

(No Model.)

T. A. BELL.
SEGGAR.

No. 408,369.

Patented Aug. 6, 1889.

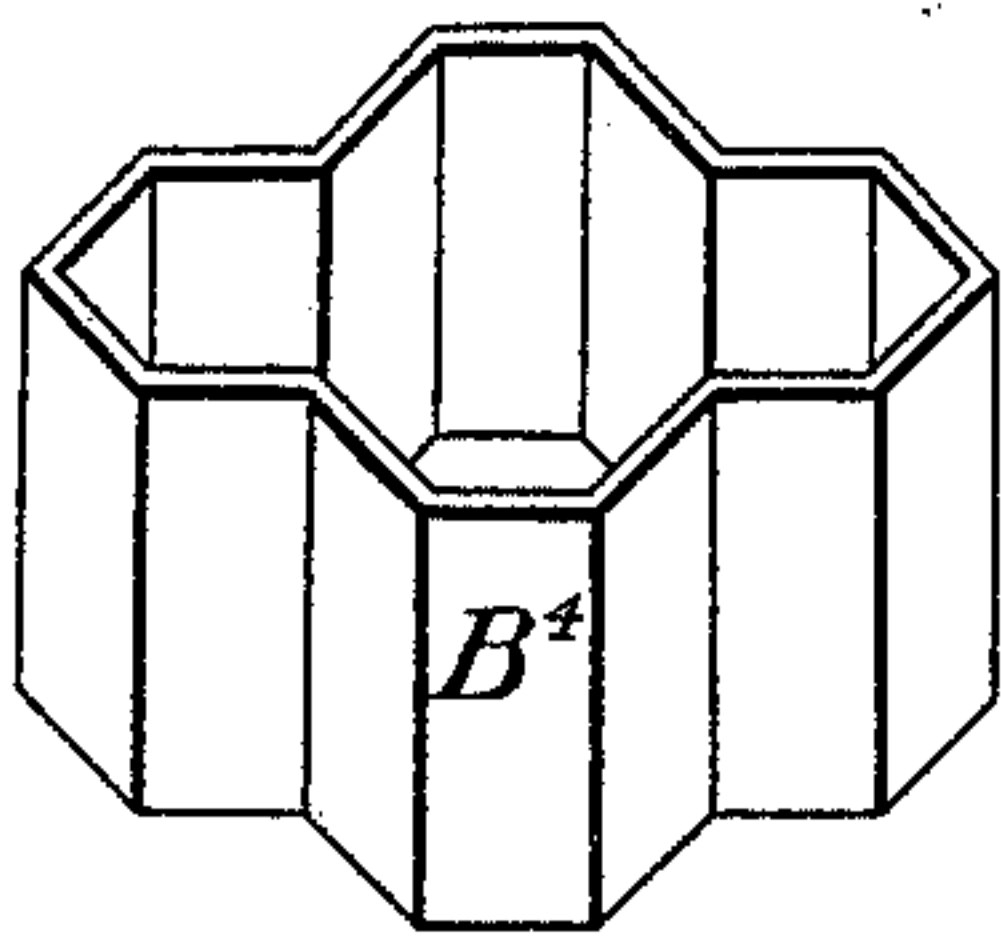


Fig. 1.

