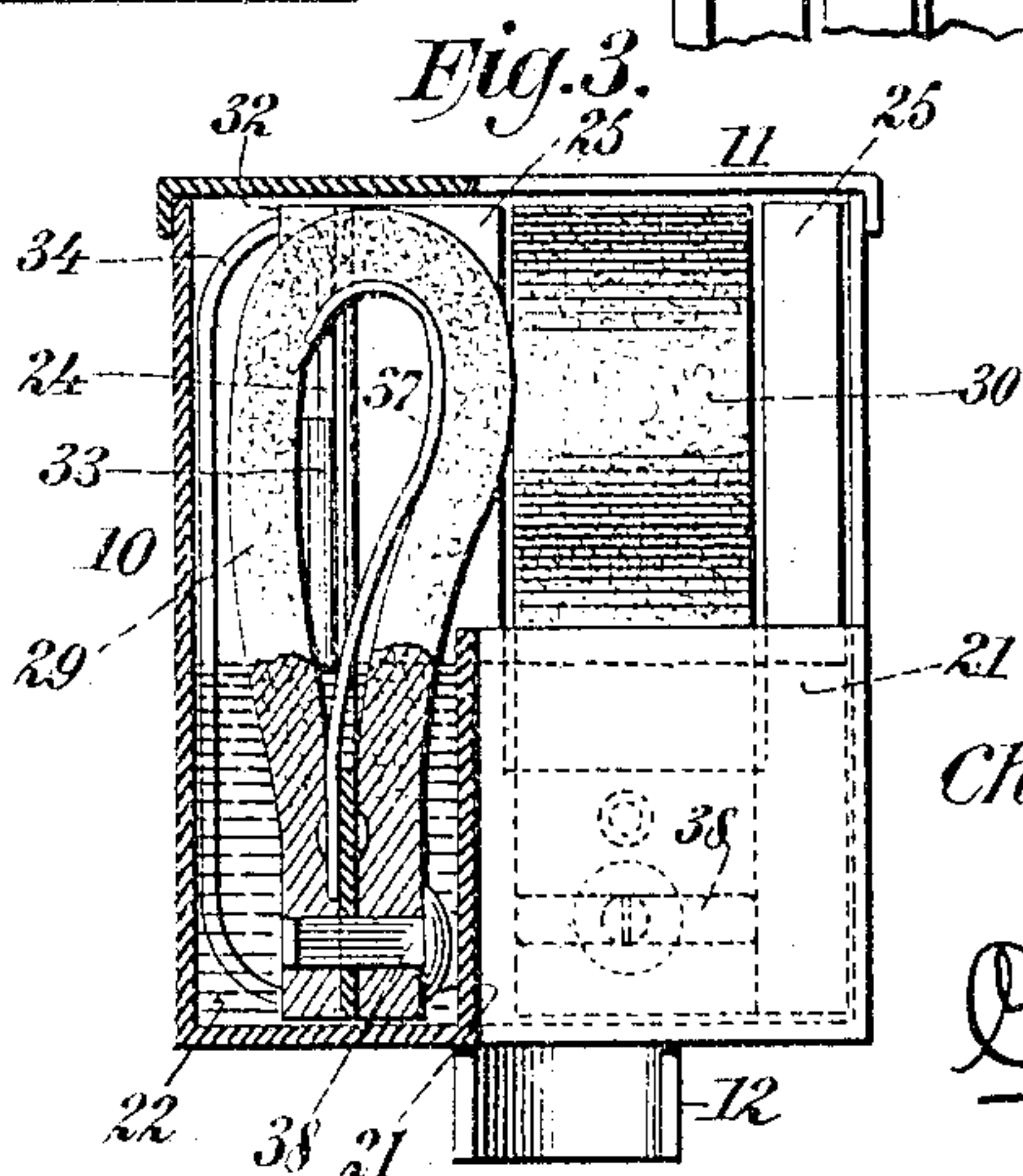
