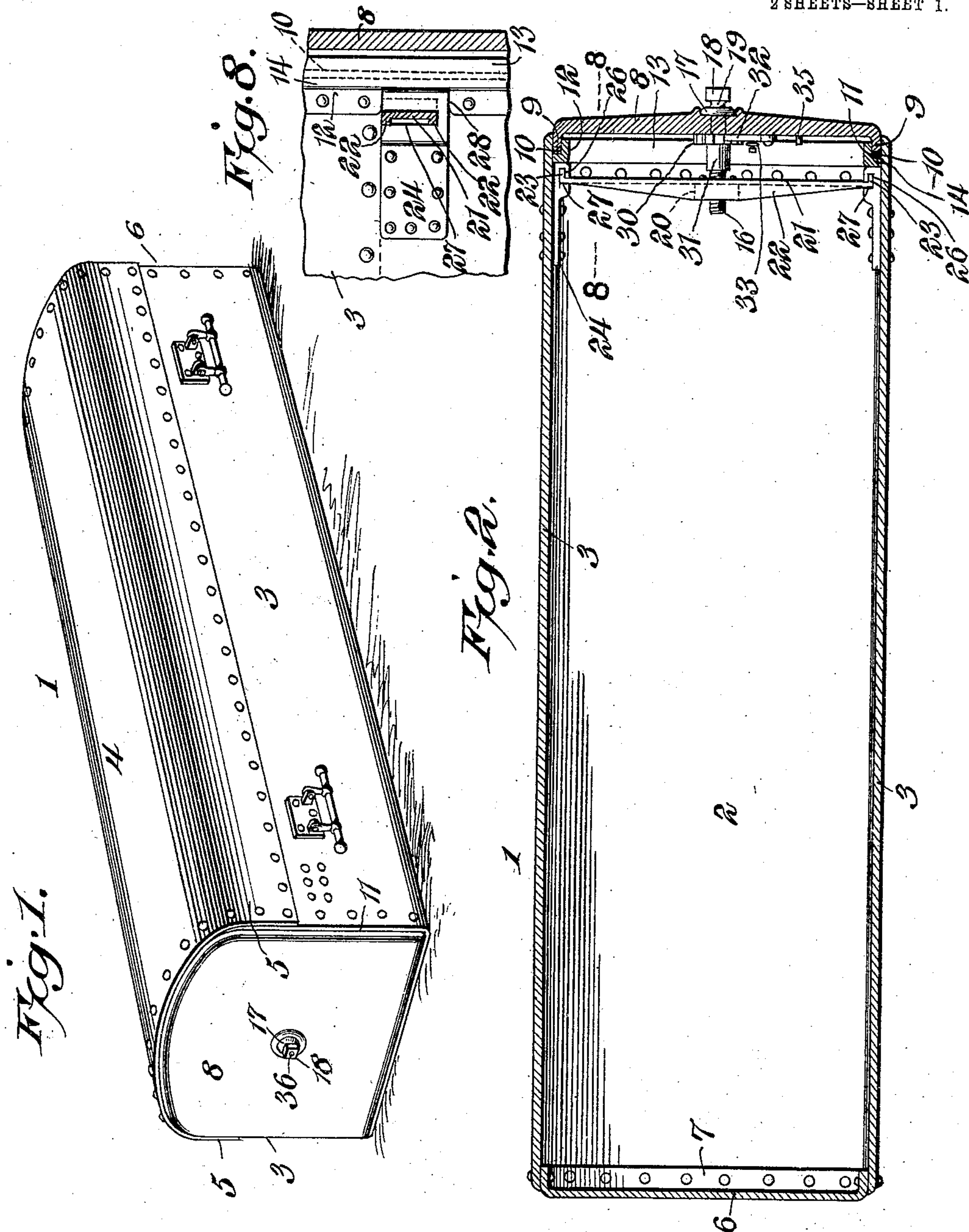


S. E. BURKE.
BURIAL VAULT.
APPLICATION FILED MAR. 25, 1909.

928,847.

Patented July 20, 1909.

