

(No Model.)

H. BRADLEY, Jr.
CAP FOR SEWER AND OTHER PIPES.

No. 510,884.

Patented Dec. 19, 1893.

Fig. 1.

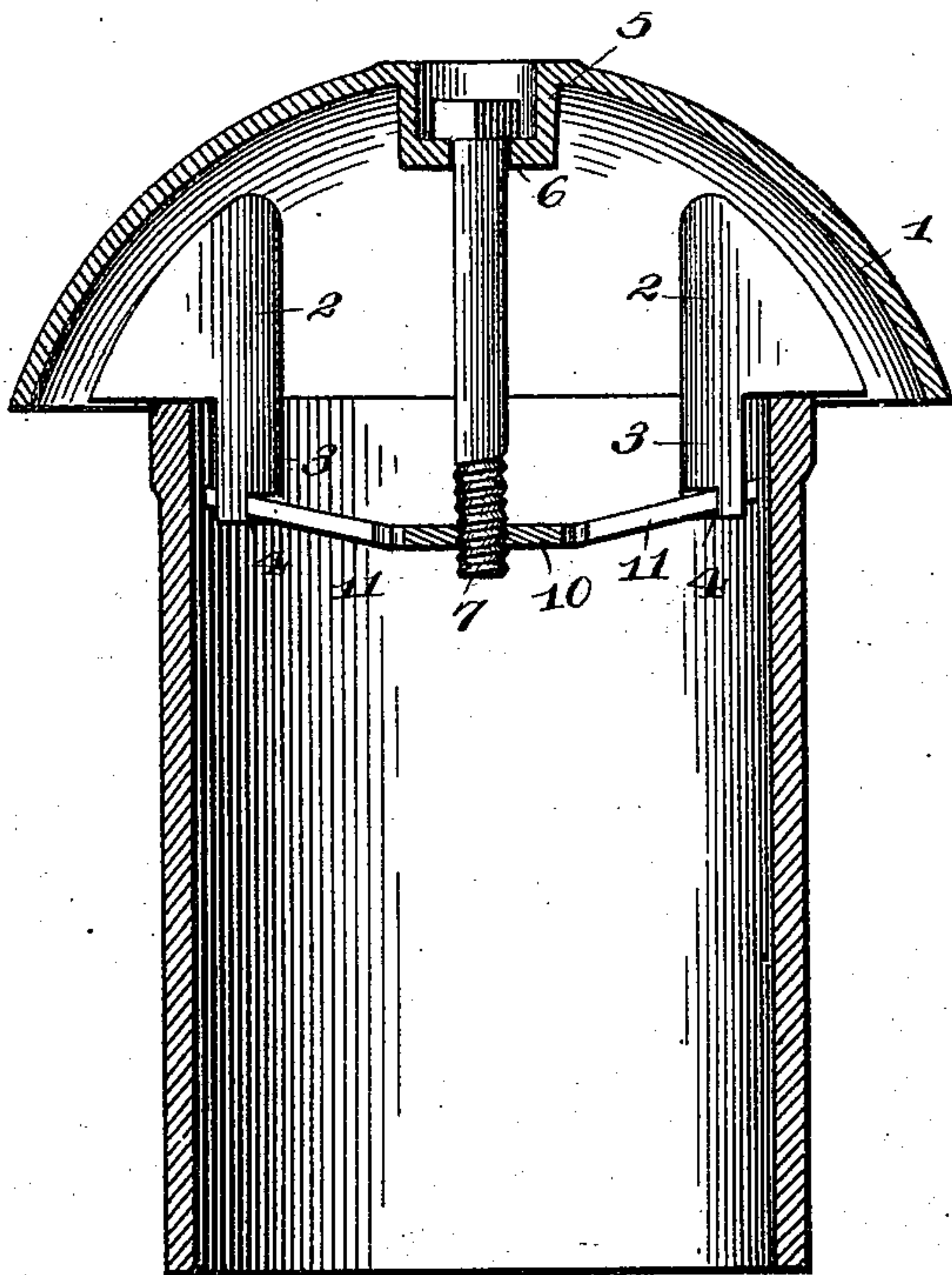


Fig. 2.

