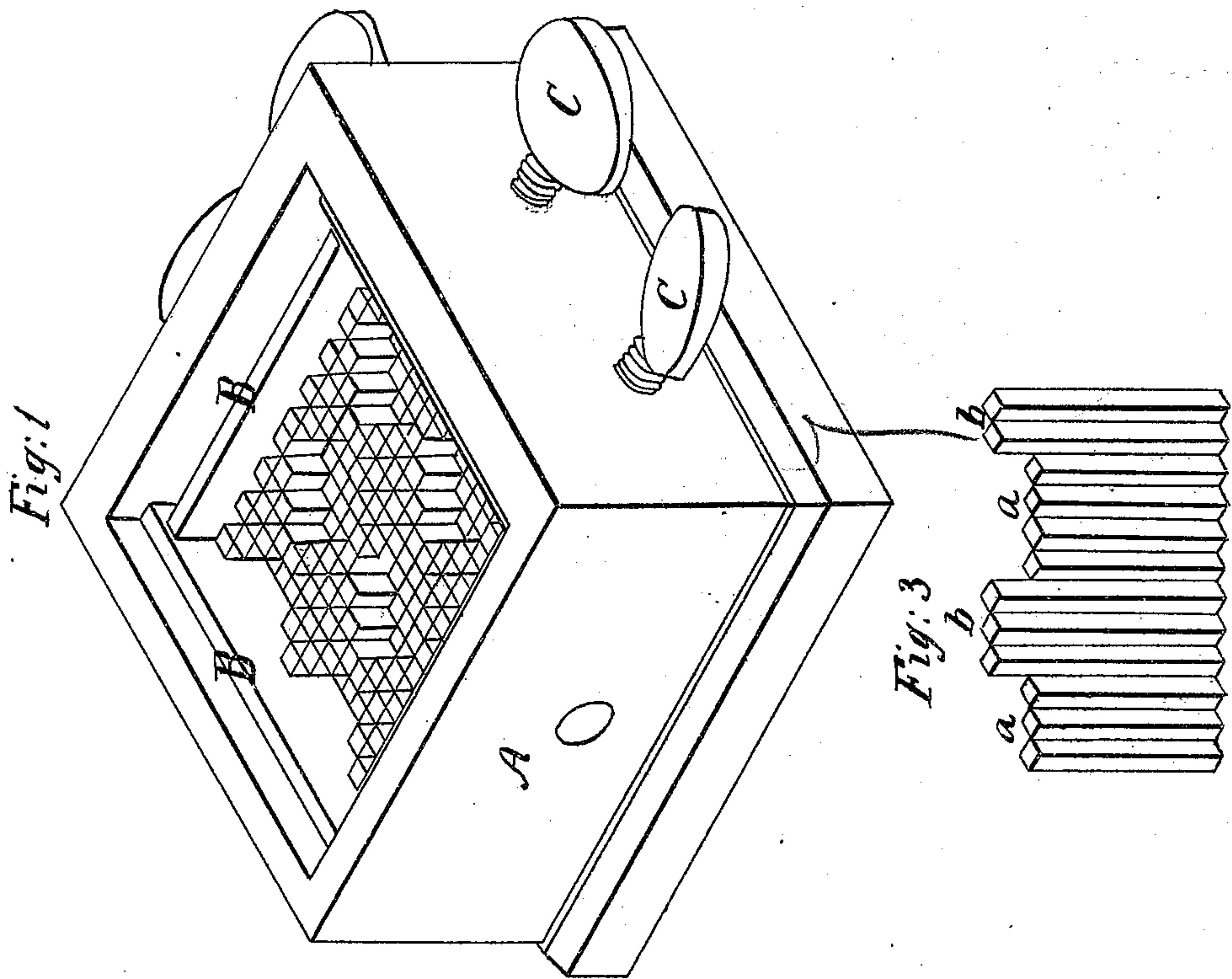
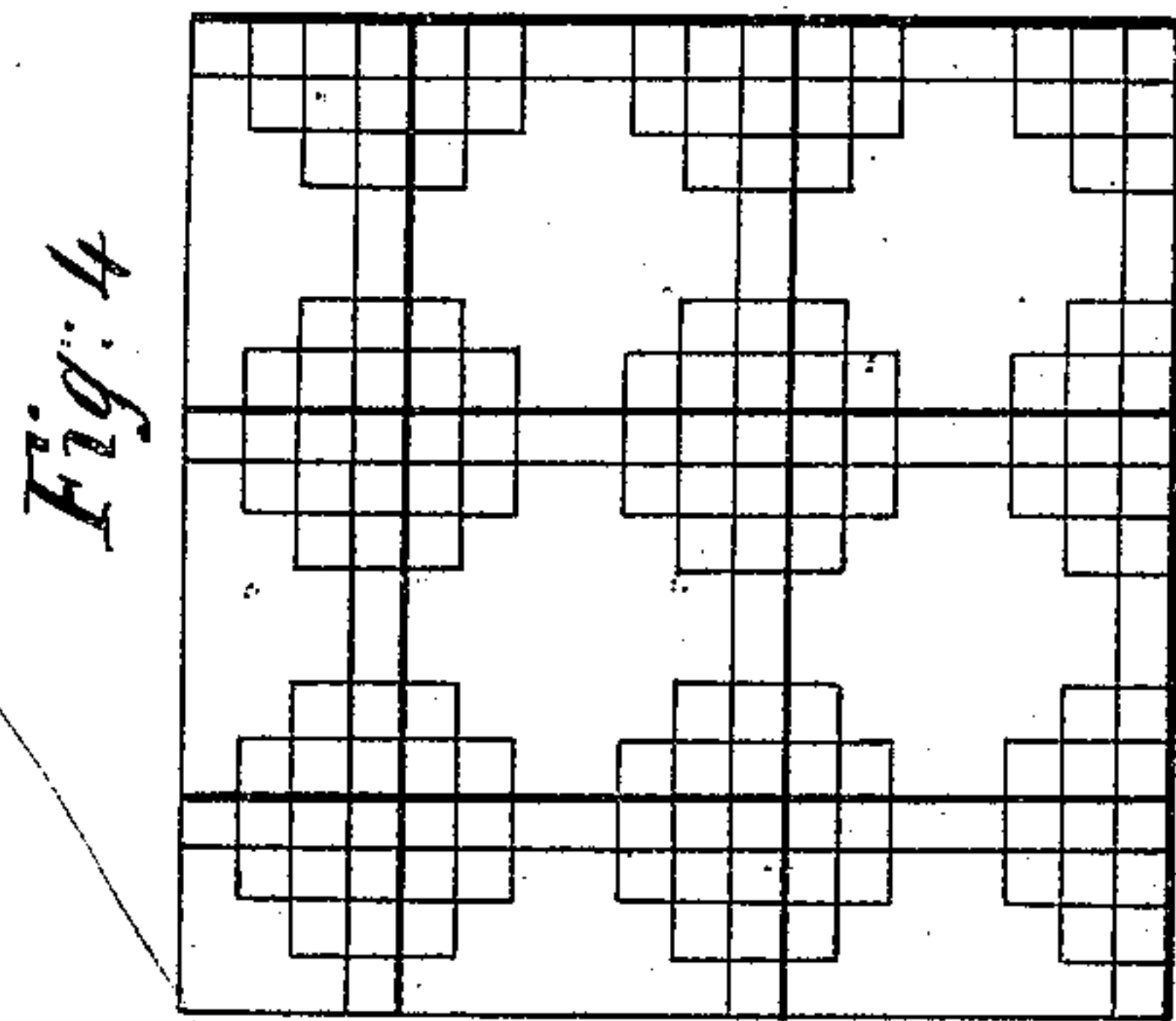