2 SHEETS—SHEET 1.



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Witnesses
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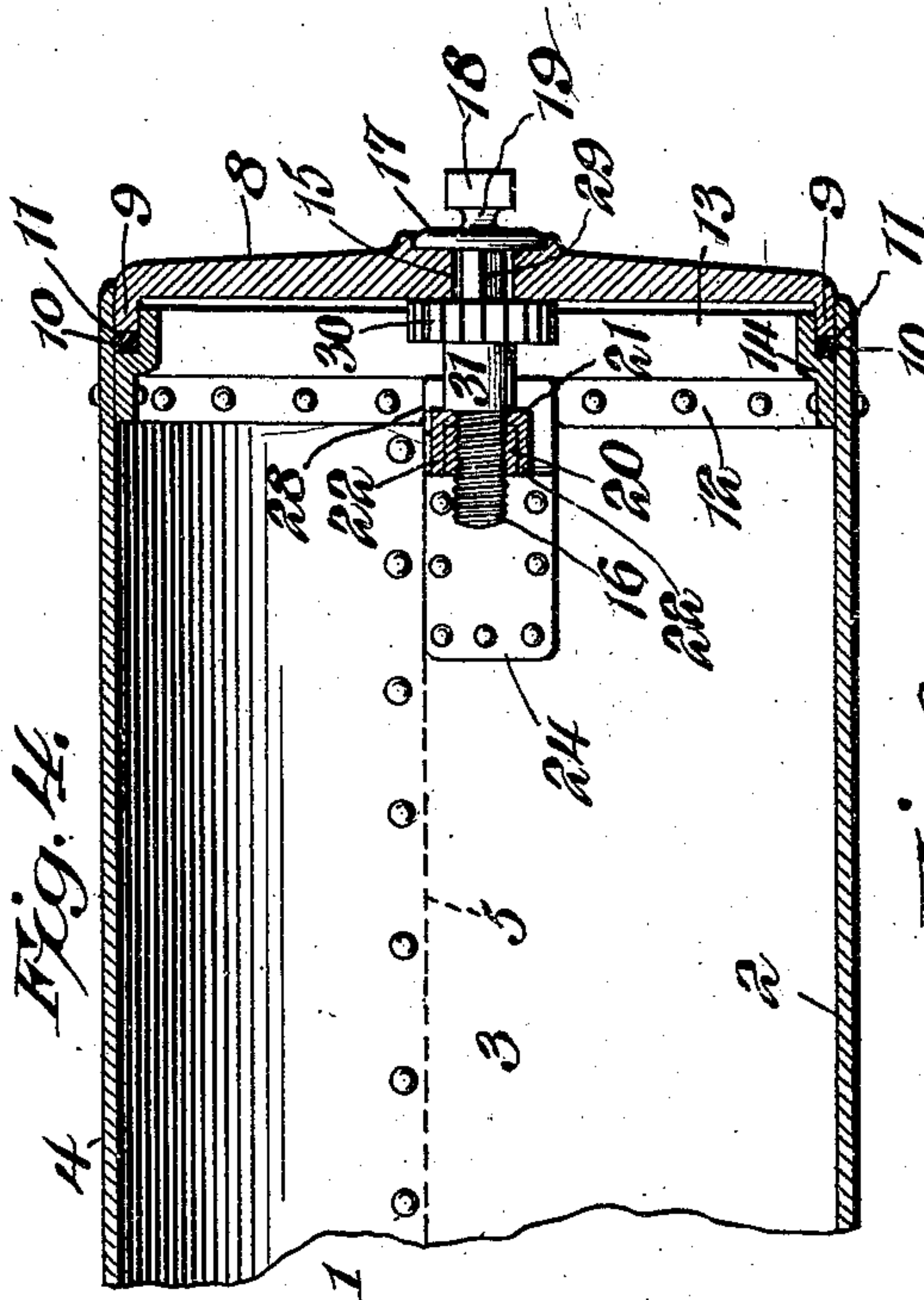
