(Model.)

H. KEELER.

AGGREGATE CUBE.

No. 332,256. Patented Dec. 15, 1885.

Fig. 7.

Fig. 1.

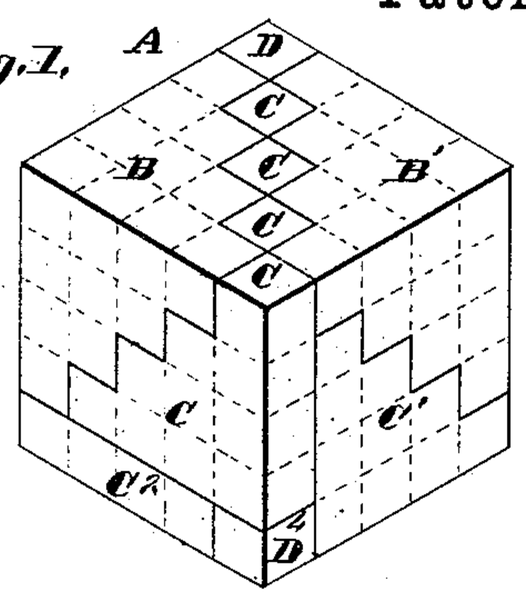
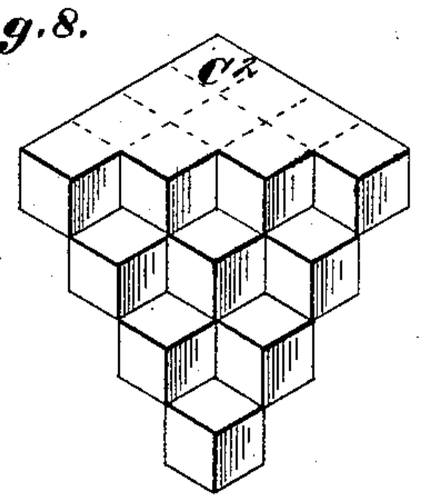


Fig. 8.



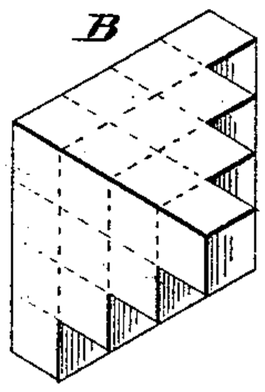
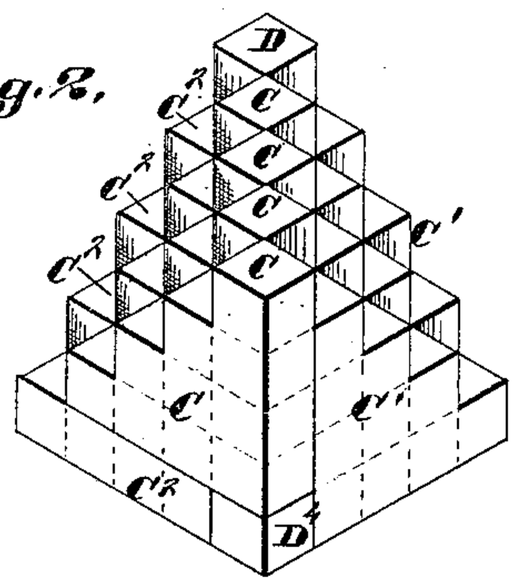


Fig. 2.



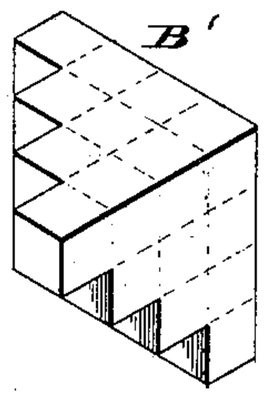
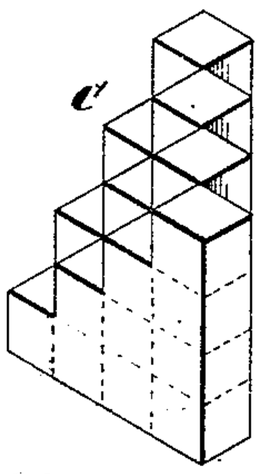


Fig. 3.



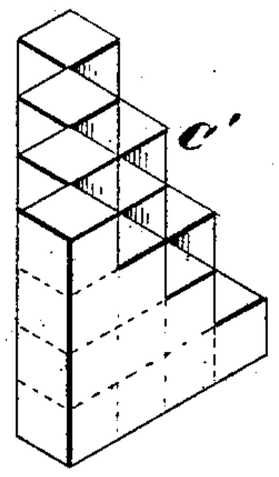


Fig. 5.

