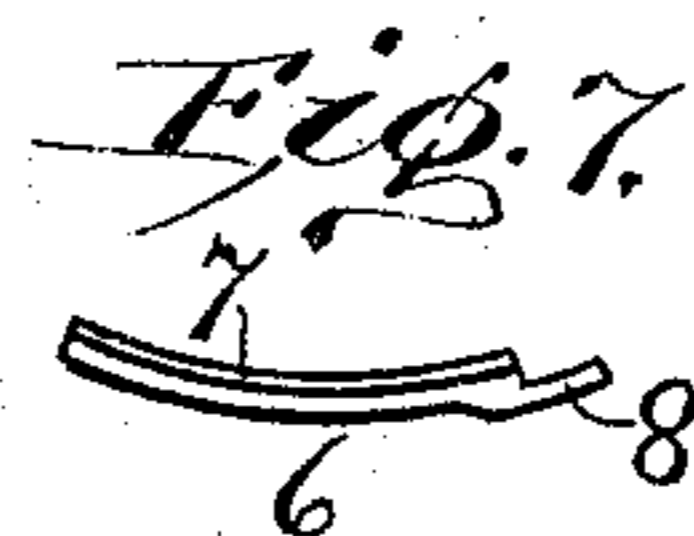
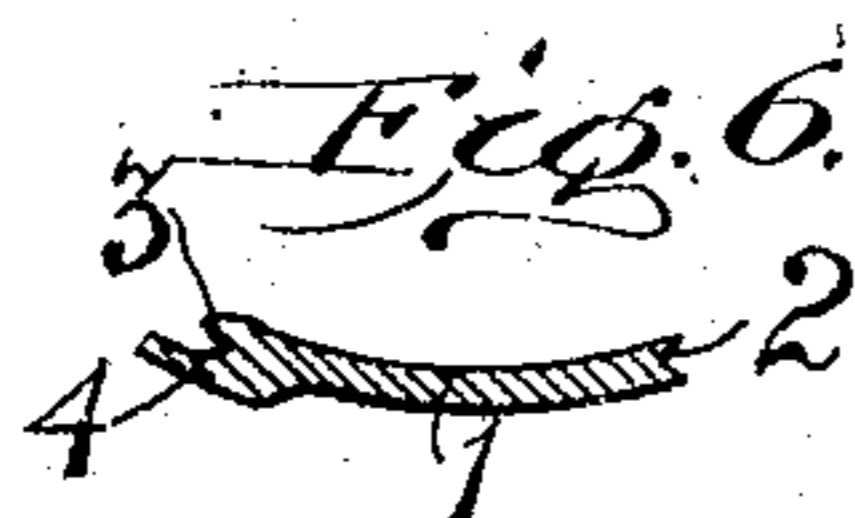
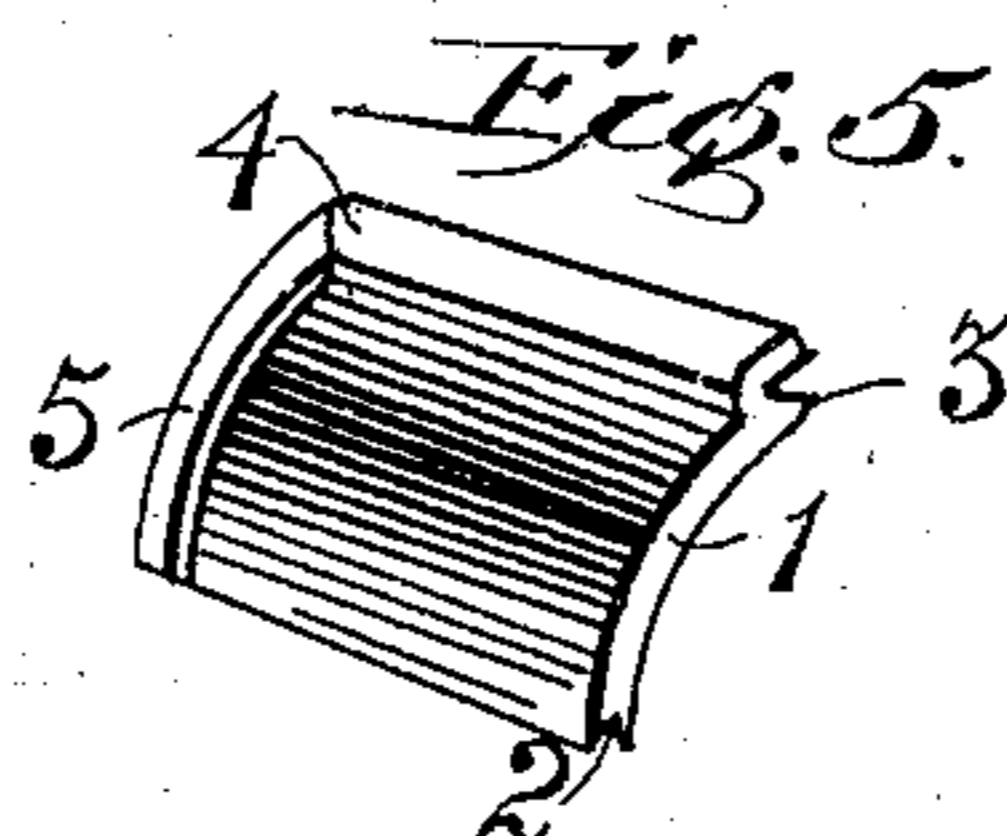