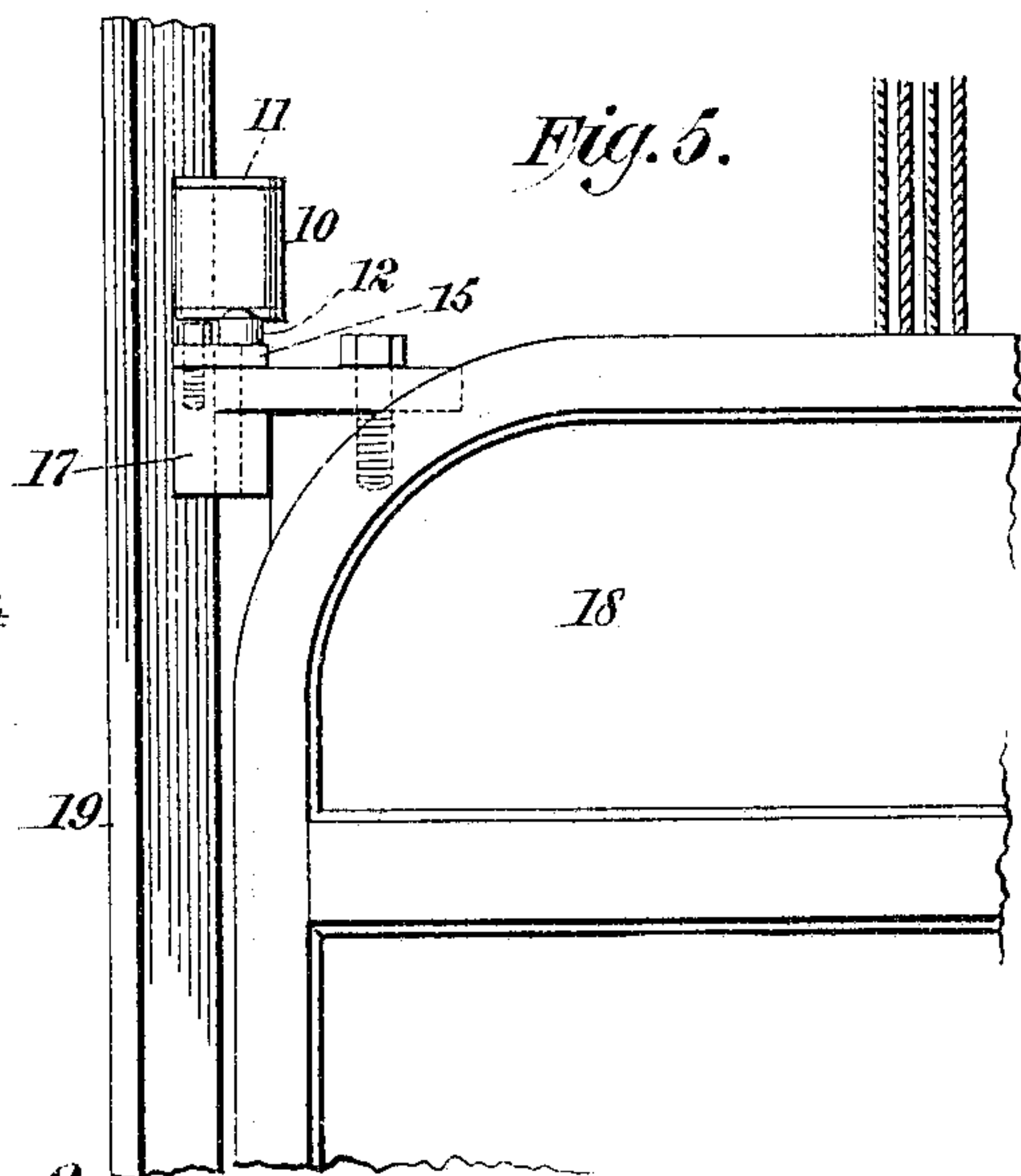