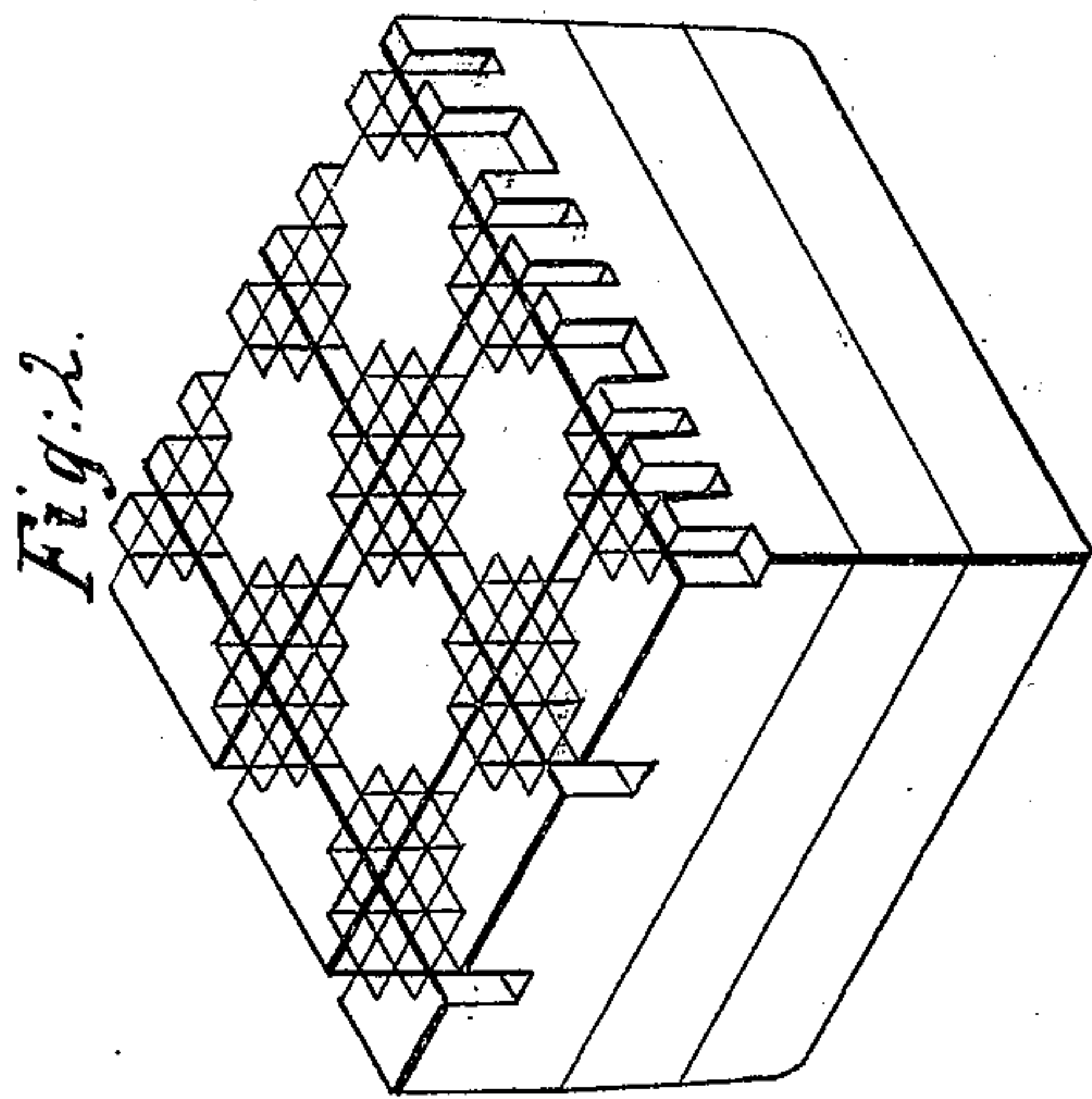


