

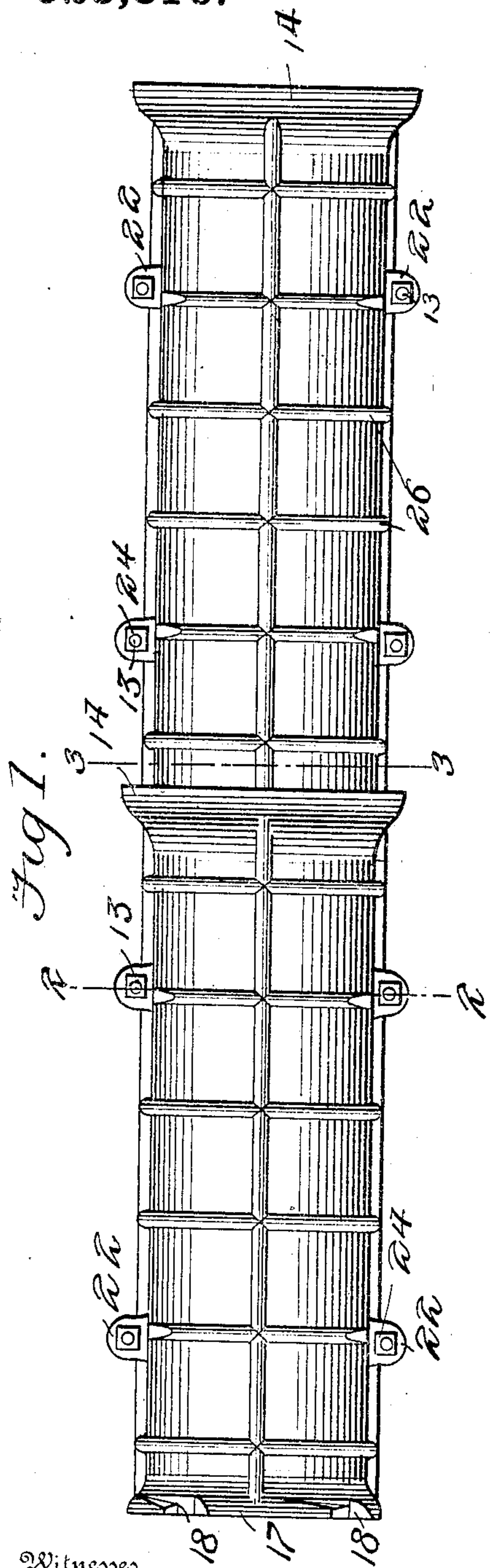
F. R. ELBERT.

TILE.

APPLICATION FILED FEB. 7, 1908.