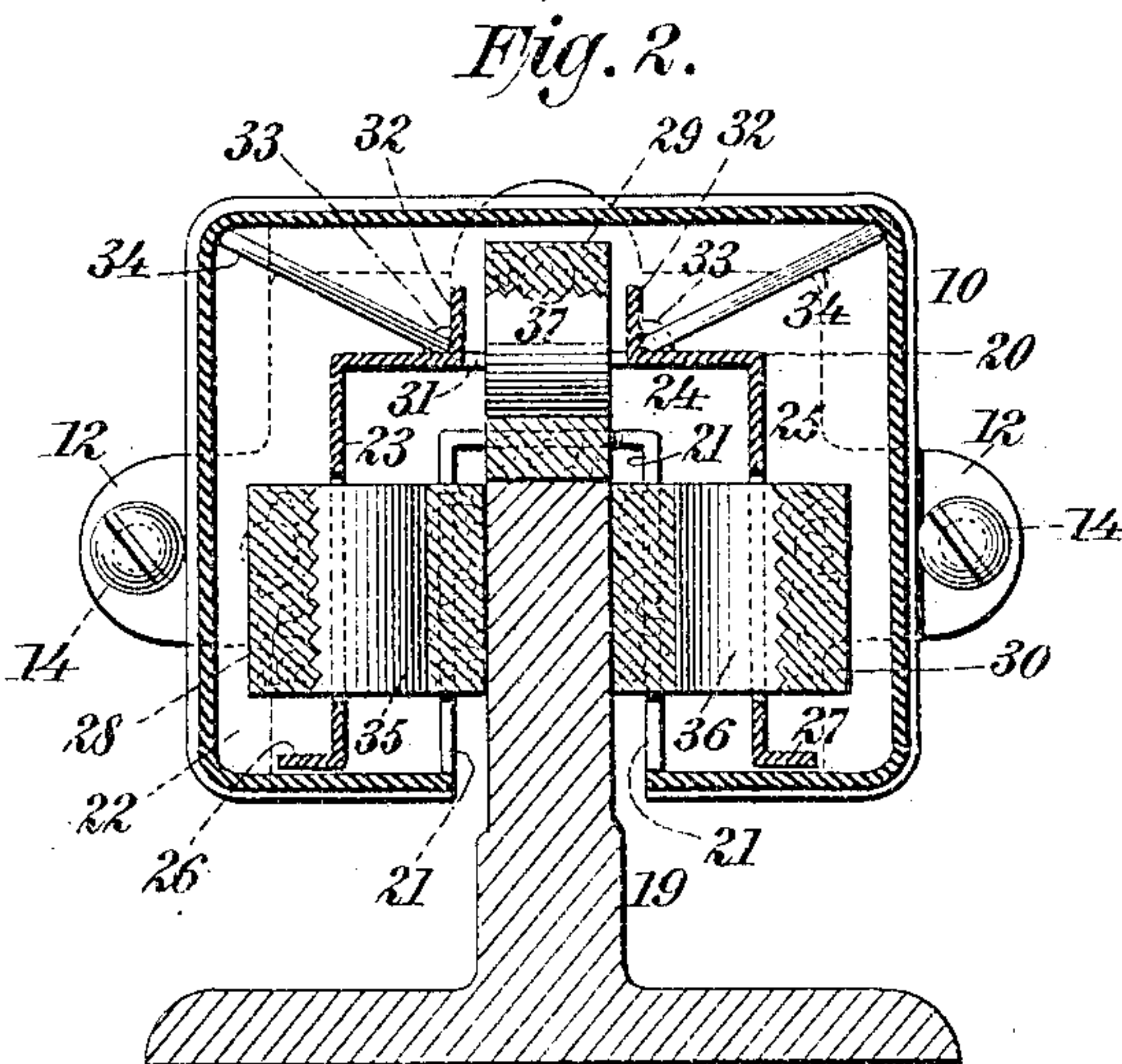