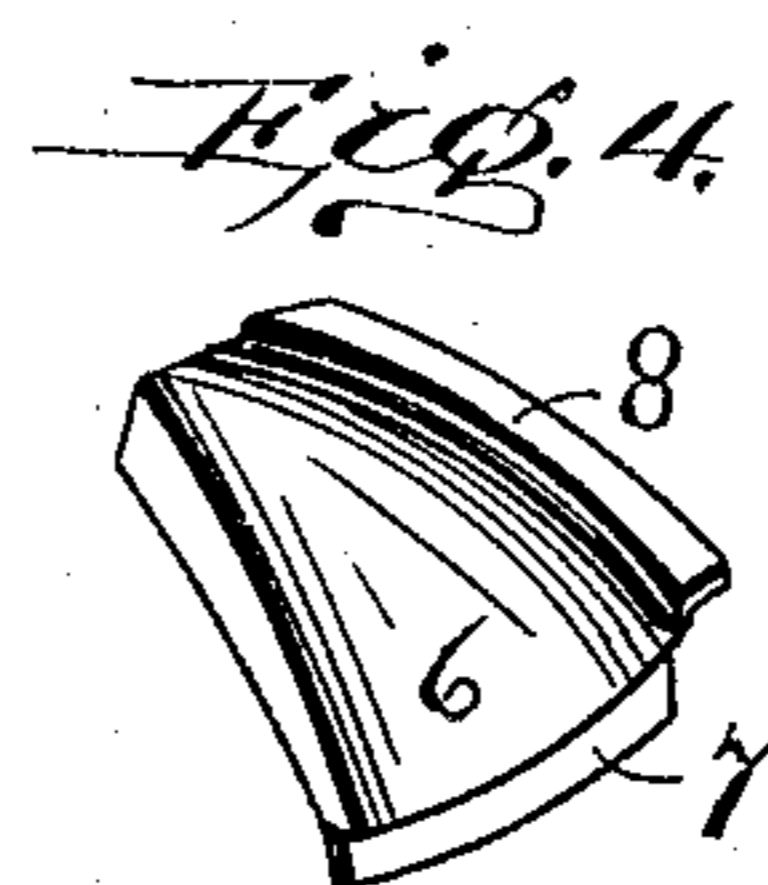