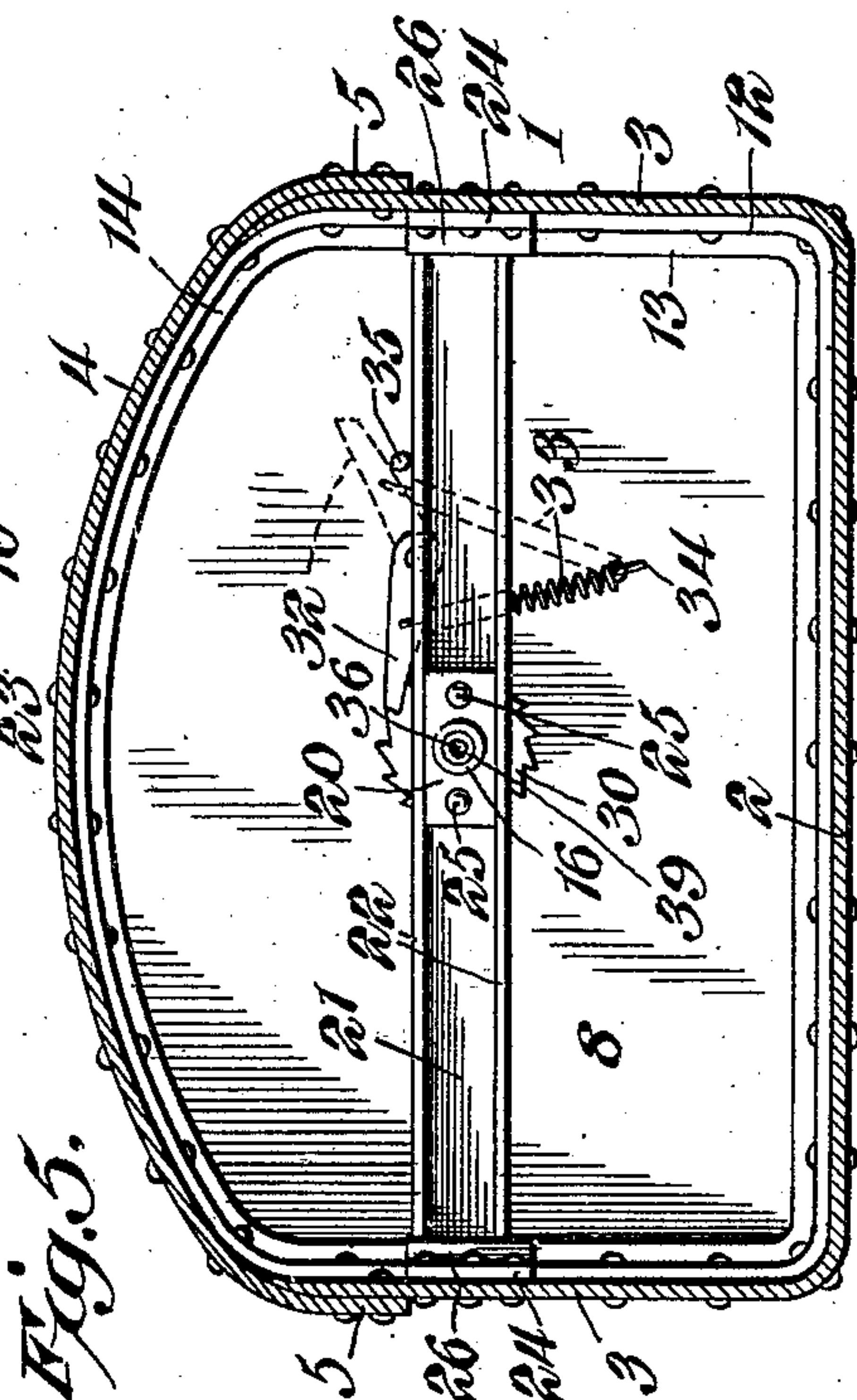
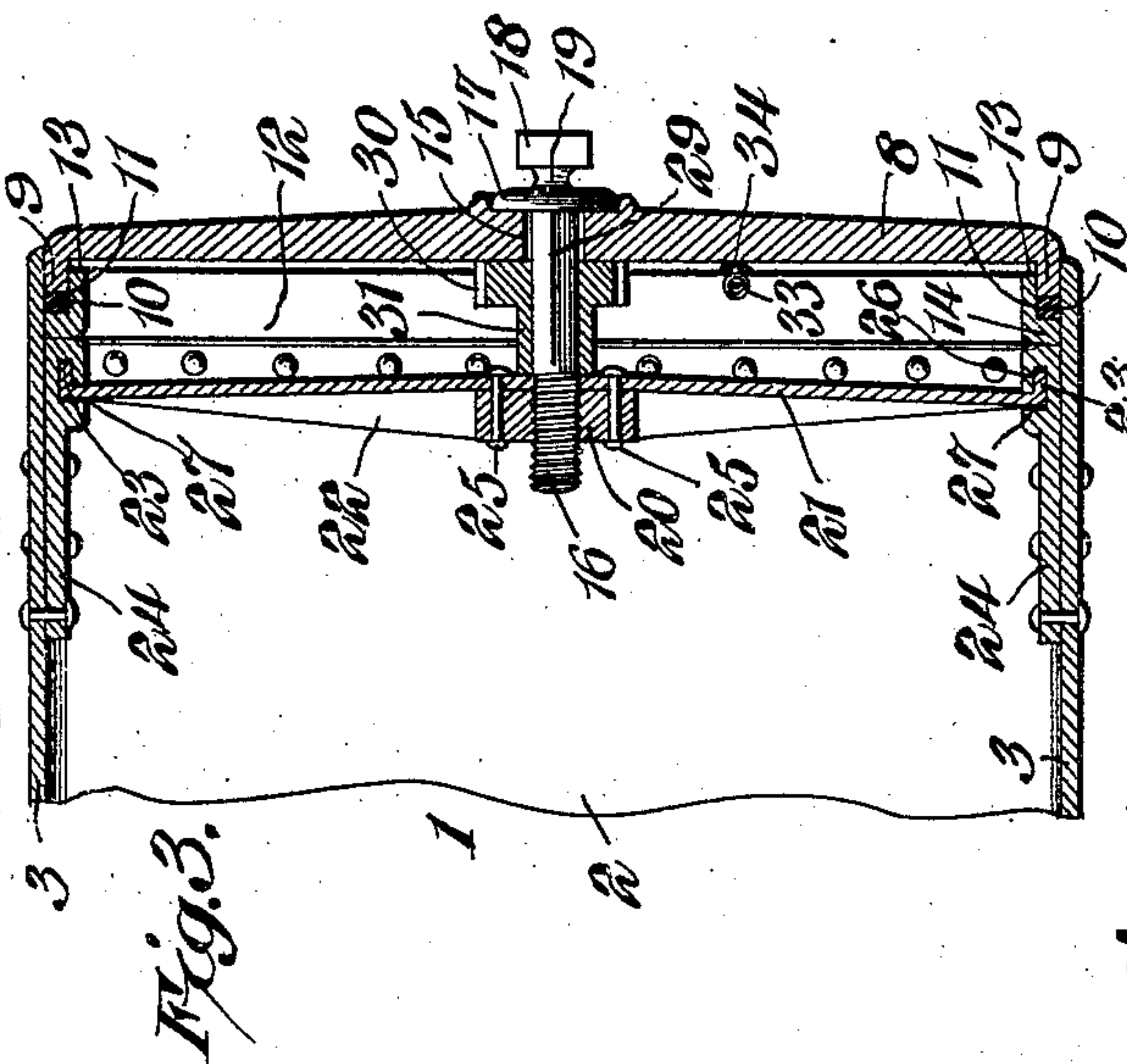