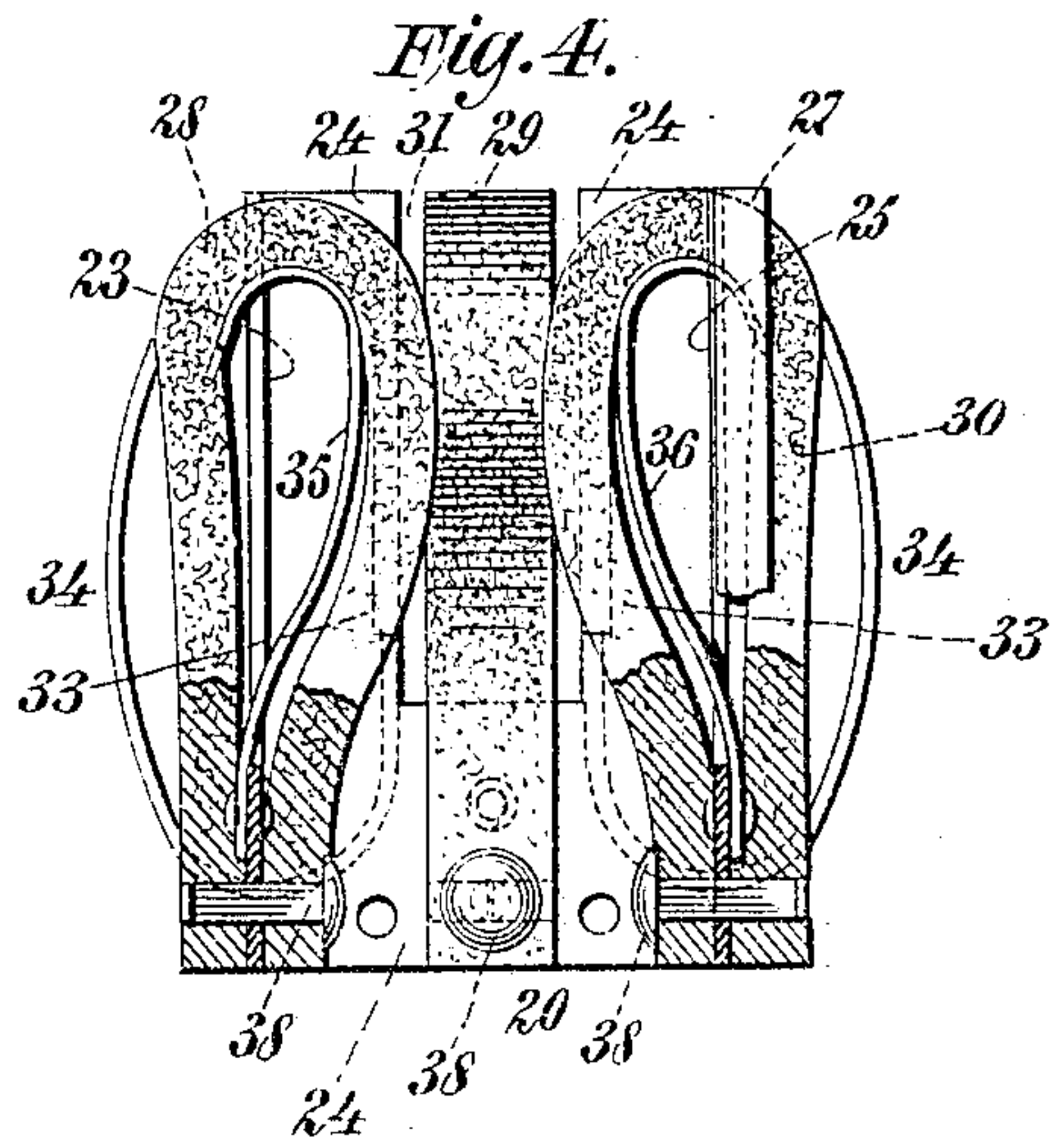