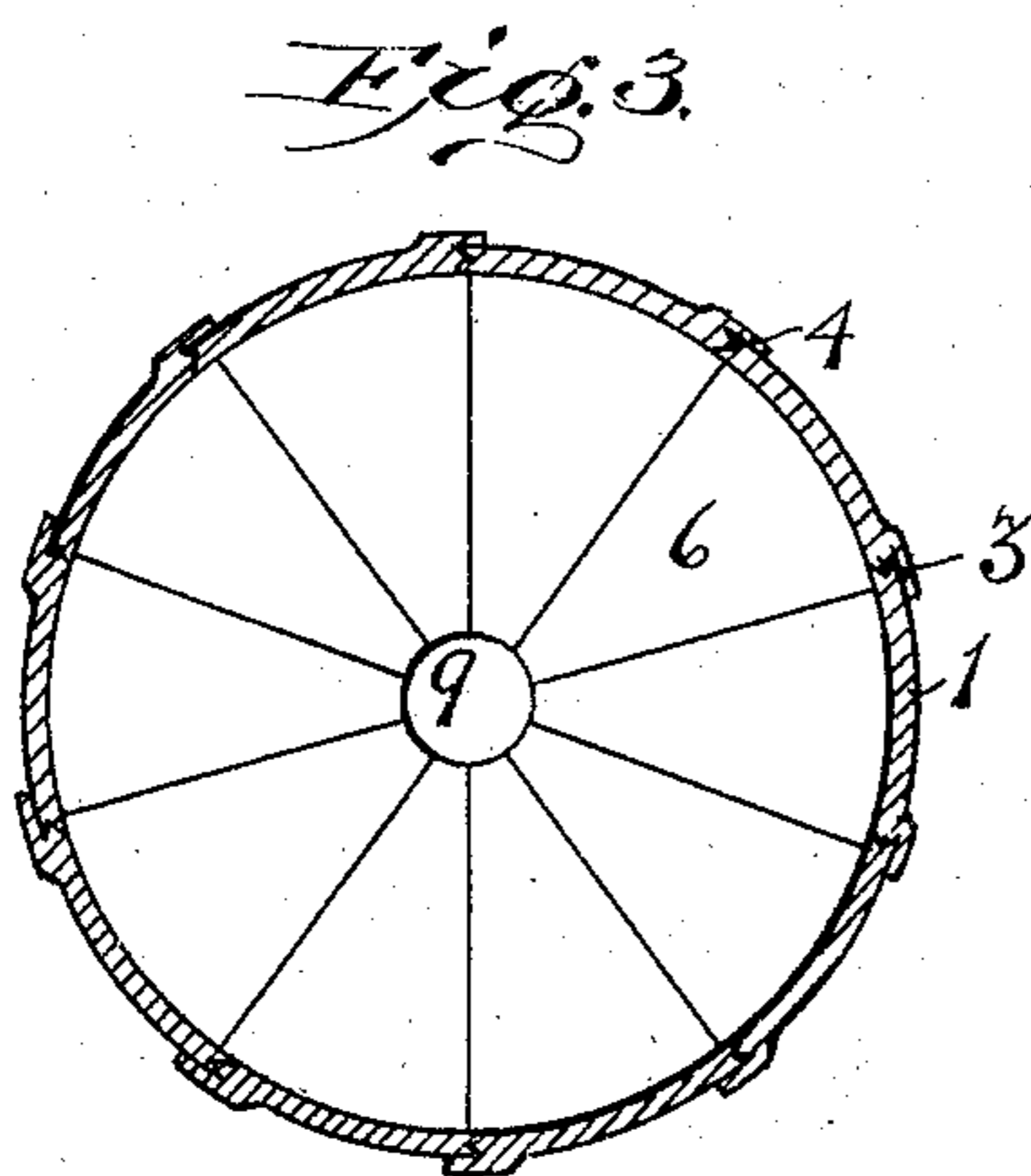
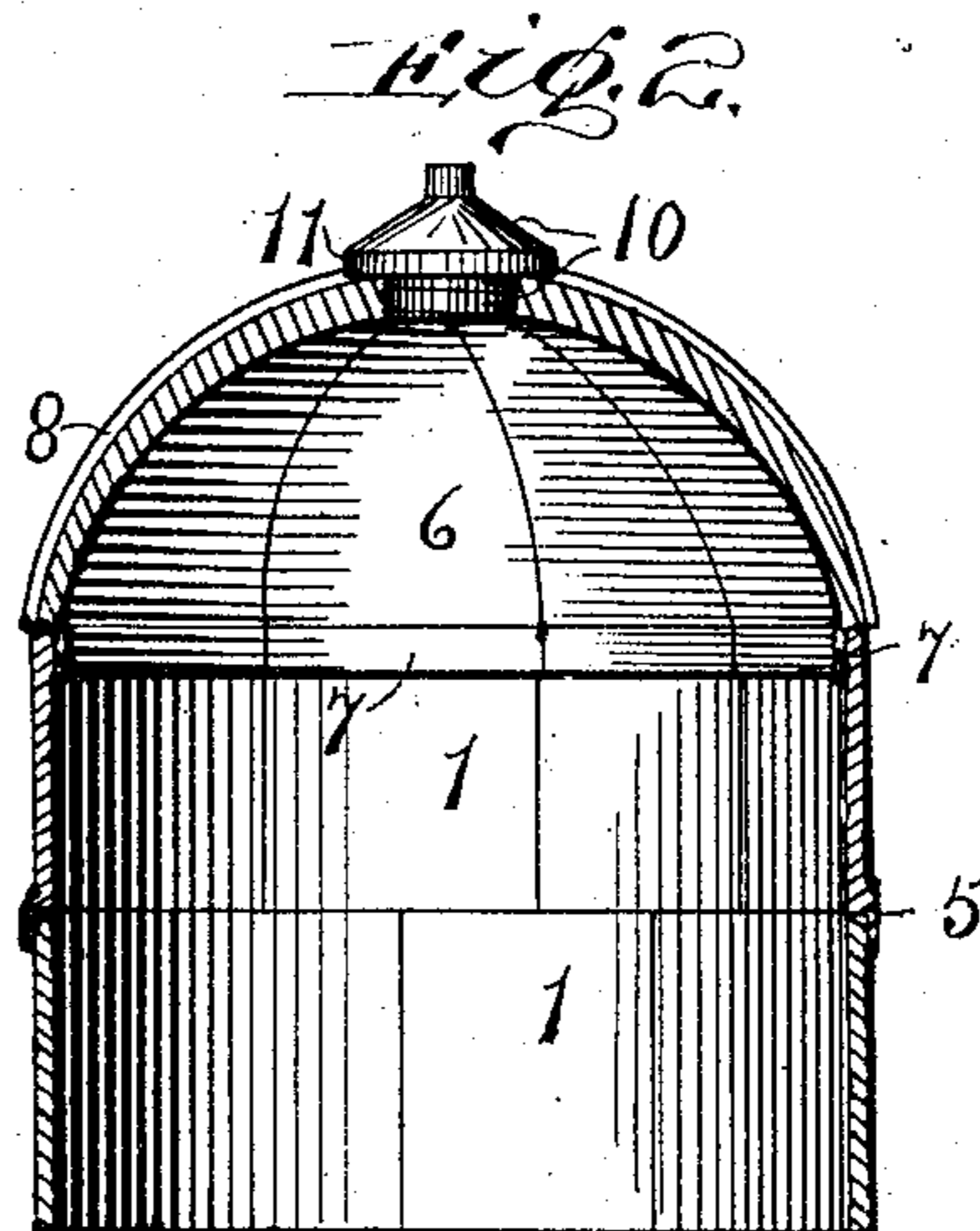