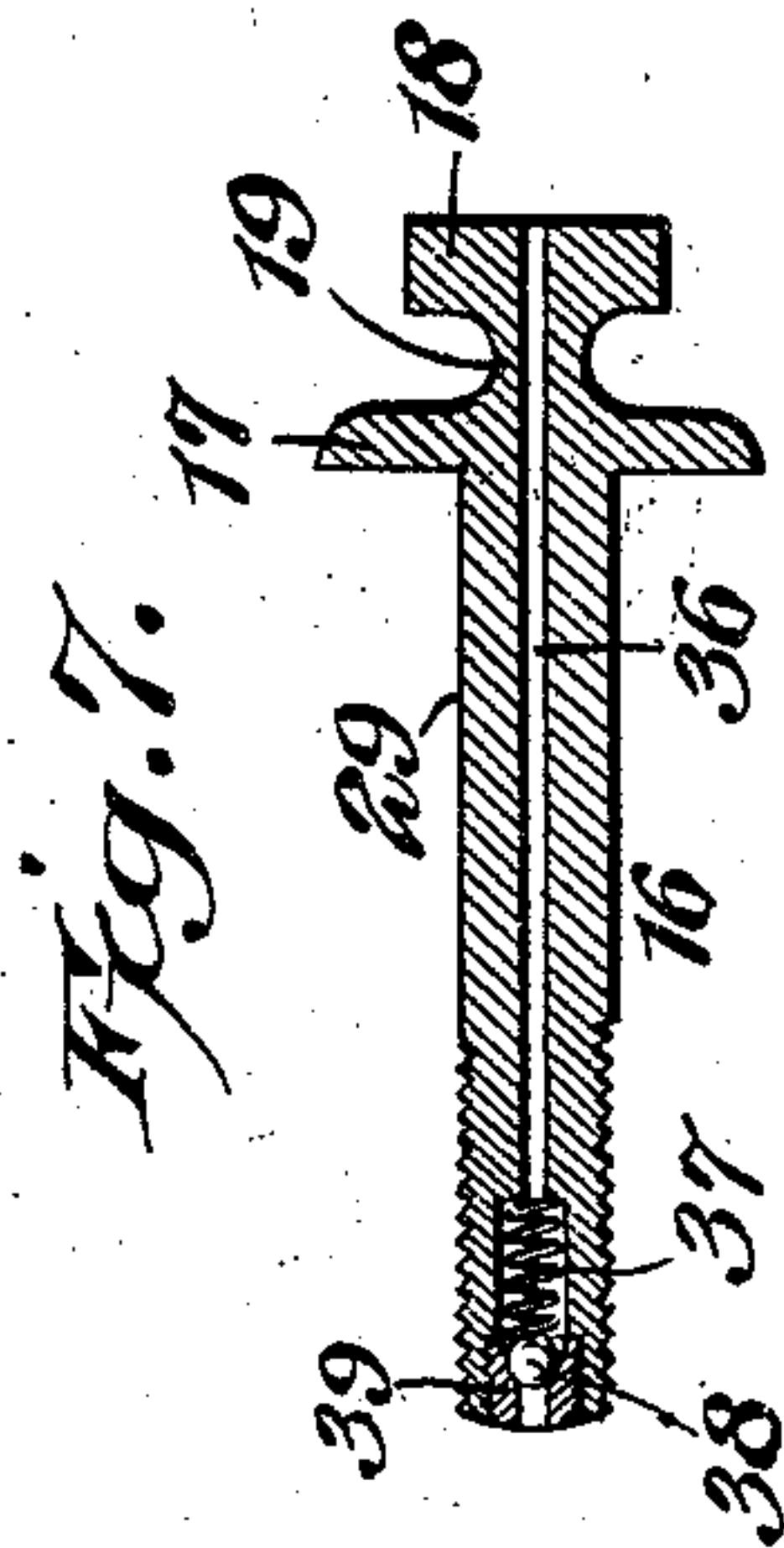
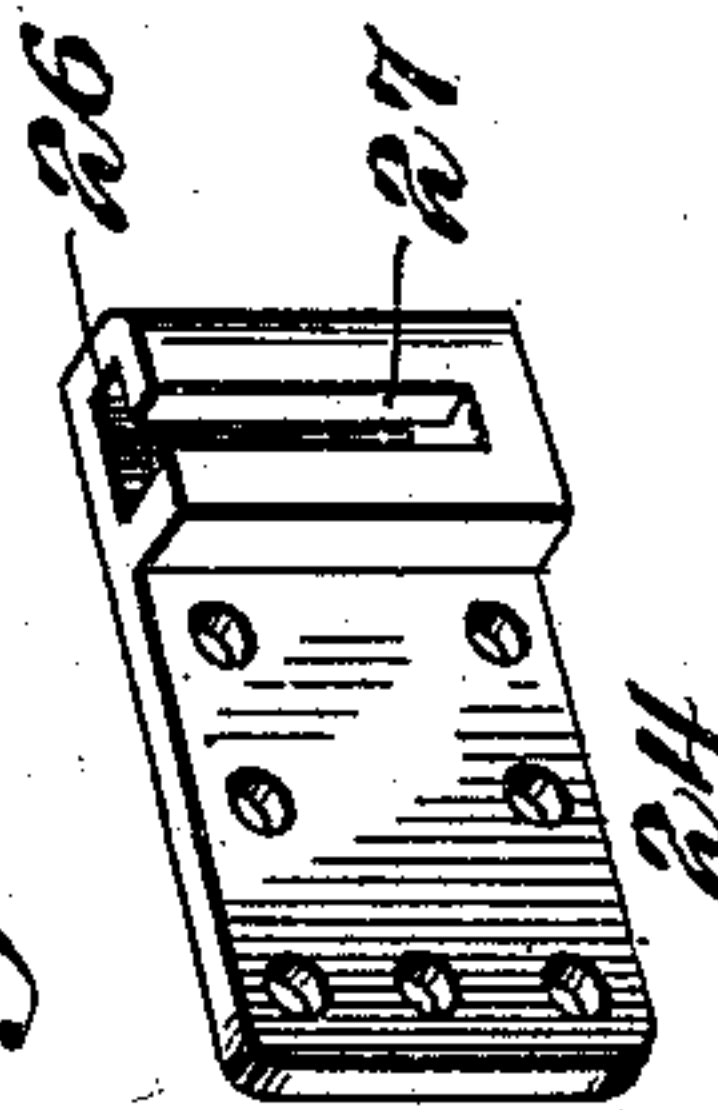