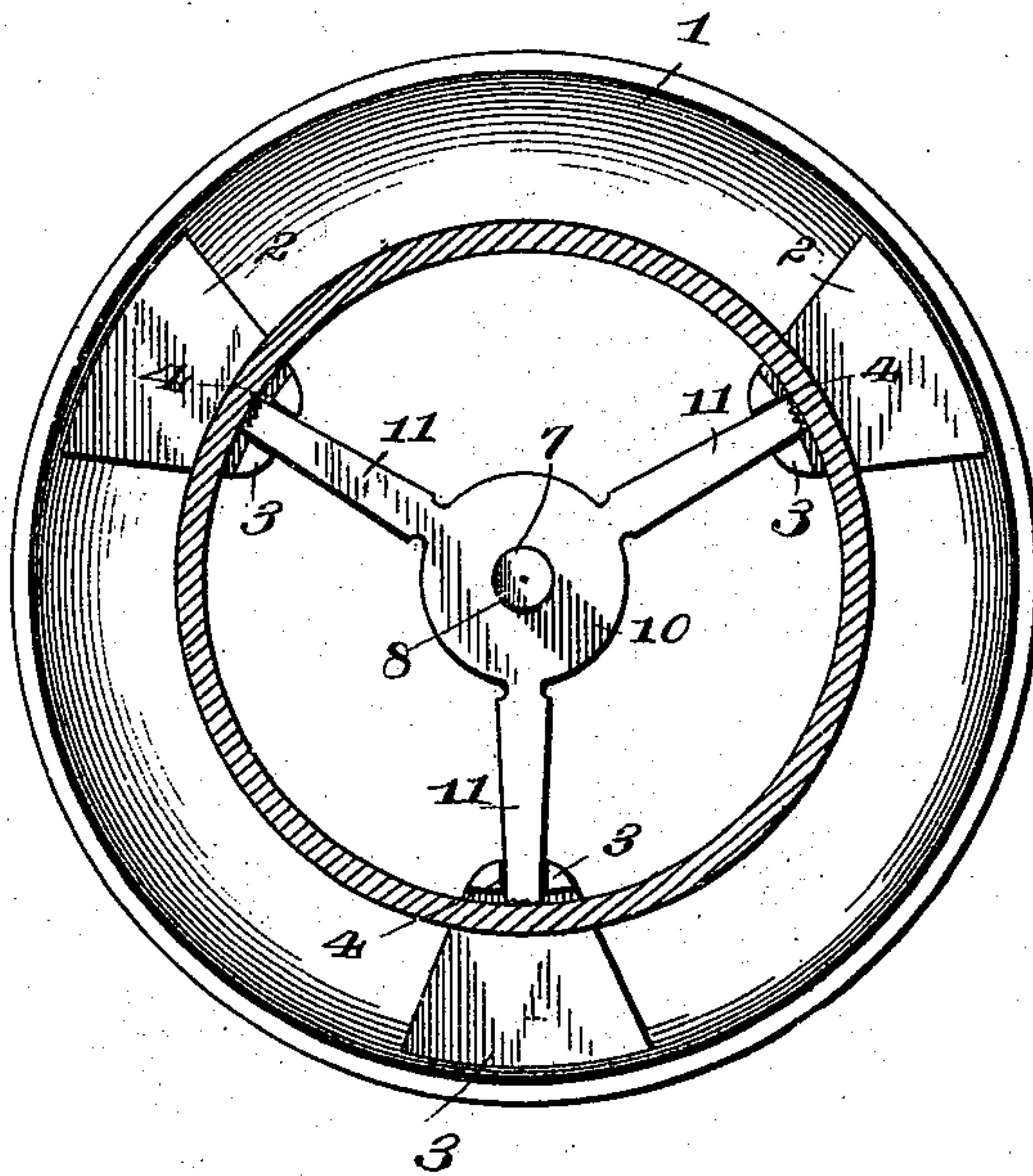


Fig. 3.