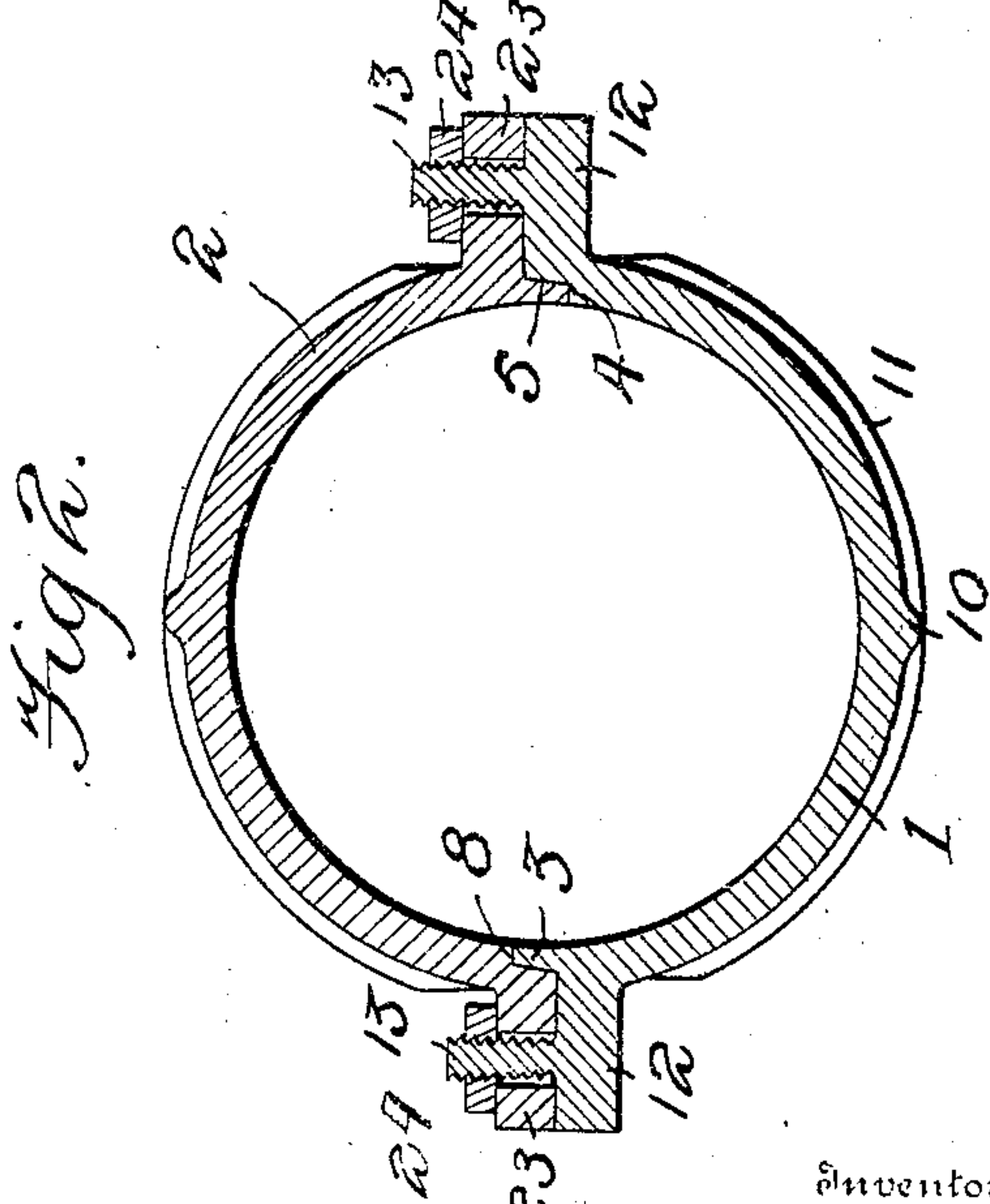
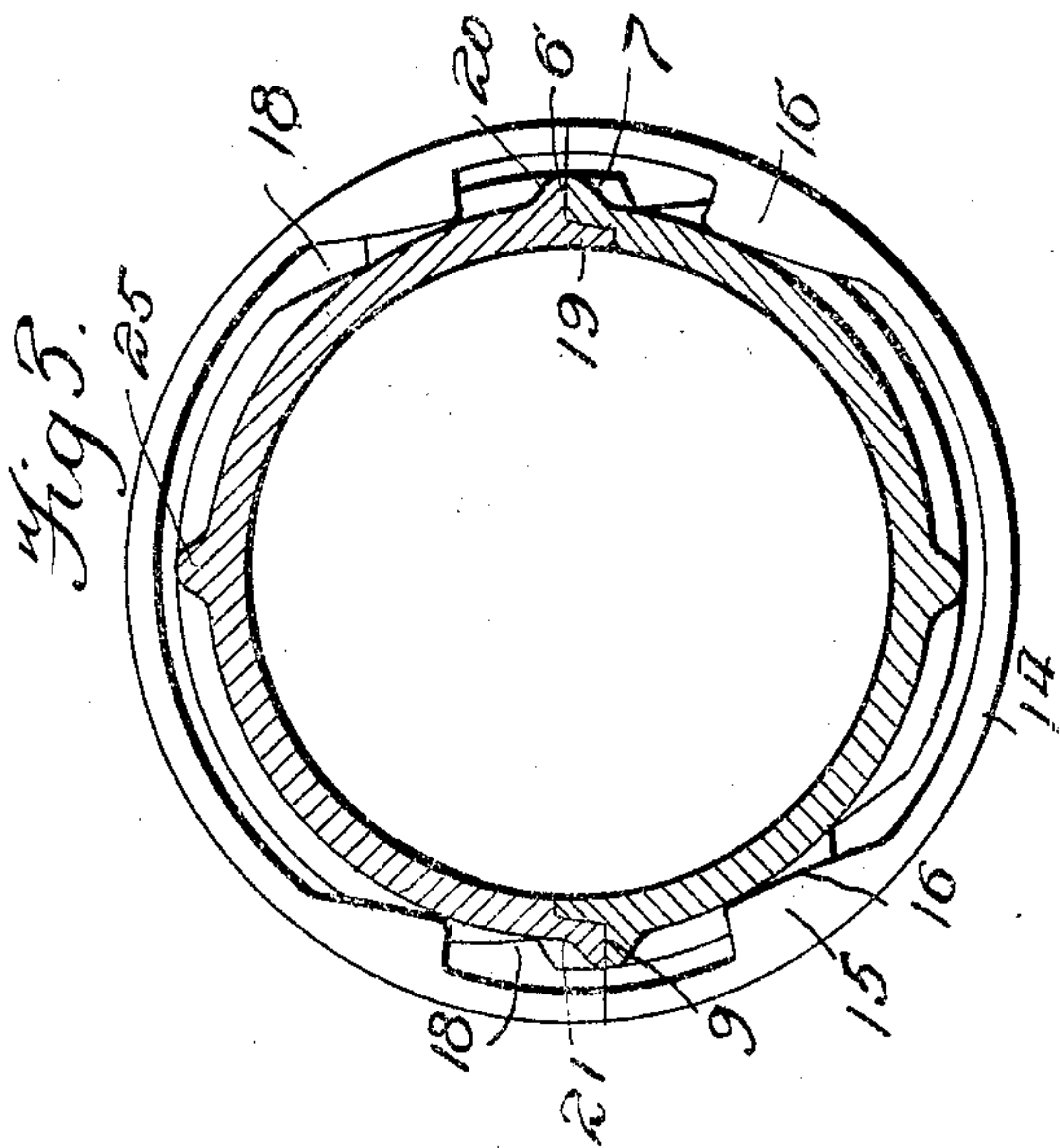
925,316.

