L. SCHMETZER.

TOY BUILDING BLOCKS.

No. 171,533. Patented Dec. 28, 1875.

Fig: 1

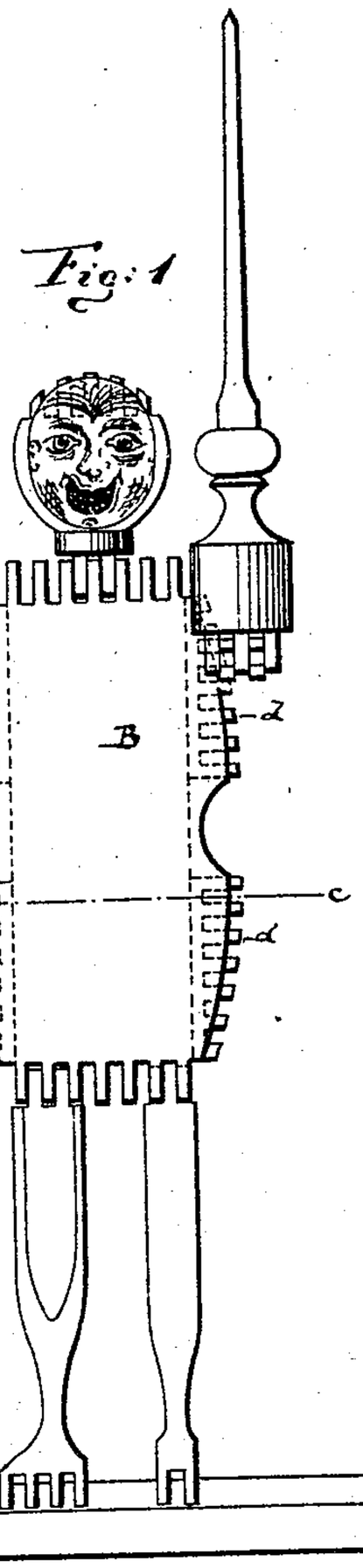


Fig: 2

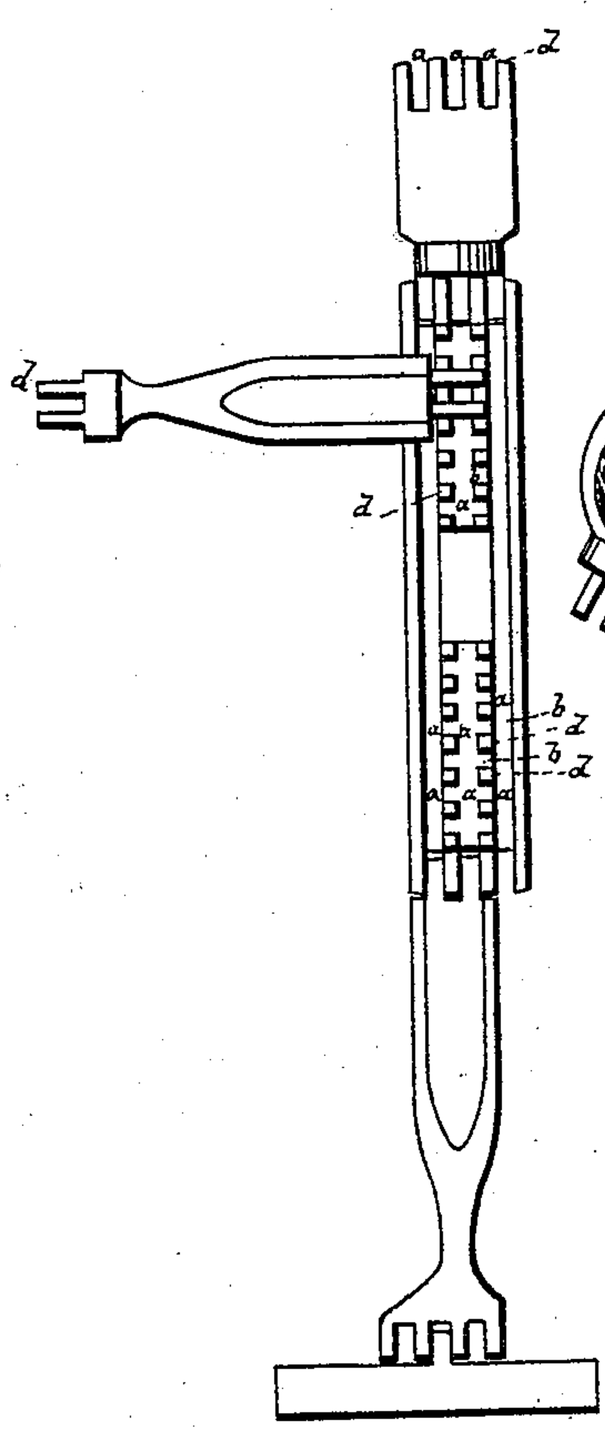


Fig: 3

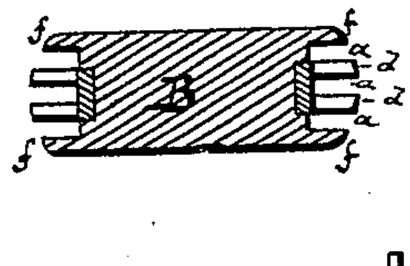


Fig: 5

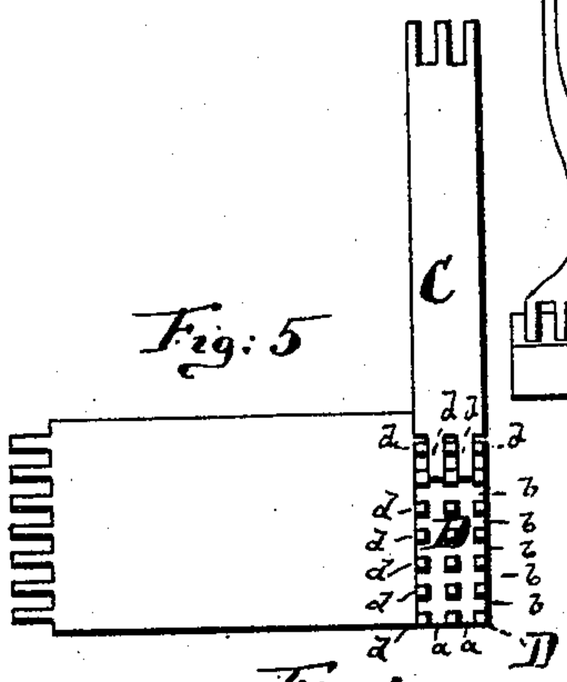
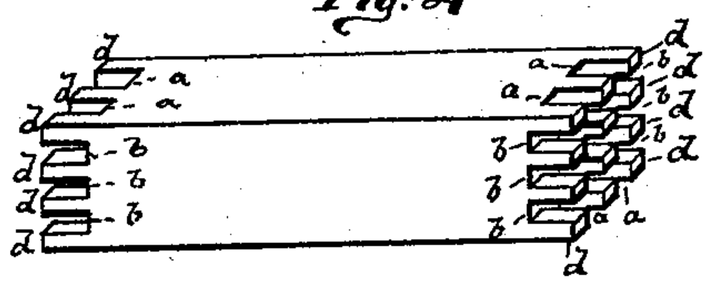


Fig: 4



Witnesses:

A. Moraga.

C. A. Weidner.

Inventor:

L. Schmetzer

by his attorney.

A. v. Briesen

UNITED STATES PATENT OFFICE.

LOUIS SCHMETZER, OF ROTHENBURG-ON-THE-TAUBER, BAVARIA, GERMANY.

IMPROVEMENT IN TOY BUILDING-BLOCKS.

Specification forming part of Letters Patent No. **171,533**, dated December 28, 1875; application filed November 18, 1875.

To all whom it may concern:

Be it known that I, LOUIS SCHMETZER, of Rothenburg-on-the-Tauber, Bavaria, Germany, have invented a new and useful Improvement in Toy Blocks and Figures, of which the following is a specification:

This invention relates to that class of sectional toys in which the figures or articles are composed of several pieces which may be jointed together in various manner, according to the taste or fancy.

The toys, whatever they may be intended to represent, are composed of blocks of wood or other material, the ends and parts of the sides of which are formed with a double set of grooves, one set crossing the other, so as to form a number of prismatic pins or tenons, parallel with, and equidistant from, one another, so that the pins of any one piece will fit the corresponding prismatic spaces of any other piece.

In carrying out the invention, it is preferred that the ends and edges of the blocks or pieces should be slightly rounded before the grooves are cut in them, so that the side or outer pins will be somewhat shorter than the inner ones.

By constructing the blocks in this manner, the limbs of a human figure may be inclined to the right or left, or made to project backward or forward, as may be desired, and very amusing postures of the limbs and other parts of the body may be thereby produced.

The invention is applicable to various sorts of toys, and the blocks may be made to represent the limbs of men or animals or parts of buildings, or architectural structures of various kinds, the peculiar feature and advantage of the invention being that the blocks or pieces may be connected together at right angles to each other when desired, instead of all the parts being jointed or connected together in one plane, as heretofore, when only one set of grooves, parallel to the superficial plane of the several pieces, is used.