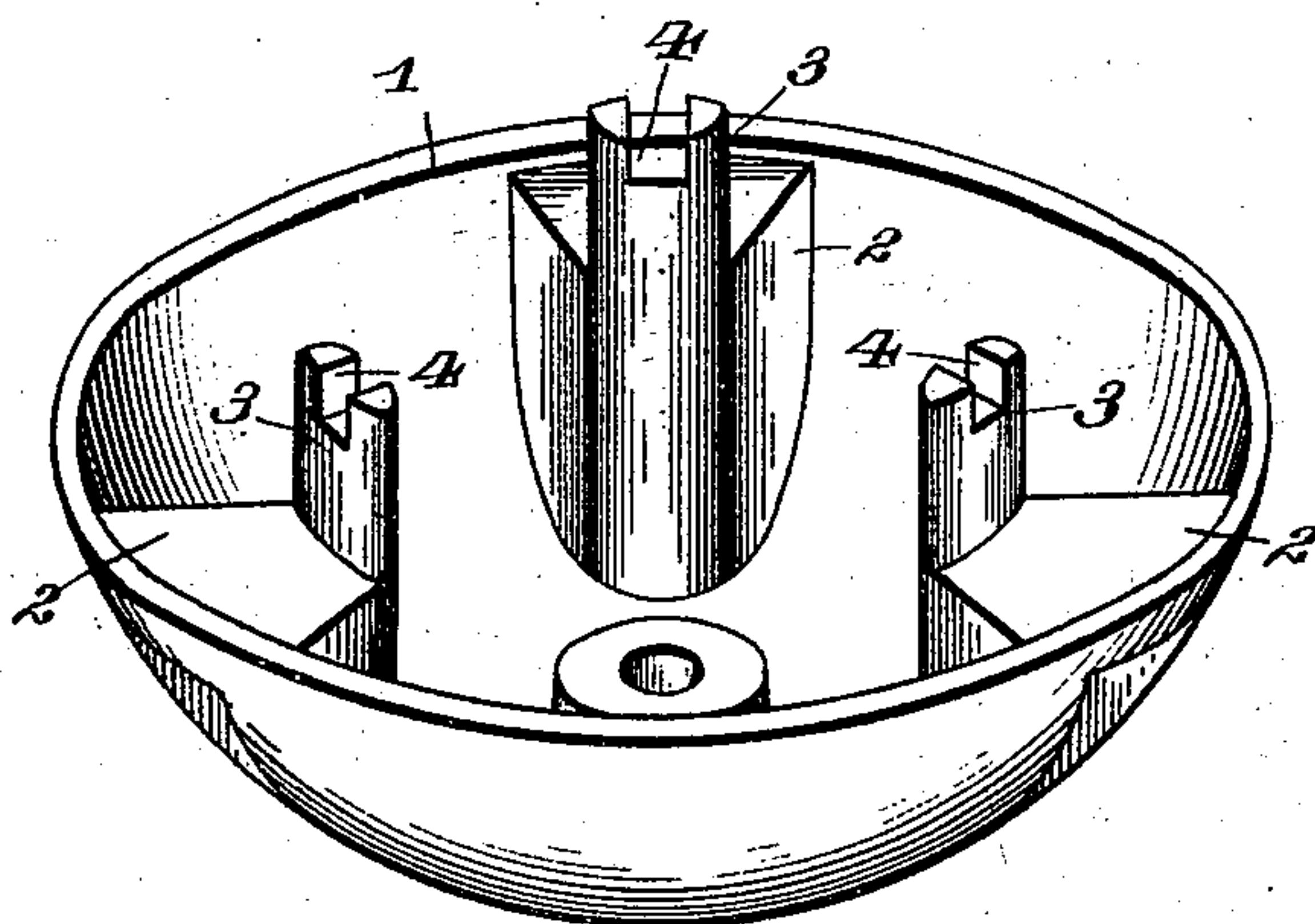
