

(No Model.)

J. H. COLLINS & G. E. ODELL.

PUZZLE.

No. 343,516.

Patented June 8, 1886.

Fig:1.

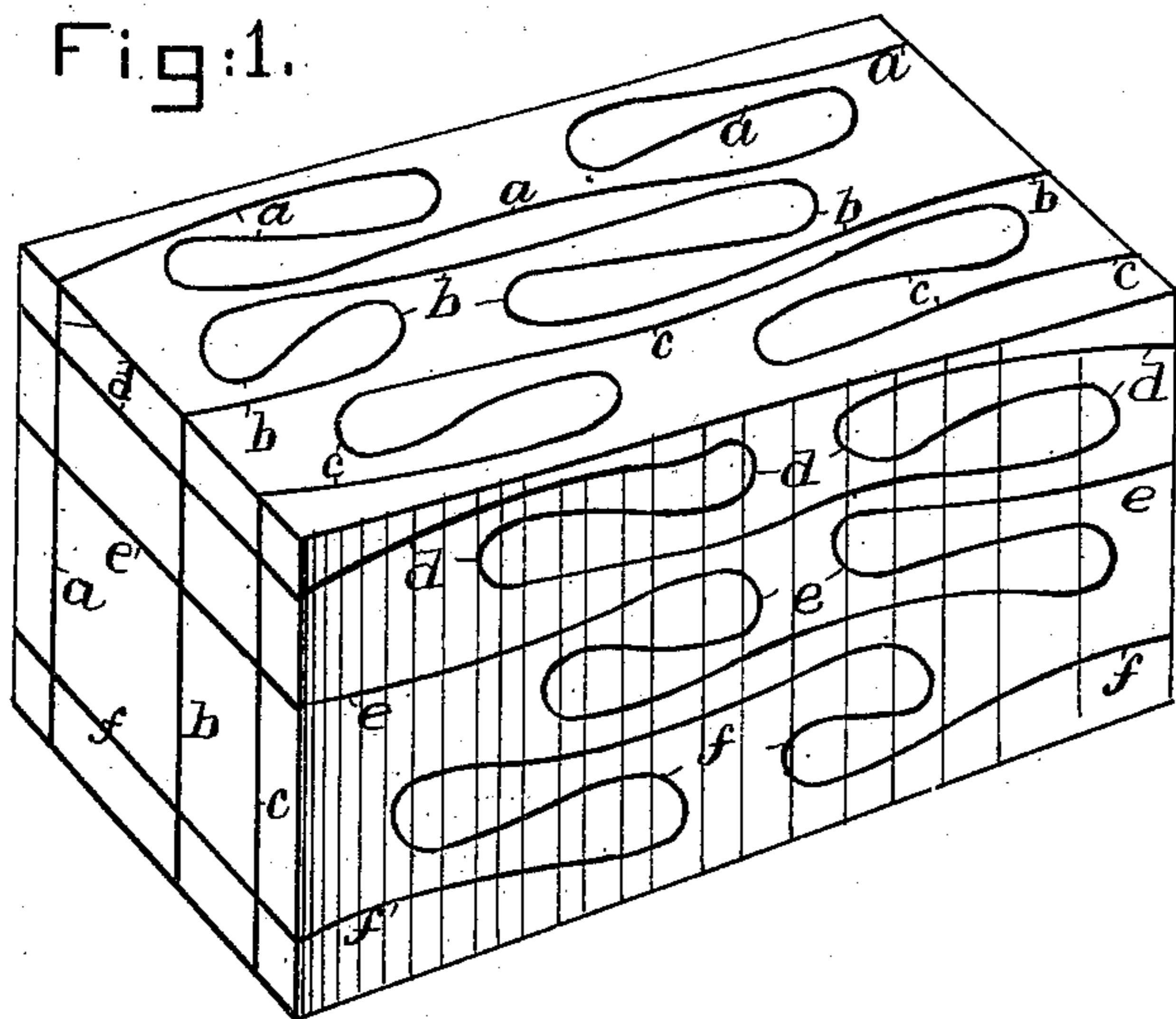


Fig:2.