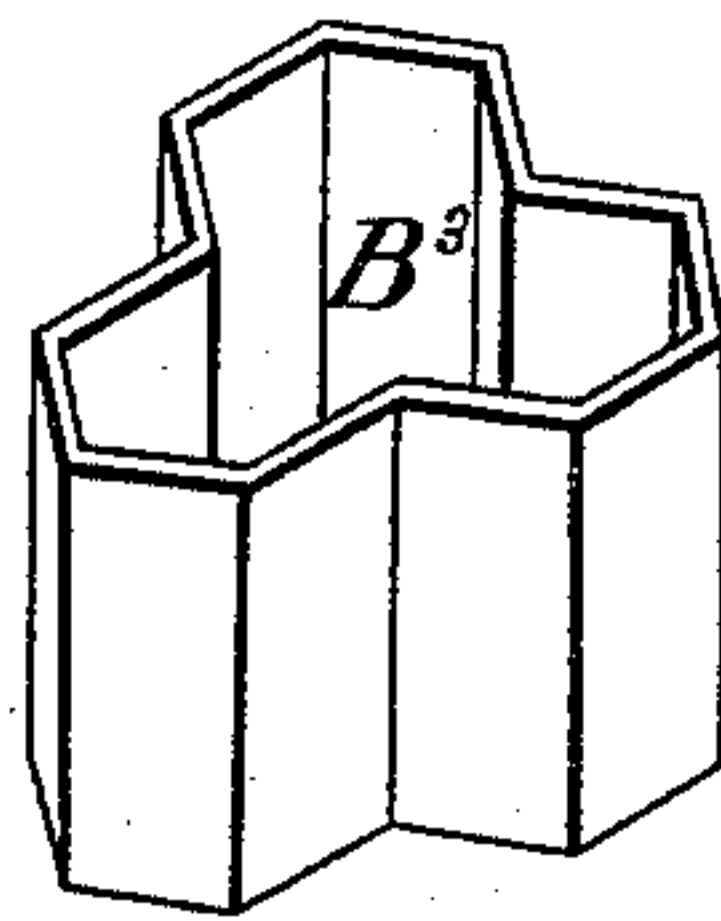


Fig. 2.

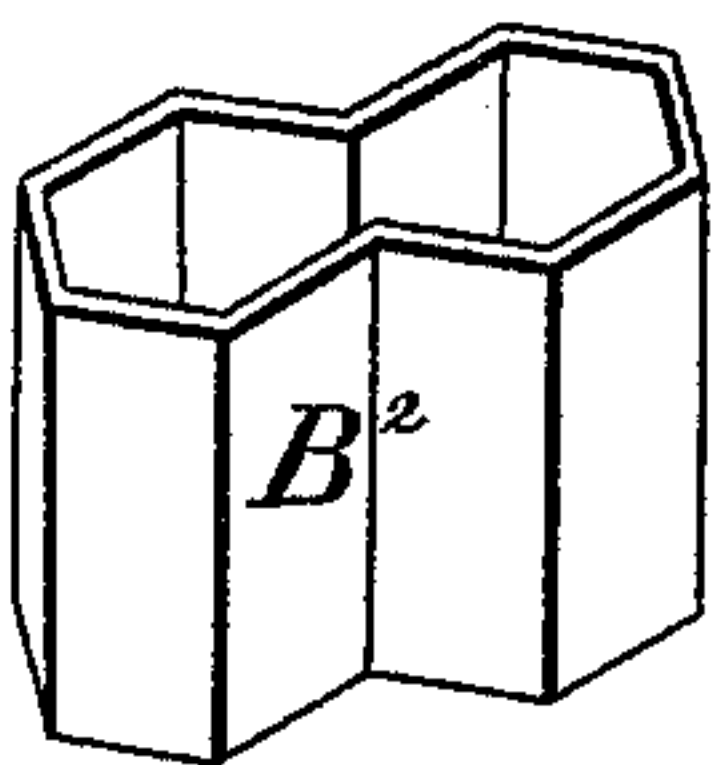


Fig. 3.

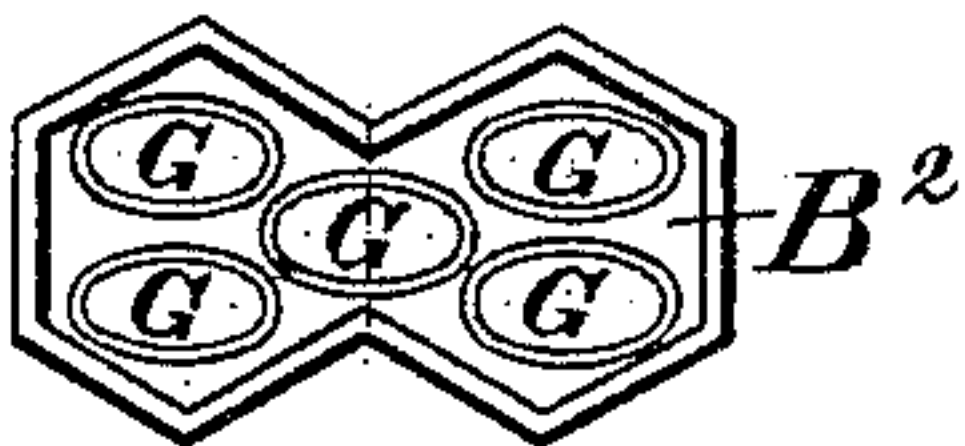


Fig. 7.