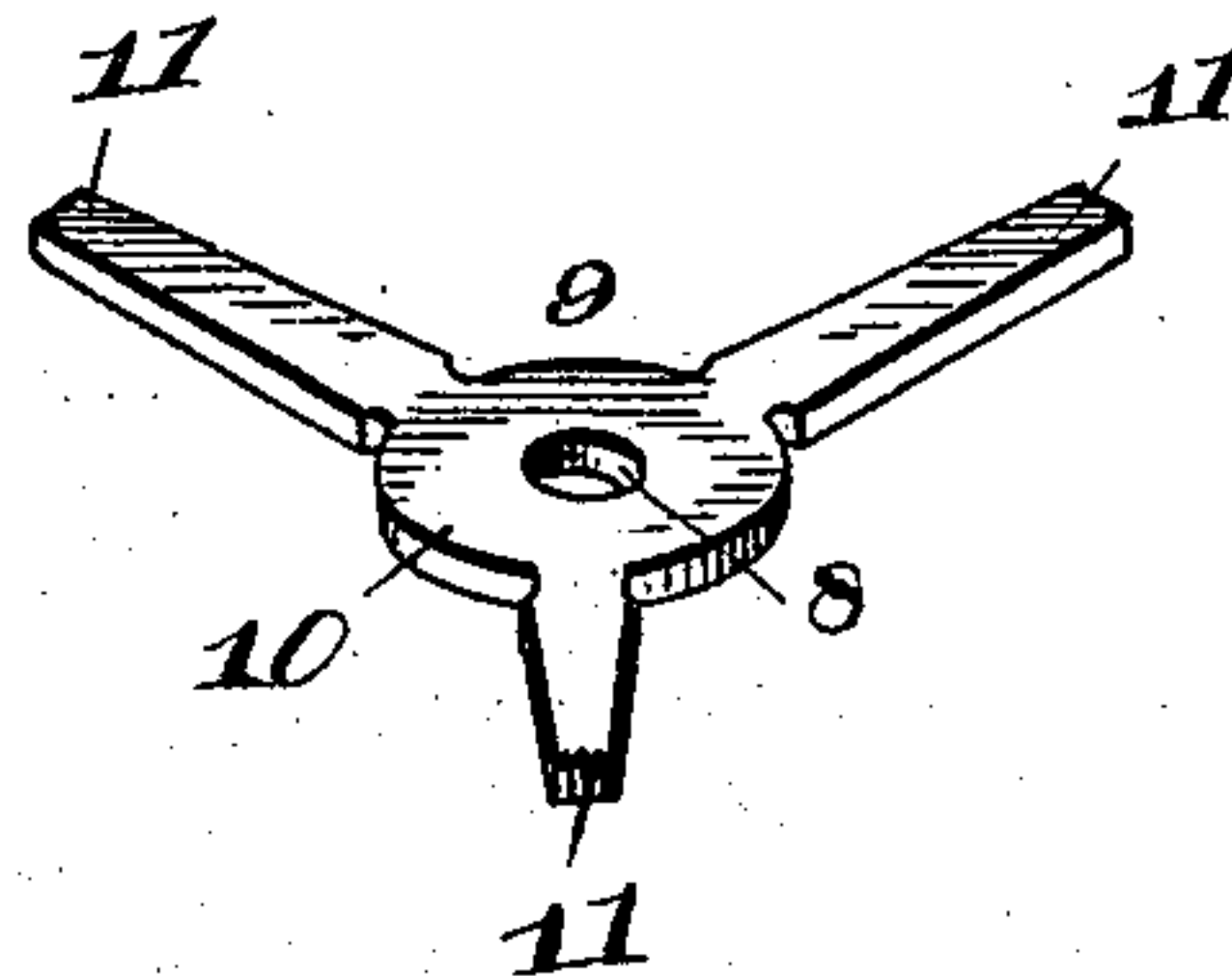