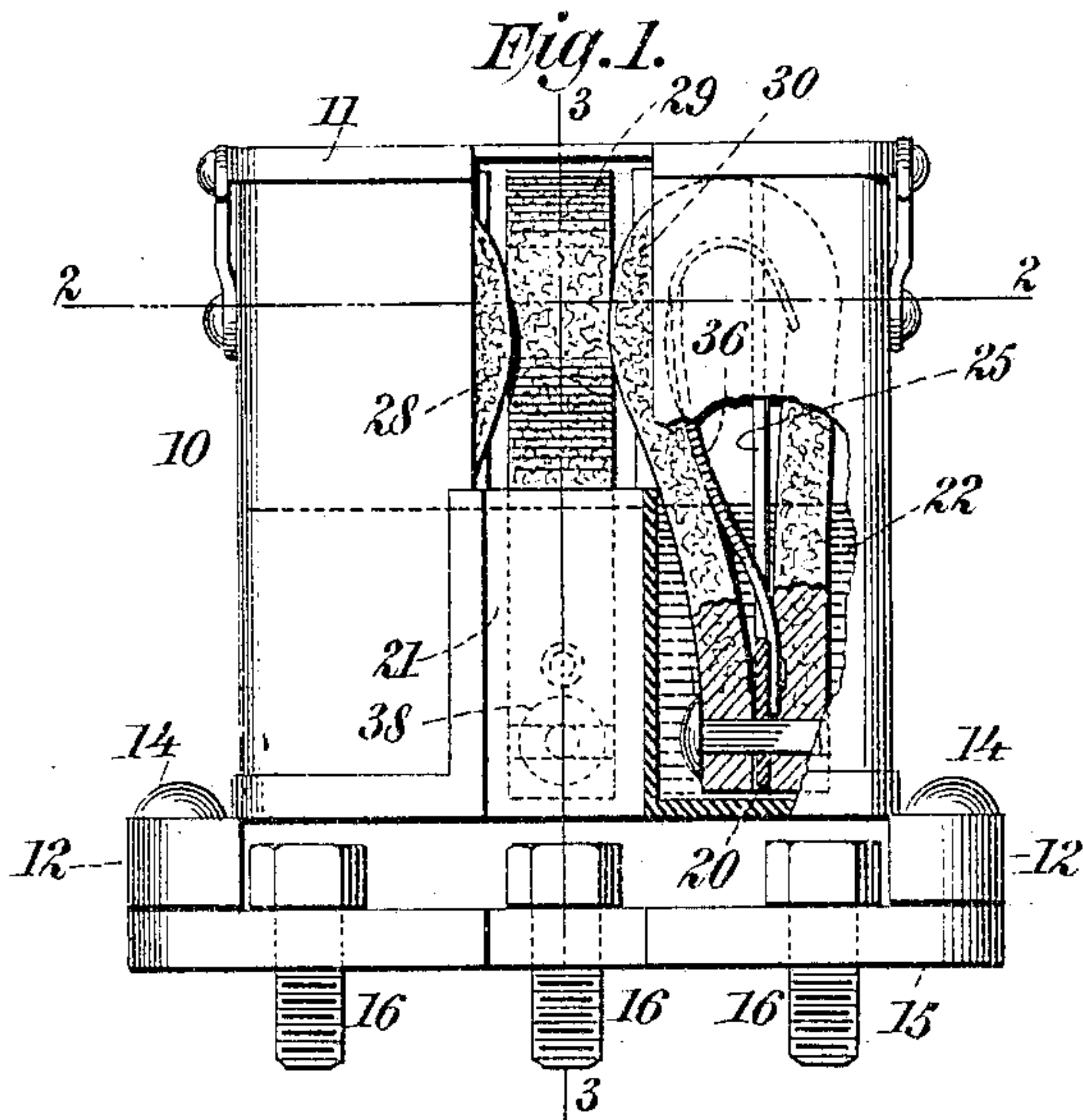