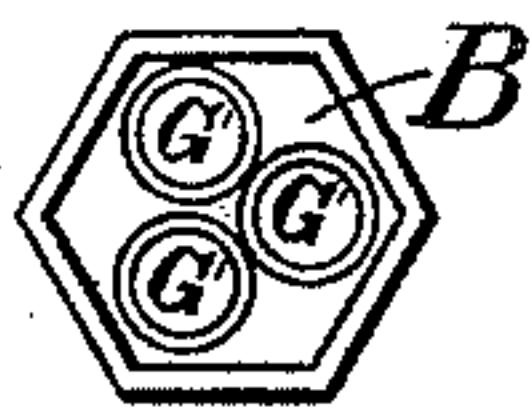


Fig. 8.

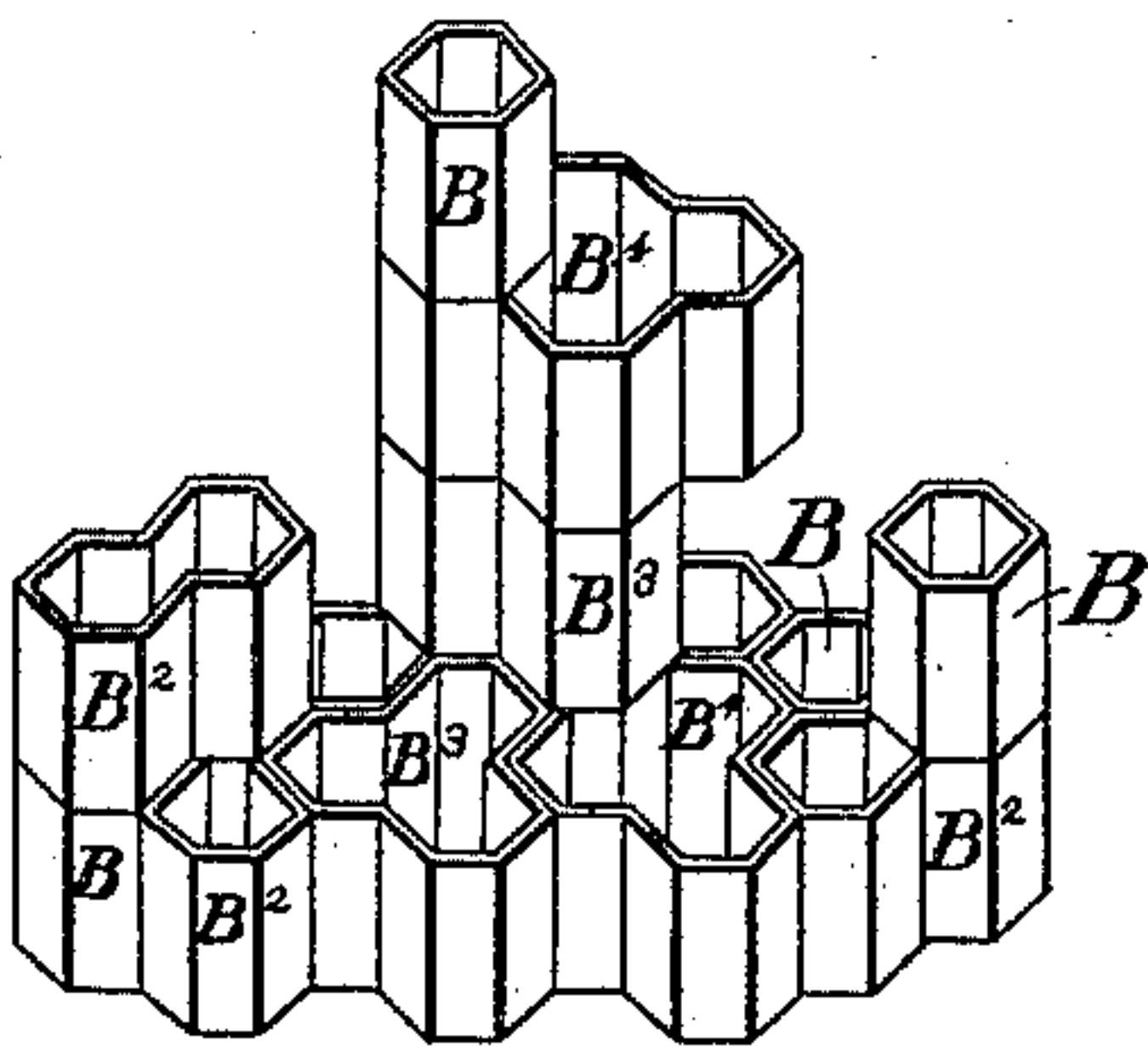


Fig. 10.