Fig. 6.



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UNITED STATES PATENT OFFICE.

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BURIAL-VAULT.

No. 928,847.

Specification of Letters Patent.

Patented July 20, 1909.

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To all whom it may concern:

Be it known that I, STEPHEN E. BURKE, a citizen of the United States, residing at Hamilton, in the county of Steuben and State of Indiana, have invented a new and useful Burial-Vault, of which the following is a specification.

The invention relates to improvements in burial vaults.

The object of the present invention is to improve the construction of burial vaults, and to provide a simple, inexpensive and efficient burglar-proof burial vault, which will be air, water and vermin tight, and at the same time capable of permitting the escape of gases, resulting from the decomposition of a body, so that injury to the burial vault from internal pressure of such gases will be effectually prevented.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of a burial vault, constructed in accordance with this invention. Fig. 2 is a horizontal sectional view of the same. Fig. 3 is a similar view on an enlarged scale of one end of the burial vault. Fig. 4 is a vertical sectional view of the same. Fig. 5 is a transverse sectional view of the burial vault. Fig. 6 is a detail view of one of the supports for the cross bar. Fig. 7 is a detail view of the screw. Fig. 8 is a detail sectional view on the line 8—8 of Fig. 2.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a burial vault, constructed of suitable metal and provided with a horizontal bottom 2, vertical sides 3 and an arched top 4. The bottom and sides are preferably constructed of a single piece of stout sheet metal, or other suitable material, and the upper portions of the sides are overlapped and riveted to depending extensions 5 of the arched top. The body, however, of the base may be constructed in any other preferred

manner, and it is equipped with a permanently attached end 6 having an inwardly extending attaching flange 7, riveted or otherwise secured to the body of the vault, as clearly illustrated in Fig. 2 of the drawings. The other end of the body is open and receives a removable closure 8, preferably constructed of malleable metal and provided with an inwardly extending integral marginal flange 9, which engages a packing 10 of rubber, or other suitable material. The packing 10 is arranged in a groove 11, which also receives the marginal flange of the removable closure 8 of the vault. The groove is formed by an interior rim 12, constructed of malleable metal, or other suitable material and extending entirely around the interior of the body of the burial vault at the open end thereof, and consisting of an inner attaching flange or portion, and an outwardly extending flange 13 of less diameter than the attaching flange, and spaced from and coöperating with the adjacent terminal portions of the body to form the said groove 11. The outwardly extending flange 13 is connected with the attaching portion by an intermediate portion 14. The rim 12 conforms to the configuration of the body portion of the burial vault being composed of a straight bottom and sides and a curved top, as clearly illustrated in Fig. 5 of the drawings.