Figure 1 of the accompanying drawing represents a front view of a human figure composed of my improved blocks. Fig. 2 is an edge view of substantially the same. Fig. 3 is a cross-section on the line C C, Fig. 1. Fig. 4 is a perspective view of one of the blocks, and Fig. 5 a top view of three blocks united.

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

The several blocks shown in the drawing are represented with their sides or ends cross-grooved—that is to say, one set of grooves, *a a*, to cross another set of grooves, *b b*, at right angles or nearly so, thereby producing a series of parallel and equidistant prismatic pins or tenons, *d d*, between the intersections of these grooves. This is most clearly represented in Fig. 4. The thickness of the tenons corresponds to the width of the grooves in such manner that the tenons of one block will fit snugly into the grooves of the other block, and thus connect both.

Blocks thus made can be united, not only with the tenons of one block to enter between the tenons of the other block parallel thereto, as shown at the junction of the arm A to the body B, in Fig. 1, but they may also be united, as shown in Fig. 5—that is, with the pins of one block, C, approaching and passing the pins of the other block, D, at right angles; or they may be joined at any other angle, larger or smaller than a right angle, to produce any desired variety or peculiarity of effect.

I am aware that the style of toy blocks described in Patent No. 61,721, of February 5, 1867, has been in public use in the United States many years prior to my invention above described, and I disclaim everything described in said patent.

I am aware that before my invention toy blocks were made with tongues and grooves to be united in the same plane, and this I do not claim; but

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

The toy block, provided with equidistant projecting quadrangular prisms *d d*, which are formed by two sets of grooves, *a* and *b*, crossing each other at right angles, the grooves and prisms being of substantially the same width, as set forth.

The foregoing description of my invention signed by me this 26th day of October, 1875.

LOUIS SCHMETZER.

Witnesses:

OTTO FEINTIENBERG,

FRIEDR. KUHN THUZKOPPER.