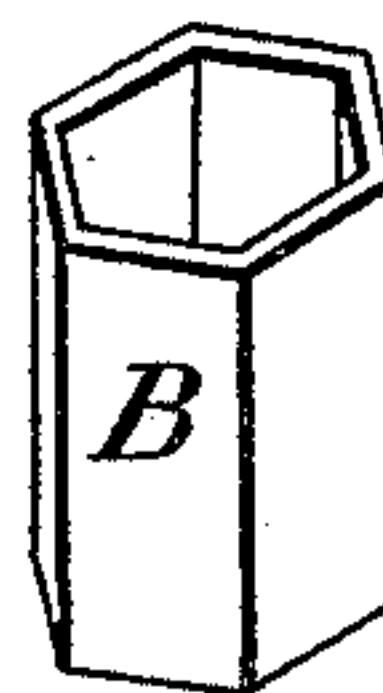


Fig. 4.

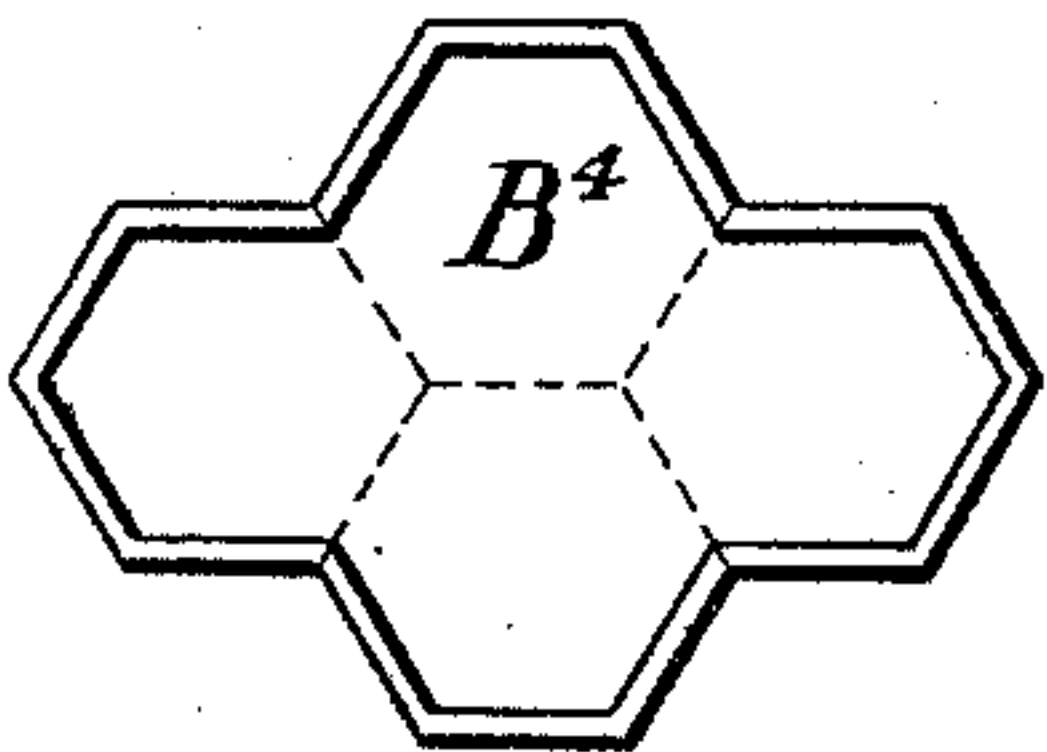


Fig. 5.