Patented June 15, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

FRANK R. ELBERT, OF CRESTLINE, OHIO.

TILE.

No. 925,316.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed February 7, 1908. Serial No. 414,846.

To all whom it may concern:

Be it known that I, FRANK R. ELBERT, a citizen of the United States, residing at Crestline, in the county of Crawford and State of Ohio, have invented new and useful Improvements in Tiles, of which the following is a specification.

This invention relates to improvements in tiles, for drains, sewers, culverts, conduits etc., and the object of the invention is to provide a sectional tile which is so constructed that the parts may be easily secured together, and present a dirt excluding joint formed by the juncture of the two members, the parts being provided with strengthening webs so arranged as to not only add to their strength but to prevent dirt from being washed away from the tile.

It is another object of the invention to construct the tile so that a close and tight fitting joint is presented between the various sections of the tiles, whereby the sections may be easily and quickly secured within each other.

It is a still further object of the invention to provide a sectional tile of the character set forth, wherein the joints of the various sections of the tiles may be "broken" and effectively secured together without interfering with the joints of either the upper or lower section of the tiles.

With these and other objects in view the invention resides in the novel construction of tiles hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a top plan view of a portion of a pipe line constructed in accordance with my invention. Fig. 2 is a cross sectional view upon the line 2—2 of Fig. 1. Fig. 3 is a similar view upon the line 3—3 of Fig. 1.