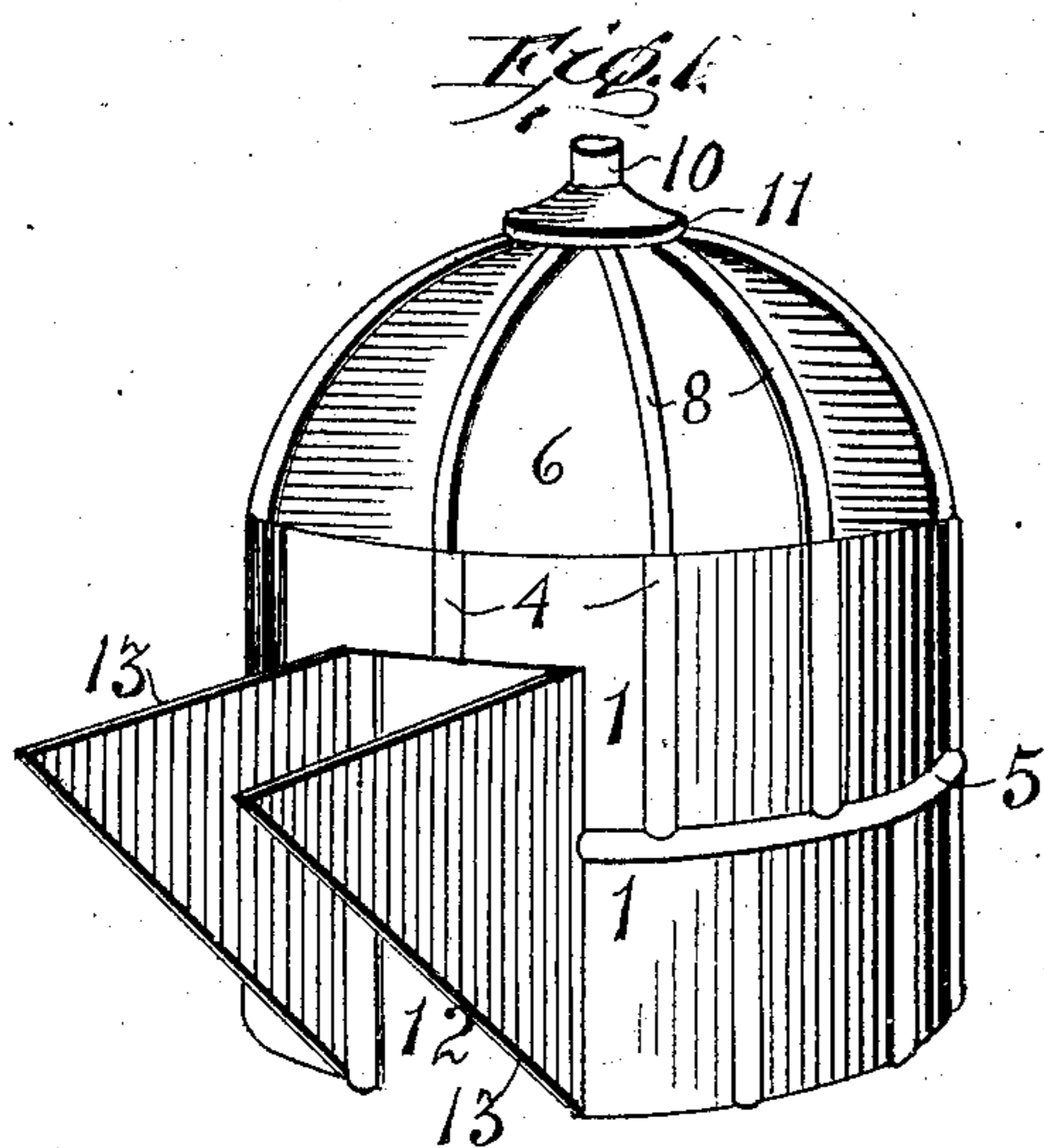