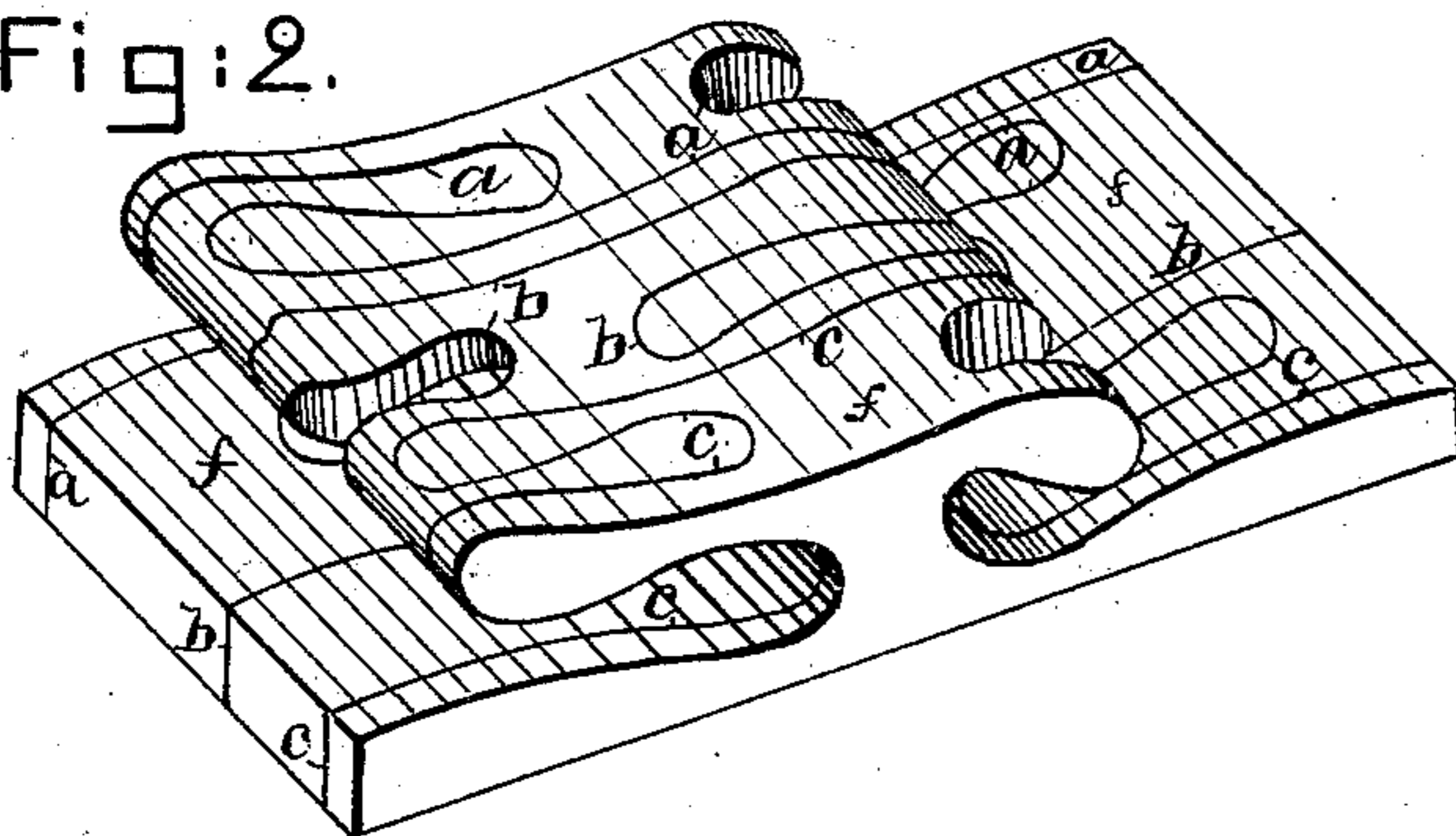