J. Berry.

Mould for Printing Blocks.

N^o 10630.

Patented Mar. 14. 1854.



UNITED STATES PATENT OFFICE.

JAMES BERRY, OF ROXBURY, MASSACHUSETTS.

IMPROVED METHOD OF CONSTRUCTING MOLDS FOR MAKING PRINTING-BLOCKS.

Specification forming part of Letters Patent No. **10,630**, dated March 14, 1854.

To all whom it may concern:

Be it known that I, JAMES BERRY, of Roxbury, in the county of Norfolk and State of Massachusetts, have invented a new and useful Method of Constructing the Molds for Casting Blocks for Printing Carpets and other Goods, House-Paper, &c.; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an isometric view of my mold as set up preparatory to receiving the casting. Fig. 2 is the block as it appears when removed from the mold. Fig. 3 is a view of the two sizes of types of which the mold is composed. Fig. 4 is a diagram showing the manner in which the figure to be copied is marked off preparatory to being set up in the mold.

The nature of my invention consists in forming the molds into which the printing-blocks are to be cast of rectangular or other shaped prisms of a suitable size and of two different lengths. These types or prisms are set up to form the molds in such a manner that the short ones shall form the sunken part of the mold and the long ones the raised portion, so that when the material of which the block is to be formed is cast into the mold the elevated portion of the mold shall form the depressed portion of block, and the depression in the mold shall form the raised or figured portion of the block.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is the box in which the mold is set up. B are followers, which are tightened up against the types by the screws C to hold them in place. *a* and *b* are the sections of rectangular wire of which my mold is composed. The figures are set up in the mold with the short types *a*, the raised portion of the mold which corresponds to the depressed portion of the block with the large types *b*. The size of the prisms or wires used may be varied to suit the degree of fineness required for the pattern.

Operation: The figure to be produced is first marked off into squares of the same size as the prisms, Fig. 3. Each color is then read off, and a separate mold is set up for it in the following manner: Those portions corresponding to the color to be printed by the par-

ticular block are set up with the short types *a*, and all the rest of the mold is set up with the long types *b*. The followers are then brought to bear upon the types, and the whole is held securely in place. The block is then cast into the mold, and when withdrawn will furnish an exact counterpart of it. The types or prisms may be of type-metal, iron, copper, or any other suitable material, and the printing-blocks may be made of any material that, by fusion or by mixture with water or oil, may be rendered sufficiently liquid or plastic to be poured or forced into the molds—such as type-metal, plaster-of-paris, and clay, or mixtures of shellac and fine sand, highly-vulcanized india-rubber, or gutta percha. The latter is the material which I prefer, as it transfers the whole of the color received to the goods without absorbing any portion of it, while it has elasticity sufficient to cause it readily to leave the molds, and is so tough that its face may be easily dressed and kept in order.

It is evident that the molds, when no longer required, may be taken to pieces and again set up with other patterns, so that to the great economy of time, which results from the use of my invention, may be added an equal economy of materials, a small stock only of the clamps or boxes A and of the metallic prisms serving for the preparation of a great number of blocks.

It is proposed to extend this invention to the production of cylinders as well as blocks, and also to set the types for the molds by machinery, from which a great saving of labor will result; but this forms no part of my present invention; neither do I claim making blocks for printing by casting them into suitably-prepared molds; nor do I claim making blocks for printing woolen or other fabrics by setting up movable types, and thus producing the requisite figures to be subsequently printed from; but

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

Forming the molds in which to cast printing-blocks of types or prisms in the manner described and for the purpose set forth, by which I am enabled to produce a great variety of patterns at a very small cost and in a comparatively short space of time.

Witnesses: JAMES BERRY.

CAUSTEN BROWNE,
SAM. COOPER.