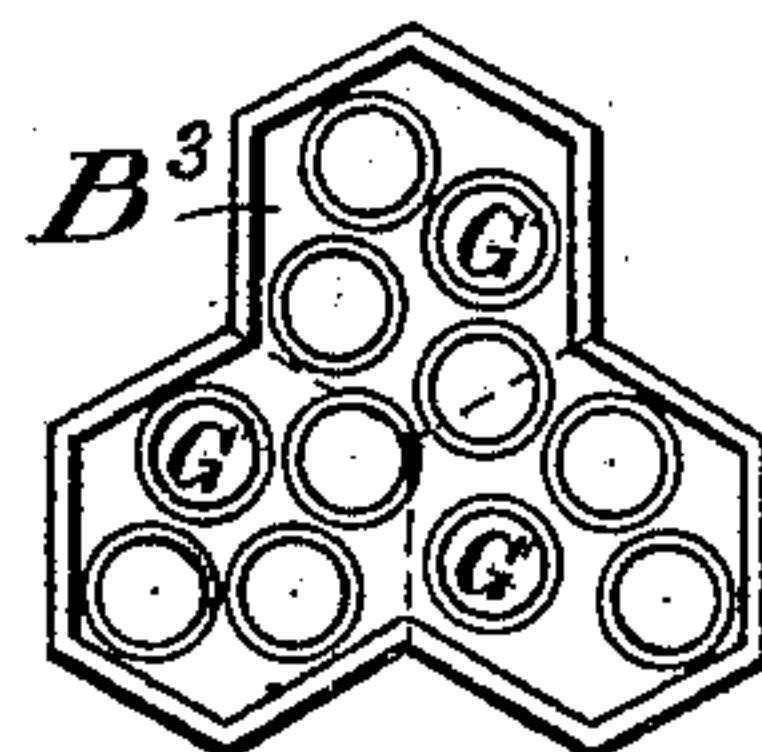


Fig. 6.

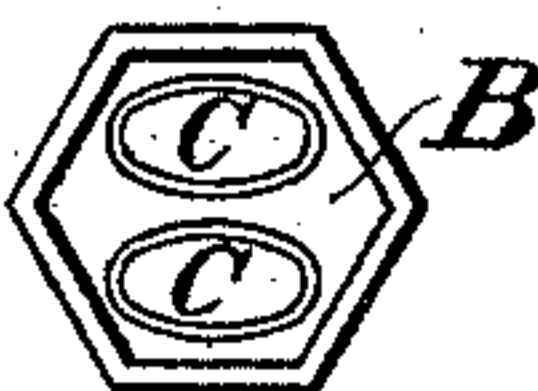


Fig. 9.

Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS A. BELL, OF TRENTON, NEW JERSEY.

SEGGAR.

SPECIFICATION forming part of Letters Patent No. 408,369, dated August 6, 1889.

Application filed January 12, 1889. Serial No. 295,955. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. BELL, a citizen of the United States, residing at Trenton, in the county of Mercer and State of New Jersey, have invented a certain new and Improved Seggar, of which the following is a full specification.

Of the accompanying drawings, Figures 1, 2, 3, and 4 show in perspective seggars of various sizes embodying the principle of my invention. Figs. 5, 6, 7, 8, and 9 are plan views of the various sizes, some of which are shown to contain articles to be baked. Fig. 10 shows in perspective how the seggars are compactly packed together in the kiln.

In the charging of a kiln for the baking of pottery and other articles it has always been a problem of great moment from an economical standpoint, as every one skilled in the art knows, to introduce within the space of the kiln the largest possible number of articles at a single charge. In effecting this end two things must be considered: first, to introduce the largest possible number of articles within the space of each seggar, or, in other words, to make the seggar of such a shape as to contain the articles most compactly, and, second, to pack the largest possible number of seggars within the space of the kiln itself.