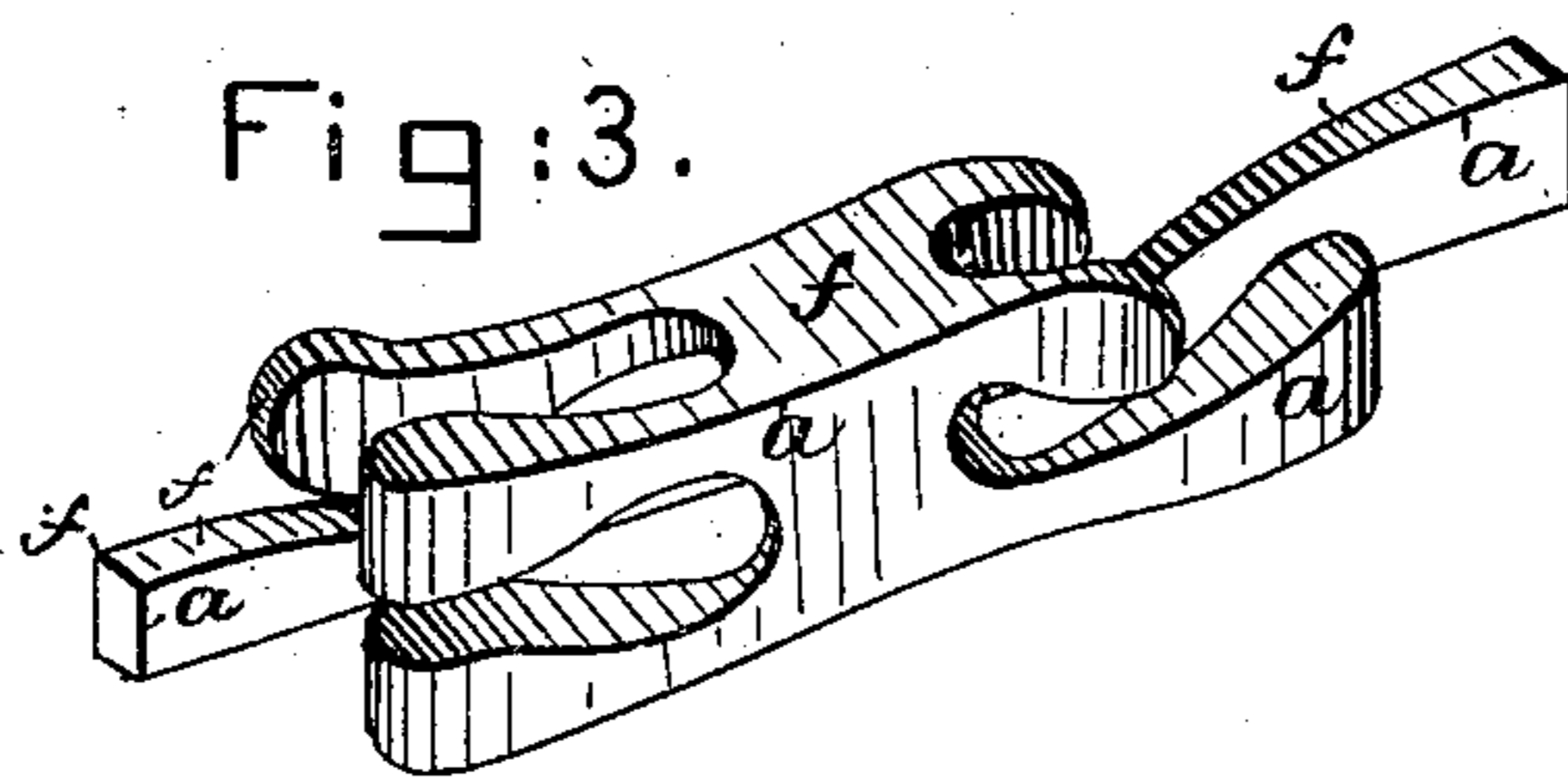


