

# PATENT SPECIFICATION

420,349



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Complete Accepted: Nov. 29, 1934.

## COMPLETE SPECIFICATION.

### Toy Building or Puzzle Blocks.

I, PIET HEIN, a Danish Citizen, of Raadhustræde 1, Copenhagen, Denmark, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to toy building or puzzle blocks for use in building up three-dimensional geometrical figures or structures.

Building or puzzle blocks are well known in which the individual blocks or units are formed by different combinations of regular solid figures such as cubes, the individual blocks being adapted to be assembled together to form various different figures or structures.

The object of my invention is to provide an improved set of blocks or units in which a minimum number of blocks of simple form are employed and a very large number of combinations of the blocks is possible.

According to my invention a set of toy building or puzzle blocks consists of seven blocks or units each of which has the outline of three or four cubes assembled together in such a manner that at least three faces of each cube are free. The set of seven blocks is equivalent to twenty-seven cubes and experiments and calculations have shown that from the set of seven blocks it is possible to construct approximately the same number of geometrical figures as could be constructed from twenty-seven separate cubes.

The principle underlying the invention is that blocks composed of three or four cubes assembled together can be arranged in a maximum number of different positions and that no advantage is gained by reducing or increasing the number of cubes forming each block.

The blocks may be made of wood, metal, mouldable materials, clay, glass, or any

other suitable material, or even from edible substances, suitably wrapped, and the faces of the blocks may be provided with complimentary pegs and recesses or other means for holding them in the assembled position.

The blocks in a set may be coloured or uncoloured, and the individual blocks of a set may be differently coloured if desired.

My invention is illustrated in the accompanying drawings in which:—

Figures 1 to 7 are perspective views of the seven blocks forming a set.

Figures 8 to 13 are examples of solid geometrical figures or bodies which can be built up from the seven blocks.

Each of the blocks illustrated in Figures 1 to 7 has the outline of a figure formed by placing three or four cubes in juxtaposition. The block shown in Figure 1 is formed from three cubes while each of the others is formed from four cubes arranged in different relationships, the whole set being the equivalent of twenty-seven cubes.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. An improved set of toy building or puzzle blocks consisting of seven different blocks or units each of which has the outline of three or four cubes assembled together in such a manner that at least three faces of each cube are free, the set of seven blocks being equivalent to twenty-seven cubes.

2. The improved set of toy building or puzzle blocks substantially as described with reference to the accompanying drawings.

Dated this 19th day of March, 1934.  
BARKER, BRETTELL & DUNCAN.

Fig.1.

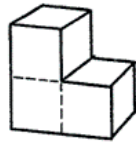


Fig.2.

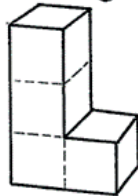


Fig.3.

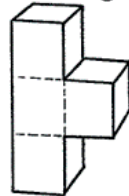


Fig.4.

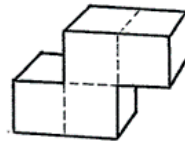


Fig.5.

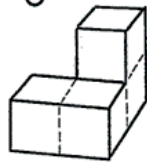


Fig.6.

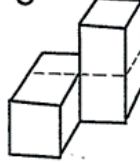


Fig.7.

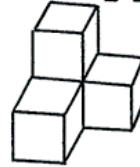


Fig.8.

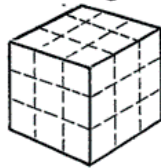


Fig.9.

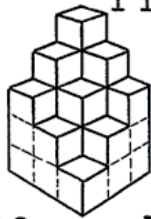


Fig.10.

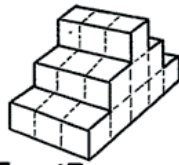


Fig.11.

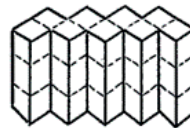


Fig.12.

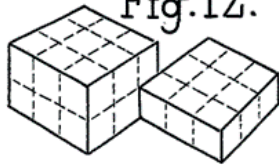
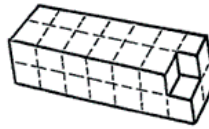


Fig.13.



[This Drawing is a reproduction of the Original on a reduced scale.]