In the accompanying drawings the numeral 1 designates the lower member of my improved tile and 2 the upper section thereof, the tile being divided longitudinally into halves. The line describing the inside surface in cross section when the halves are in position describes a perfect circle, and the longitudinal edge of one side of the section 1 extends above the center of the circle to provide a lip 3, while the opposite edge of the section is provided with a longitudinal recess below the center of the circle. The recess thus provided comprises a horizontal surface 4 having the vertical wall 5 arranged at an angle in relation to the horizontal plane of the bearing surface 4, and having its upper

face 6 extending outwardly and terminating in a semi-cylindrical bead 7. The lip 3 provided upon the opposite side of the tile is provided with a horizontal bearing surface 8 extending downwardly at an angle and terminating in a horizontal wall 9 extending longitudinally of the tile. Upon this tile 1 a centrally arranged integral strengthening bead 10 is provided, running longitudinally the length of the tile, and the tile is also provided with a series of strengthening beads 11 provided upon the tile in transverse relation to the longitudinal bead 10. Upon the beads 7 and 9, of the tile section, are provided a series of ears 12, each having an integrally formed, upwardly extending threaded pintle 13. One end of the section is provided with an outwardly flared bell-shaped mouth 14 having inwardly projecting lugs 15. The lugs 15 comprise an angularly arranged inwardly projecting portion 16, of a substantially V-shaped formation, and having its edges provided with a bevel or inclination. The opposite end of the section is provided with a flange 17, having V-shaped cut away portions 18, adapted to engage with the lugs 15 of the section to which it is attached.

The upper section 2 is of a formation coinciding with that of the lower section 1, having a longitudinal lip 19 adapted for engagement with the bearing surface 4 and vertical wall 5 and face 6 of the lower section 1, and terminating in the longitudinal semi-circular bead 20, coinciding with the bead 7 of the lower section. The opposite edge of the section 2 is provided with a recessed portion 21 adapted for engagement with the lip 3 of the lower section and having a downwardly beveled portion coinciding with the bevel 8 of the lower section and terminating in a horizontal face adapted to engage with the wall 9 of the lower section 1. The free extremity of the disengaging portion of the section 2 terminates in the horizontally arranged bead coinciding with the bead provided upon the upper outer portion of the lower section.

A plurality of ears 22, coinciding with the ears 12 of the lower section 1, and having a series of perforations 23 are provided upon the upper section 2. The perforations of the ears 22 are adapted for engagement with the pintles 13 of the ears of the lower section, and are adapted to retain the upper and lower sections in engagement with each other through the medium of retaining elements 24, provided upon the pintles 13 and adapted

to force the ears of the upper and lower sections into close engagement with each other.

5 A centrally arranged longitudinally extending strengthening rib 25 is provided upon the upper section 2, and a series of transverse ribs 26, coinciding with the ribs 11 of the lower section are also provided upon the upper section, whereby the sections are materially strengthened and which also prevents
10 dirt from being washed away from the pipe line.

From the above description it will be noted that I have provided a sectional tile, the sections of which may be easily and
15 quickly secured together, and easily and quickly applied to other lengths of tile provided by the sections. It will also be noted that the tile may be positioned either when the members are secured together, or the
20 lower section may be first positioned and the upper section easily and quickly secured to the lower section. It will be still further noted that the joints of a line of pipe constructed from my improved tile may be
25 easily "broken" when desired. In breaking the joints the lower sections of the line are first positioned within the ground and the upper sections also secured together and the ears of one section nearest one end of the section positioned upon the ears of the other sec-

tion farthest from the end of the section which they would normally engage. By this construction it will be noted that an effective "break joint" is secured by my device without changing the structure or disarranging any of the parts. 35

Having thus fully described the invention what is claimed as new is:

A tile comprising an upper and a lower member, each approximately semi-cylindrical in cross section, and having their longitudinal edges overlapping, one of the sections being provided with threaded offset members, the opposite section having extending ears adapted to engage the threaded
40 offsets, securing members for the ears and offsets, one of the ends of the tile being provided with a flared mouth having inturned beveled projections, the opposite end of the tile being provided with a beveled enlargement having inclined slots or cut away portions, substantially as and for the purpose
50 set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK R. ELBERT.

Witnesses:

EMMA STEIERT,
B. J. COLTEN.