Fig:3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN H. COLLINS AND GEORGE E. ODELL, OF SALEM, MASSACHUSETTS;
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PUZZLE.

SPECIFICATION forming part of Letters Patent No. 343,516, dated June 8, 1886.

Application filed October 8, 1883. Serial No. 108,418. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. COLLINS and GEORGE E. ODELL, citizens of the United States, residing at Salem, in the county of Essex and State of Massachusetts, have jointly invented certain new and useful Improvements in Puzzles; and we do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

The object of this invention is to produce a dissected-block puzzle formed by sawing from a single piece, and requiring much patience and study to assemble the parts in their original positions when once dismembered and disarranged.

The distinguishing peculiarity of our invention is that the block is sawed both vertically and horizontally, or in other intersecting planes, from end to end, in two or more irregular and dissimilar curved lines in each plane, and is thereby severed into vertical and horizontal series of separable blocks, no two of which are alike. It follows that each block will fit only into its original position, and when all are indiscriminately mixed their restoration is very puzzling. A further peculiarity of the arrangement shown in the drawings is that each block interlocks vertically and horizontally with those adjacent to it, and can only be removed by moving an entire series in one direction, and a unit therefrom in the other direction.

The drawings will make clear these features of our invention, Figure 1 showing in perspective the sawed block and the lines on which it is severed, Fig. 2 representing the lower horizontal series of pieces in position after removal of all the others laterally, and Fig. 3 one of the units of that series.

The original block is, by preference, of whitewood or equivalent material not liable to split, and is of rectangular form, about as indicated in Fig. 1. This block is sawed through and from end to end by a very fine scroll-saw in two series of irregular intersecting lines, shown in the drawings by the vertical series *a b c* and the series *d e f* at right angles thereto. Each of these lines differs from every other one, so that the severing of the block by the passage of the saw through it three times in each direction, as shown, forms sixteen dissimilar pieces, one of which

is illustrated in Fig. 3. An additional cut in each direction would produce twenty-five pieces and add to the intricacy of the puzzle.

When the course of the saw through the block is such as the drawings indicate, it is obvious that the adjacent pieces will interlock in both directions, although each series is severed from every other, and may be detached as a whole by a sidewise movement, (see Fig. 2;) but such sidewise movement will not detach the units from the series. They can only be removed in the opposite direction in the plane in which each is severed from the others of its own series, so in assembling the parts after detachment they can only be replaced by series. This peculiarity serves to tie together all the pieces composing the block, so that it may be handled quite freely without dismemberment piece by piece.

We disclaim the well-known flat dissected maps, &c., of a single thickness and divided into irregular pieces by intersecting or broken lines; also, the patent of McChesney, August 9, 1881, which shows "a spherical, oval, or cylindrical block sawed in halves on a single lock-cut line, and each half separately cut transversely on such lines." It is obvious that every piece in said patented device has as part of its surface the smooth curve of the periphery of the original block, and such a shape otherwise as denotes from what part of either half of the block it was cut, thus making it a simple matter to reassemble the parts.

Our block is rectangular, and is cut in two or more irregular lines in each of the intersecting planes, vertical and horizontal, forming a series of pieces in each direction.

We claim as our invention—

The herein-described puzzle, consisting of a rectangular block subdivided longitudinally by two or more vertical and two or more horizontal interlocking saw-cuts, each series of cuts intersecting the other series, substantially as and for the purpose set forth.

In testimony whereof we hereto affix our signatures in presence of two witnesses.

JOHN H. COLLINS.
GEORGE E. ODELL.

Witnesses:

A. H. SPENCER,
E. A. PHELPS.