Fig. 4.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

HARRY BRADLEY, JR., OF BUFFALO, NEW YORK.

CAP FOR SEWER AND OTHER PIPES.

SPECIFICATION forming part of Letters Patent No. 510,884, dated December 19, 1893.

Application filed June 22, 1893. Serial No. 478,489. (No model.)

To all whom it may concern:

Be it known that I, HARRY BRADLEY, Jr., a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Cap for Sewer and other Pipes, of which the following is a specification.

My invention relates to improvements in cast-metal caps employed for covering sewer and other pipes, such for instance as stop-cock boxes or pipes employed in water and gas service systems, &c.

The objects of the invention are to produce a cap, the same being so constructed as to adapt it to fit snugly over the end of the pipe and to cover a variety of sizes; to produce means for locking the cap in position upon the end of the pipe, whereby any accidental displacement thereof is avoided; and, furthermore, to so arrange such means as to avoid successful tampering therewith by children or other unauthorized persons not provided with the requisite tool for such purpose.

Various other objects and advantages of the invention will appear in the following description and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a longitudinal sectional view of a portion of a pipe, the same being covered with a cap constructed in accordance with my invention. Fig. 2 is a transverse sectional view of the pipe looking upward. Fig. 3 is an inverted perspective of the cap. Fig. 4 is a similar view of the locking crab or spider.

Like numerals of reference indicate like parts in all the figures of the drawings.

The cap 1 is concavo-convex in cross-section, and as before stated, is constructed of cast-metal. At intervals the inner surface of the cap is provided with offsets 2 from which depend lugs 3 whose extremities are recessed as indicated at 4. Concentric with the lugs the cap is provided with a countersunk portion or recess 5, and the same has a central flanged opening 6 formed in its bottom. Passed down through this opening is a bolt 7, whose lower end is, in this instance, threaded and engages a threaded perforation 8 formed in a spider 9. This spider or crab 9 consists of a central disk 10 in which the perforation is formed and in radial angularly disposed

arms 11, said arms resting in the notches of the lugs heretofore mentioned. The upper end or head 12 of the bolt rests within the countersunk recess of the cap, and in order to operate said bolt it is, in this instance, necessary to employ a socket form of wrench, an ordinary wrench being incapable of operating the bolt. By this means it will be seen that children or others unauthorized cannot with the ordinary wrench tamper with the cap. I thus overcome one of the objections heretofore urged against caps of this kind, namely, that boys mischievously inclined were apt to secure a wrench, remove the bolt, and steal the cap. The bolt may be disposed in the opposite direction, that is inverted, and a nut substituted for the head, or, if desired, I may omit the countersunk recess, though I prefer to employ the same.

In any event the operation is the same and is as follows:—To apply the cap the same is mounted over the end of the pipe, and it will be seen that the under surfaces of the offsets are above the horizontal plane of the lower edge of the cap, so that said cap encircles and extends beyond the end of the pipe over which it is mounted. The lugs are located at the inner end of the offsets, and consequently considerable space intervenes between the rim of the cap and the outer sides of the lugs, so that regardless of the thickness of the pipe the cap may be readily applied and will fit the same. When once mounted in position a few turns of the bolt by the socket-wrench serves to draw the spider or crab upward, and the same is thereby spread, that is its locking arms are brought nearer into the horizontal plane of the central portion of the cap, so that the bolt performs the function of drawing the spider or crab upward, and after the same has engaged with the wall of the pipe, of drawing said cap downward upon the end of said pipe. The ends of the spider arms may be serrated or toothed, if so desired, and as I have indicated in the drawings.

From the foregoing description in connection with the accompanying drawings it will be seen that I have provided a cap which is adapted to fit any thickness of pipe, which as is often known, will vary, though the internal diameter of the pipe may be of the

standard size; furthermore, that the bolt that secures the pipe cannot be tampered with by unauthorized persons unless provided with a socket-wrench not usually found, and that
5 when in position the cap is secure in all respects.

Having described my invention, what I claim is—

1. The herein described cap for pipes, the
10 same being of concavo-convex form and provided upon its interior with depending notched lugs, a central hole formed in the cap, a bolt depending through said hole, and a spider having a central opening for the bolt
15 and provided with radial locking arms angularly disposed with relation to the central portion of the spider and resting in the notches of the lugs, substantially as specified.

2. The herein described cap for pipes, the
20 same being of concavo-convex form and having its interior provided at intervals above its lower edge with horizontal offsets, at whose inner sides depending notched lugs are formed, and the center of the cap provided
25 with an opening, a spider or crab consisting of a central perforated portion and radial an-

gularly disposed locking arms seated in the notches of the standards, and a bolt depending through the opening in the cap and engaging the opening in the spider or crab, substantially as specified. 30

3. The herein described improved cap for pipes, the same being of concavo-convex form and adapted to fit over the end of a pipe, the said cap being provided upon its interior with
35 depending notched lugs extending below the bottom of the cap and at its center with a countersunk recess having a central opening, a bolt depending through the opening and terminating above the same in a head, and a
40 crab or spider having a central threaded opening for engaging the lower end of the bolt, and radially inclined arms located in the notches of the lugs, substantially as specified.

In testimony that I claim the foregoing as
45 my own I have hereto affixed my signature in the presence of two witnesses.

HARRY BRADLEY, JR.

Witnesses:

JOHN A. KENNEDY,
C. D. FOWLER.