No. 787,978.

PATENTED APR. 25, 1905.

C. H. EGGLES.
LUBRICATOR FOR ELEVATOR GUIDES:
APPLICATION FILED JAN. 19, 1905.



WITNESSES:

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CHARLES HUBERT EGGLE, OF NEW YORK, N. Y.

LUBRICATOR FOR ELEVATOR-GUIDES.

SPECIFICATION forming part of Letters Patent No. 787,978, dated April 25, 1905.

Application filed January 19, 1905. Serial No. 241,724.

To all whom it may concern:

Be it known that I, CHARLES HUBERT EGGLE, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Lubricators for Elevator-Guides, of which the following is a specification.

The invention relates to improvements in lubricators for elevators; and it consists in the novel features and combinations of parts hereinafter described, and particularly pointed out in the claims.

The object of the invention is to provide a simple and highly efficient lubricator to be connected with the car or platform and adapted to automatically lubricate the vertical guides between which the car or platform travels.

One purpose of my invention is to provide simple and economical means for lubricating the guides and which will not entail a waste of the oil when the car is at rest, but will properly and evenly lubricate the guides when the car is in motion without danger of the lubricant being spattered about and wasted or doing damage.

In carrying out my invention in the preferred construction I provide at each side of the car and connected with the latter a receptacle adapted to the guide-bars and to contain a definite quantity of the lubricant, and within this receptacle I place a removable frame carrying pieces of felt which are spring-pressed against the surfaces of the guide and convey the lubricant to such surfaces during the travel of the car, the lower portions of the strips of felt being immersed within the body of lubricant and the upper portions thereof being projected against the surfaces of the guide.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, partly broken away and partly in section, of a lubricator

constructed in accordance with and embodying the invention, the said lubricator being shown as secured upon the usual top plate carried by the shoe which engages the guide. Fig. 2 is a horizontal section of same on the dotted line 2 2 of Fig. 1. Fig. 3 is a vertical section of same on the dotted line 3 3 of Fig. 1. Fig. 4 is a detached front elevation, partly broken away and partly in section, of the interior frame detached from the lubricator-receptacle, the pieces of felt being connected with this frame; and Fig. 5 is a view showing a portion of an elevator-car and one of the guides with the lubricator device of my invention in position for use.

In the drawings, 10 designates the lubricator-receptacle, which may be of any suitable outline, but is shown as being of rectangular form in cross-section and provided upon its upper end with a removable cap 11 and at its lower end with ears or lugs 12, through which screws 14 may be applied for securing the receptacle to the plate 15, which is customarily fastened by screws 16 upon the usual shoe 17, carried by the car 18 and engaging the customary guide 19, the said shoe 17 ordinarily containing a phosphor-bronze lining held down in place by the aforesaid plate 15. I employ the lugs 12 to receive the screws 14 in order that the lubricator-receptacle 10 may be conveniently applied to the said plate 15 without interfering with the heads of the usual screws 16, the said lugs serving to elevate the body of the receptacle above the heads of said screws, as shown in Fig. 1.

The receptacle 10 at its side facing the guide 19 is recessed throughout its length to receive the edges of the guide 19, as shown in Fig. 2, and about the lower portion of this recess the receptacle 10 contains the walls 21, which with the other walls of the receptacle form within the lower portion of the latter a reservoir 22 for the lubricant, which will be poured into the receptacle from the top of the latter upon the removal of the cap 11.