My invention consists of constructing the seggars in such a form that both these ends are accomplished—viz, that a large number of articles may be easily contained within the seggar itself, and that the seggars may be most compactly and closely packed within the kiln.

The principle I adopt by which I accomplish the desired result consists of making the seggars of various sizes, and in the cross-section of which the hexagon, or some combination of the elementary sections of a hexagon, is the motive of the shape. I may make my improved seggar in the form of a single hollow hexagonal prism, as indicated by B in the accompanying drawings, or, as indicated by B², B³, and B⁴, of the same exterior shape as two or more combined hexagonal prisms of the same size, wherein the exterior sides are all of the same area, as clearly shown in Figs. 5, 6, 7, 8, and 9.

In a kiln of a given size all the seggars, whether one, two, three, or four hexagon seggars, are made up of hexagonal prisms of the

same size, thereby enabling them to be closely packed together, with practically no waste of room whatever, as shown in Fig. 10. If the seggars are of curved or circular section, obviously much space is wasted between them, no matter how closely they are packed together. At the same time in a single hexagonal seggar B practically as many articles of a given size may be packed as in a circular seggar of the same sectional area, whereas in a two, three, or four hexagon seggar the capacity of each is much more than proportionally increased. Fig. 8, for instance, shows a single hexagon seggar B, containing three circular articles G' of a given size, this being all the seggar will hold. Fig. 6 represents in plan a three-hexagon seggar B³, whose size and exterior shape are the same as three combined hexagons of the size shown in Fig. 8, thus occupying just three times the space within the kiln as does the seggar B, and yet the three-hexagon seggar B³ will easily hold eleven articles G' of the same size as the three within the single-hexagon seggar B. Again, taking the single-hexagon seggar B shown in Fig. 10, which can contain only two elliptical articles G of a given size, and referring also to Fig. 7, it will be seen that the two-hexagon seggar B², though occupying only twice as much space as B, will contain easily five articles G of the same size as the two in the seggar B. From these illustrations the advantages of employing the larger sizes of seggars of this form when a large number of articles of a given size are to be baked is obvious, and it will easily be seen, also, that however varied both in size and shape the articles may be, they can be much more economically packed in the kiln by employing seggars of the two, three, or four hexagon form than by using seggars of any other construction. Moreover, the three-hexagon seggar, for example, has twelve sides, while three single-hexagon seggars would have in all eighteen sides, so that a great saving of material, as well as space, is accomplished in the larger seggars.

In the ordinary charging of a kiln with circular seggars they are packed in bungs or piles forming cylindrical columns within the kiln, great care being required during the charging to pile them so that they will not topple

over, and at the same time to arrange the different-sized bungs most economically within the kiln. Thus the best of skilled labor has hitherto been necessary for this kind of work, 5 as in every charge much planning is necessary. I, however, preferably do not pack my improved hexagonal seggars in bungs, but place them side by side and one above another regardless of order.

10 As shown in Fig. 10, the one, two, three, and four hexagon seggars may be placed side by side in any order and completely fill up a given space. Moreover, a two-hexagon may be placed above a three or four hexagon seggar, 15 or a single hexagon above a two or three hexagon. In other words, they may be placed one above another without regard to order, and at the same time, if desired, completely fill a given volume with a firm and solid mass.

20 Whenever it is desired, spaces may be left by leaving out one or more seggars without materially affecting the firmness of the mass. Any ordinary laborer may thus be employed to charge a kiln with hexagonal seggars, and 25 at the same time, as has already been shown, he can do it much more economically than

could be done under the best circumstances with circular seggars.

Aside from the question of all the available space within the kiln being utilized with seggars of hexagonal form, one of the most desirable features of this form of seggar is its great strength over those ordinarily employed. The hexagon is the strongest shape that can be made for this use, and strength is of the utmost importance in seggars, that they may not give way under the enormous heat to which they are subjected. It is also true that, considering the capacity of the seggar, less material is necessary to construct the hexagonal form than any other. 30 35 40

I claim—

A seggar, the same consisting of a right prismoid the motive of whose exterior form is the hexagon, substantially as above described. 45

In witness whereof I have hereunto set my hand.

THOS. A. BELL.

Witnesses:

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