The removable closure 8 is provided with a central opening 15 through which passes a screw 16, equipped at its outer end with an annular flange 17 and a polygonal head 18, connected with the flange by a reduced portion or neck 19. The polygonal head 18 is preferably square, and is adapted to be engaged by a wrench, or other suitable tool for operating the screw. The screw engages the threaded aperture of a nut 20, carried by a cross bar 21, constructed of sheet steel, or other suitable material, and provided with longitudinally tapered side flanges 22 and having terminal flanges 23, extending outwardly at right angles and detachably engaging opposite supports 24. The nut 20 is arranged between the side flanges and is secured to the cross bar by rivets 25, but a threaded opening for the cross bar may be provided in any other desired manner. The supports 24, which are also preferably constructed of malleable metal, consist of plates secured by rivets, or other suitable fastening

devices to the inner faces of the opposite sides of the body of the vault, and provided at their outer ends with vertical sockets 26, open at the top and having vertical slots 27, receiving the terminal portions of the cross bar 21. The cross bar fits in the vertical slots 27, and the flanges 23 extend into the sockets 26, whereby the terminals of the cross bar are detachably interlocked with the sides of the burial vault. This effectually prevents the sides of the burial vault from spreading at the open end. The rim 12 is provided at opposite sides with recesses 28, in which the socket portions of the supports fit, as clearly illustrated in Fig. 8 of the drawings.

The screw is provided with a squared portion 29 on which is arranged a ratchet wheel 30, fitting against the inner face of the removable closure 8 and provided with an inwardly extending sleeve 31, forming a stop for the cross bar. In fastening the removable end to the body portion of the burial vault, the screw is rotated until the cross bar is bowed or sprung outward and thereby brought into engagement with the ends of the collar or sleeve 31. This limits the inward rotary movement of the screw, which is locked against backward and outward movement by means of a pawl or dog 32, pivoted to the inner face of the removable closure 8 and engaging the ratchet wheel, as clearly illustrated in Fig. 5 of the drawings. The pawl or dog 32 is maintained in engagement with the ratchet wheel by a coiled spring 33, located beneath the said pawl or dog and secured at its upper end to the same and connected at its lower end to an eye 34, projecting from the inner face of the removable closure 8. Thus the screw is locked against rotary movement in either direction and any attempt to use excessive force to unscrew it will operate to twist off the polygonal head, the screw being weakened at the reduced neck 19. This will not impair the locking device and the closure will remain as secure as before the head was twisted off. The removable closure is also provided with a lug or projection 35, located at a point beyond the pawl or dog and adapted to support the same out of engagement with the ratchet wheel, as illustrated in dotted lines in Fig. 5 of the drawings. This will enable the burial vault to be used as a shipping case, when the same is sent from the factory to the undertaker or other purchaser, as the screw is free to be rotated rearwardly when the pawl or dog is in such position. When the vault closure is to be fastened at the grave, the pawl or dog is reversed and arranged to engage the ratchet wheel.

The screw is provided with a longitudinal bore 36, forming a vent and enlarged at the inner portion to receive a coiled spring 37 and a valve 38, which is held against a seat

39 by the spring 37. The valve may be in the form of a ball, as shown, and the seat is preferably formed by a perforated plug screwed into the enlarged portion of the bore or opening, 36, but any other desired construction may be employed. When pressure of gases resulting from the decomposition of a body is greater than the strength of the spring, the valve will open and permit the gases to escape. This will prevent the burial vault from being injured by internal pressure, and the valve will be held firmly seated when the internal pressure is less than that of the spring. The bowing of the cross bar holds the removable closure 8 tightly in engagement with the packing 11, and should there be any shrinkage of the packing, the closure 8 will be drawn by the cross bar and a tight joint maintained at all times.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A burial vault comprising in its construction a body having an open end, a closure therefor, a cross bar interlocked at its terminals with the opposite walls of the body to prevent the same from spreading, and a screw forming an adjustable connection between the closure and the cross bar.