No. 791,149.

PATENTED MAY 30, 1905.

F. T. HELLYER.
BUILDING BLOCKS FOR CYLINDRICAL STRUCTURES.
APPLICATION FILED OCT. 24, 1904.



Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK T. HELLYER, OF ICONIUM, IOWA.

BUILDING-BLOCKS FOR CYLINDRICAL STRUCTURES.

SPECIFICATION forming part of Letters Patent No. 791,149, dated May 30, 1905.

Application filed October 24, 1904. Serial No. 229,694.

To all whom it may concern:

Be it known that I, FREDERICK T. HELLYER, a citizen of the United States, residing at Iconium, in the county of Appanoose and State of Iowa, have invented new and useful Improvements in Building-Blocks for Cylindrical Structures, of which the following is a specification.

My invention relates to improvements in building-blocks for cylindrical structures, such as caves, cisterns, wells, and other underground structures.

The object of the invention is to produce a generally improved block of this class which will be exceedingly simple in construction, cheap of manufacture, and efficient in use and which will be much better suited to its intended purposes than any other device of this class with which I am acquainted.

With this end in view the invention consists in the novel construction, arrangement, and combination of parts hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

Referring now to the drawings forming a part of this specification, Figure 1 is a perspective view of a structure constructed with my improved blocks. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a horizontal sectional view showing the concave surface of the top-forming blocks. Fig. 4 is a detail view of one of the top-forming blocks. Fig. 5 is a detail view of one of the side-forming blocks. Fig. 6 is a sectional view of one of the side-forming blocks. Fig. 7 is an end view of the lower or base end of one of the top-forming blocks.

In the drawings, 1 designates a series of blocks forming the cylindrical sides or walls of the structure and each consisting of a block of cement or other suitable and convenient material formed into proper shape and provided at one side with a recess or groove 2 and at the other with a laterally-extending flange 3, adapted to take into the recess or groove 2 of an adjacent block 1.

4 designates an overlapping flange formed at the side of the block 1 adjacent to and protruding over said laterally-extending flange 3

and adapted to take over the contiguous edge of an adjacent block and cover the crack or opening formed by the meeting edges of the blocks.

5 designates a downwardly-extending flange formed at the base of the blocks 1 and designed to take over the top edge of the block upon which it rests and cover the crack or opening formed by the meeting edges of said blocks.

6 designates a series of top-forming blocks of substantially the form shown, each provided at the inner base edge thereof with a downwardly-extending flange 7, adapted to take over the inner edge of the blocks 1, forming the cylindrical sides or walls and upon which the base of the blocks 6 rest. The purpose of this flange 7 is to lock the top-forming blocks 6 in proper position as against any lateral displacement at the base and to cover upon the inside the crack or opening formed by the meeting edges of the top and side forming blocks 6 and 1, respectively.

Without the flange 7 it is evident that there would be a liability to the slipping out of the base of the top-forming blocks 6.

8 designates a laterally-extending flange similar in form and function to that of flange 3, hereinbefore described.

9 designates an opening formed at the top of the structure by the top-forming blocks 6 and designed to receive a cylindrical block 10, provided with an annular flange 11, adapted to cover the meeting edges of the top-forming blocks 6 and the cylindrical block 9.

12 designates an opening formed by the blocks 1, forming a door to the structure, and to the sides of which opening 12 there may be attached to the blocks 1 in any suitable and convenient manner the side walls 13.

Having thus described my invention, without having attempted to set forth all the forms in which it may be made or all the modes of its use, I declare that what I claim, and desire to secure by Letters Patent, is—

1. A cylindrical structure, consisting of a series of blocks forming the sides thereof and each formed at the side with a recess or groove, a laterally-extending flange formed at the other side thereof and adapted to take into the

recess or groove of an adjacent block, an overlapping flange formed adjacent to and protruding over said laterally-extending flange, a downwardly-extending flange formed at the base of said blocks, a series of top-forming blocks mounted on said series of blocks forming the sides, a downwardly-extending flange formed at the base of said top-forming blocks and adapted to take over the inner edge of said first-mentioned blocks, an opening formed in the top of the structure of said top-forming blocks, and a cylindrical block, provided with an annular flange, mounted in said opening.

2. A cylindrical structure, consisting of a series of blocks forming the sides thereof, a series of top-forming blocks mounted thereon and provided at their base with a downwardly-extending flange adapted to take over the inner edge of said first-mentioned blocks, a laterally-extending flange formed at the sides thereof and adapted to take over the edge of the adjacent block, an opening formed in the top or center of said top-forming blocks, a

cylindrical block mounted in said opening, and an annular flange formed about said cylindrical block and adapted to take over the contiguous edges of said top-forming blocks. 25

3. A top-forming block for cylindrical structures, consisting of a block of substantially triangular shape and provided at its inner base edge with a downwardly-extending flange adapted to take over the inner edge of the block upon which it rests. 30

4. A top-forming block for cylindrical structures, consisting of a block, a laterally-extending flange formed in one side thereof, and a downwardly-extending flange formed at the inner base edge thereof. 35

In testimony whereof I have affixed my signature in presence of two subscribing witnesses. 40

FREDERICK T. HELLYER.

Witnesses:

J. L. HELLYER,

L. L. FUNKHOUSER.