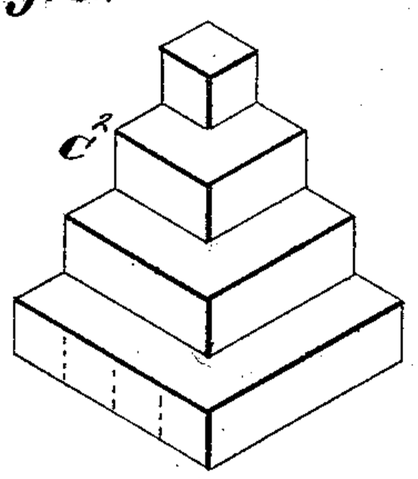


Fig. 4.

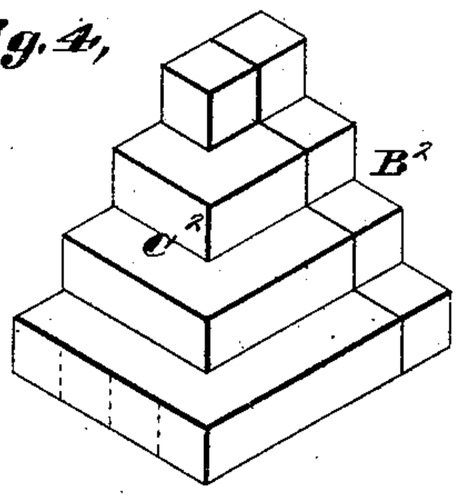
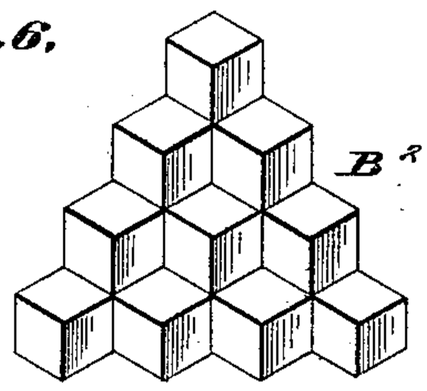


Fig. 6.



Attest:
Ger. L. Wheelock
Victor A. Lewis

Inventor:
Henry Keeler
By Knight Bros
Attys

UNITED STATES PATENT OFFICE.

HENRY KEELER, OF OSKALOOSA, KANSAS.

AGGREGATE CUBE.

SPECIFICATION forming part of Letters Patent No. 332,256, dated December 15, 1885.

Application filed November 8, 1884. Serial No. 147,431. (Model.)

To all whom it may concern:

Be it known that I, HENRY KEELER, of Oskaloosa, in the county of Jefferson, and the State of Kansas, have invented a certain new and useful Improvement in Aggregate Cubes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is an isometric view of the aggregate cube; and Figs. 2, 3, 4, 5, 6, 7, and 8 are detail isometric views of the same.

Referring to the drawings, A, as shown in Fig. 1, represents the aggregate cube, and is equal to one hundred and twenty-five smaller cubes, D. (See Fig. 7.) The aggregate cube is composed of integral cubes.

In the construction of the aggregate cube add to detail corner-section B^2 (see Fig. 6) the corresponding intermediate section, C^2, (see Fig. 5,) and which are jointly represented as seen in Fig. 4, to which add the five individual cubes D, D′, D^2, D^3, and D^4. (See Fig. 3.) These simple cubes make a series or row diagonally across and connect extreme points of the aggregate cube, as seen in Fig. 3. Then add intermediate sections, C and C′, as seen in Fig. 2, to which, lastly, are added corner-sections B and B′, making the complete aggregate cube A, as seen in Fig. 1. Each corner-section is equal to twenty cubes, and each intermediate section is equal to twenty cubes, making, with the five individual cubes, the block or whole number of one hundred and twenty-five cubes.

The sections that are shown in the isometric view A, Fig. 1, are lettered to define their relative positions in the aggregate cube when it is set up. The strata in each of the parts may be permanently attached together or secured together, so as to be easily detached from each other.

To complete the component parts of the aggrate cube, there are required (in addition to the said six compound parts) as many detached integral cubes as are necessary to make a single row across the aggregate cube.

The aggregate cube may be composed of any number of integral cubes desired, provided such number be the third power or cube of some other number.

It will be seen when the integral parts are brought together and made to take their places in the aggregate cube there is a line of vacant spaces extending diagonally between the extreme opposite corners of the aggregate cube. The small individual cubes D, D′, D^2, D^3, and D^4 (see Fig. 7) fill these spaces and complete the formation of the aggregate cube.

The aggregate cube forms a puzzle, it being exceedingly difficult for a novice to place the parts so as to form a cube.

I claim as my invention—

An aggregate cube equal to one hundred and twenty-five smaller cubes, the cubes being divided into three corner-sections, B^2 B′ B, equal to twenty cubes each, three intermediate sections, C^2 C′ C, equal to twenty cubes each, and five individual cubes, D D′ D^2 D^3 D^4, in a diagonal line, substantially as shown and described.

HENRY KEELER.

Witnesses:
G. W. LOWMAN,
ELI W. METZGER.