2. A burial vault comprising in its construction a body having an open end and provided with opposite supports having sockets, a closure for the open end of the body, a cross bar having terminal portions detachably fitted in the sockets of the supports, said cross bar connecting and preventing the opposite walls of the body from spreading, and a screw adjustably connecting the closure and the cross bar.

3. A burial vault comprising in its construction a body having an open end, a rim fitted within and extending entirely around the body and having a projecting flange co-operating with the body to form a groove, a packing arranged in the groove, a closure having a marginal flange extending into the groove and engaging the packing, and fastening means for the said closure.

4. A burial vault comprising in its construction a body having an open end, a rim fitted within and extending entirely around the body and having a projecting flange co-operating with the body to form a groove, a packing arranged in the groove, a closure having a marginal flange extending into the groove and engaging the packing, a resilient cross bar interlocked at its ends with the opposite walls of the body to prevent the latter from spreading, and means for adjustably connecting the closure with the cross bar and for bowing or springing the latter, whereby the marginal flange of the closure is yieldably maintained in engagement with the packing.

5. A burial vault comprising in its con-

struction a body having an open end, a rim secured within the body and having opposite recesses, supports consisting of plates secured to the opposite walls of the body and
 5 extending into the said recesses and provided with sockets open at the top and inner walls, a cross bar having terminal flanges interlocked with the said sockets, a closure fitted against the rim, and means for adjust-
 10 ably connecting the closure and the cross bar.

6. A burial vault comprising in its construction a body having an open end, a cross bar connected at its terminals at the oppo-
 15 site walls of the body, a closure for the open end of the body, a screw piercing the closure and engaging the cross bar and adapted to spring the same outward, a ratchet wheel mounted on the screw and having a project-
 20 ing portion forming a stop for the cross bar and limiting the forward movement of the closure, and means for engaging the ratchet wheel for locking the screw against back-
 ward rotation.

7. A burial vault comprising in its construction a body having an open end, a closure therefor, a cross bar connected at its ends with the body, a screw piercing the closure and engaging the cross bar and pro-
 30 vided at its outer portion with a flange to fit against the closure of the burial vault and having a polygonal head, and a reduced neck connecting the head with the flange, a ratchet wheel mounted on the screw and forming an
 35 abutment for the cross bar and limiting the forward movement of the screw, and a pawl or dog for engaging the ratchet wheel to lock the screw against backward movement.

8. A burial vault comprising in its con-

struction a body having an open end, a cross 40 bar connected at its ends with the body, a closure for the open end of the body provided with a lug or projection, a screw piercing the closure and connected with the cross bar, a ratchet wheel mounted on the screw, 45 a pawl pivoted to the closure of the vault at a point between the lug or projection and the ratchet wheel, and a spring connected with the pawl or dog and arranged to hold the same in engagement with either the ratchet 50 wheel or the lug or projection.

9. A burial vault comprising in its construction a casing having an open end and provided with opposite supports, a closure for the open end of the casing, a cross bar pro- 55 vided with spaced longitudinal flanges and having its terminals bent at an angle and forming flanges for engaging the supports, whereby the cross bar is interlocked with op-
 60 posite walls of the vault, a nut arranged between the side flanges of the cross bar, and a screw piercing the closure of the vault and engaging the nut.

10. A burial vault comprising in its construction a casing having an open end and 65 provided with a cross bar, a closure for the open end of the casing, a hollow screw piercing the closure and connecting the same with the cross bar, and a valve for the hollow 70 screw.

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

STEPHEN E. BURKE.

Witnesses:

HAROLD F. RENNER,
 MYRON CURRY.