Within the receptacle 10 I apply a frame

20, composed of a piece of sheet metal having the three sides 23, 24, and 25, the outer edges of the sides 23 25 being flanged outwardly, as indicated at 26 27, respectively, to engage the walls of the receptacle 10 and the said sides 23 24 25 being slotted vertically, so that the strips of felt 28 29 30 may lie within said slots and project at opposite sides of the adjacent surfaces of the said frame. At the edges of the slot 31 in the side 24 of the detachable frame 20 are formed flanges 32, which extend downwardly for a portion of their length and then curl inwardly to form ordinary hinge-knuckles or sleeves 33 for the wire loops 34, which when the frame is in position extend outwardly into the opposite corners of the receptacle 10, as shown in Fig. 2, and serve to locate the frame within said receptacle and hold said frame at that side of the receptacle which is adjacent to the guide 19. The frame 20 is detachable from the receptacle 10 to permit of the convenient renewal when necessary of the strips of felt, and while the spring-wire loops 34 are at present employed to center and rather firmly hold the frame 20 within the receptacle and in proper relation to the recessed side of the same, I do not limit the invention to the employment of the said loops 34.

Upon the lower portion of the sides 23, 24, and 25 of the frame 20 I secure spring-metal strips 35 36 37, respectively, which extend upwardly and inwardly and then at their upper ends turn outwardly, as shown, and upon these strips of spring metal I apply the strips of felt 28 29 30, the strips of felt being folded downwardly upon the spring-metal strips and the ends of the felt being brought together at opposite sides of said spring-metal strips and at opposite sides of the lower walls of the frame 20, where they are fastened together by paper-fasteners 38 of ordinary kind or other suitable means. The springs 35 36 37 are of proper form and suitably flexed to press the upper folded portions of the strips of felt within the plane of the recess in the outer side of the receptacle 10, as shown in Figs. 1, 2, and 3, and hence when the lubricator device is in position on the car the said springs maintain the said felt strips yieldingly against the sides and edge of the guide 19, whereby said strips are enabled to apply lubricant to said guide. I have secured the lower ends of the strips of felt by paper-fasteners or other detachable means 38, so that I may conveniently renew said strips from time to time, as occasion may require.

The lubricator device of my invention, therefore, comprises the receptacle 10, having a recessed side to fit around the edges of the guide 19 and forming in its lower part a reservoir for the liquid lubricant, and a detachable frame to be firmly held within said re-

ceptacle and carrying the springs 35, 36, and 37, upon which the strips of felt are secured and which serve to flex said strips at their upper portions outwardly against the sides and edge of the guide 19, while the lower portions of said strips are held within the lower portion of the receptacle and below the level of the lubricant therein.

In the employment of my invention the frame carrying the strips of felt being within the receptacle and the oil having been poured into the receptacle and the lid 11 secured in position the felt will become saturated with the oil and during the travel of the car will apply the lubricant to the guide 19, no excess of oil leaving the receptacle, but, due to the action of the friction of the strips of felt against the guide 19, sufficient oil being taken up by the strips of felt and conveyed to the guide to properly lubricate the latter without waste and without any spattering of the oil from either the receptacle or the guide. The movement of the felt upon the guide 19 seems to have the effect of drawing the oil or other lubricant along and through the said strips, the oil apparently traveling upwardly from the outer sides of said strips and downwardly along the inner sides of the same during the ascent of the car and traveling upwardly along the inner folds of said strips and downwardly over the outer folds thereof during the descent of the car, the friction of the car created by the contact of the felt with the guides seeming, in effect, to maintain a circulation of the lubricant back and forth through the strips without unduly consuming the oil and without waste of the same.

I have shown and described the preferred embodiment of my invention; but I do not desire in every instance to be limited to the special details of form and construction shown.

The strips of felt are firmly held at their ends so that they may not become disarranged during the travel of the car, and the said strips constitute a body of absorbent material whose lower portion is held within the oil contained in the reservoir 22, while the upper portion of said body is projected laterally beyond the upper edges of the inner walls of said reservoir and into contact with the guide 19. The strips of felt become saturated with the oil and apply the oil during the travel of the car to the guides 19. When the car is at rest, there is no waste of the oil or lubricant, and when the car is in motion the oil will not become spattered about, because the oil is a stationary body confined within the reservoir, and those portions of the absorbent strips which contact with the guide are outside of the reservoir and obtain their oil by absorption as distinguished from a pouring of the oil upon the strips from above.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guide and forming in its lower part a reservoir for the oil, and an integral folded strip of absorbent material mounted within said receptacle and extending from within said reservoir upwardly above the adjacent walls of the latter, combined with means for firmly holding said strip, and means for yieldingly flexing the upper folded portion of said strip into contact with said guide; substantially as set forth.

2. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guide and forming in its lower part a reservoir for the oil, and an integral strip of absorbent material mounted within said receptacle and extending from within said reservoir upwardly above the adjacent walls of the latter, combined with means for firmly holding said strip at its ends, and means for yieldingly flexing the upper portion of said strip into contact with said guide; substantially as set forth.

3. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guide and forming in its lower part a reservoir for the oil, and three integral strips of absorbent material mounted within said receptacle and extending from within said reservoir upwardly above the adjacent walls of the latter, combined with means for firmly holding said strips at their ends, and means for yieldingly pressing the upper portions of said strips into contact with the edge and sides of said guide; substantially as set forth.

4. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guides and forming in its lower part a reservoir for the lubricant, and a folded strip of absorbent material mounted within said receptacle and extending from within said reservoir upwardly above the adjacent walls of the latter, combined with means for firmly holding said strip, and the spring over which said strip is folded and which is flexed to yieldingly press the upper folded portion of said strip against said guide; substantially as set forth.

5. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guide and forming in its lower part a reservoir for the oil, and three folded strips of absorbent material mounted within said receptacle and extending from within said reser-

voir upwardly above the adjacent walls of the latter, combined with means for firmly holding said strips, and means for pressing the upper folded portions of said strips against said guide; substantially as set forth.

6. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guide and forming in its lower part a reservoir for the lubricant, and three folded strips of absorbent material mounted within said receptacle and extending from within said reservoir upwardly above the adjacent walls of the latter, combined with means for firmly holding said strips, and the springs over which said strips are folded and which are flexed to yieldingly press the upper folded portions of said strips against said guide; substantially as set forth.

7. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guide and forming in its lower part a reservoir for the lubricant, and a body of absorbent material within said receptacle and extending from within said reservoir upwardly above the adjacent walls of the latter, said absorbent material not filling said reservoir and said reservoir being adapted to hold a quantity of oil covering the lower portion of said body, combined with means for securing said body within said receptacle, and means for pressing the upper portion of said body into contact with the said guide; substantially as set forth.

8. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guide and forming in its lower part a reservoir for the lubricant, and a body of absorbent material within said receptacle and extending from within said reservoir upwardly above the adjacent walls of the latter, said absorbent material not filling said reservoir and said reservoir being adapted to hold a quantity of oil covering the lower portion of said body, combined with a detachable frame carrying said body, and means carried by said frame for pressing the upper portion of said body into contact with the said guide; substantially as set forth.

9. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the guide and forming in its lower part a reservoir for the lubricant, and three folded strips of absorbent material mounted within said receptacle and extending from within said reservoir upwardly above the adjacent walls of the latter, combined with a frame removable from said receptacle and carrying said strips, means independently securing said strips to said frame, and means for pressing the upper fold-

ed portions of said strips against said guide; substantially as set forth.

10. A lubricator for elevator-guides and to be carried by the car, said lubricator comprising a receptacle adapted to pass upon the 5 guide and forming in its lower part a reservoir for the lubricant, and three folded strips of absorbent material mounted within said receptacle and extending from within said 10 reservoir upwardly above the adjacent walls of the latter, combined with a frame removable from said receptacle and carrying said

strips, and the springs secured to said frame and over which said strips are folded and which serve to yieldingly press the upper fold- 15 ed portions of said strips against said guide; substantially as set forth.

Signed at New York city, in the county and State of New York, this 17th day of January, A. D. 1905.

CHARLES HUBERT EGGLEER.

Witnesses:

CHAS. C. GILL,
ARTHUR MARION.