

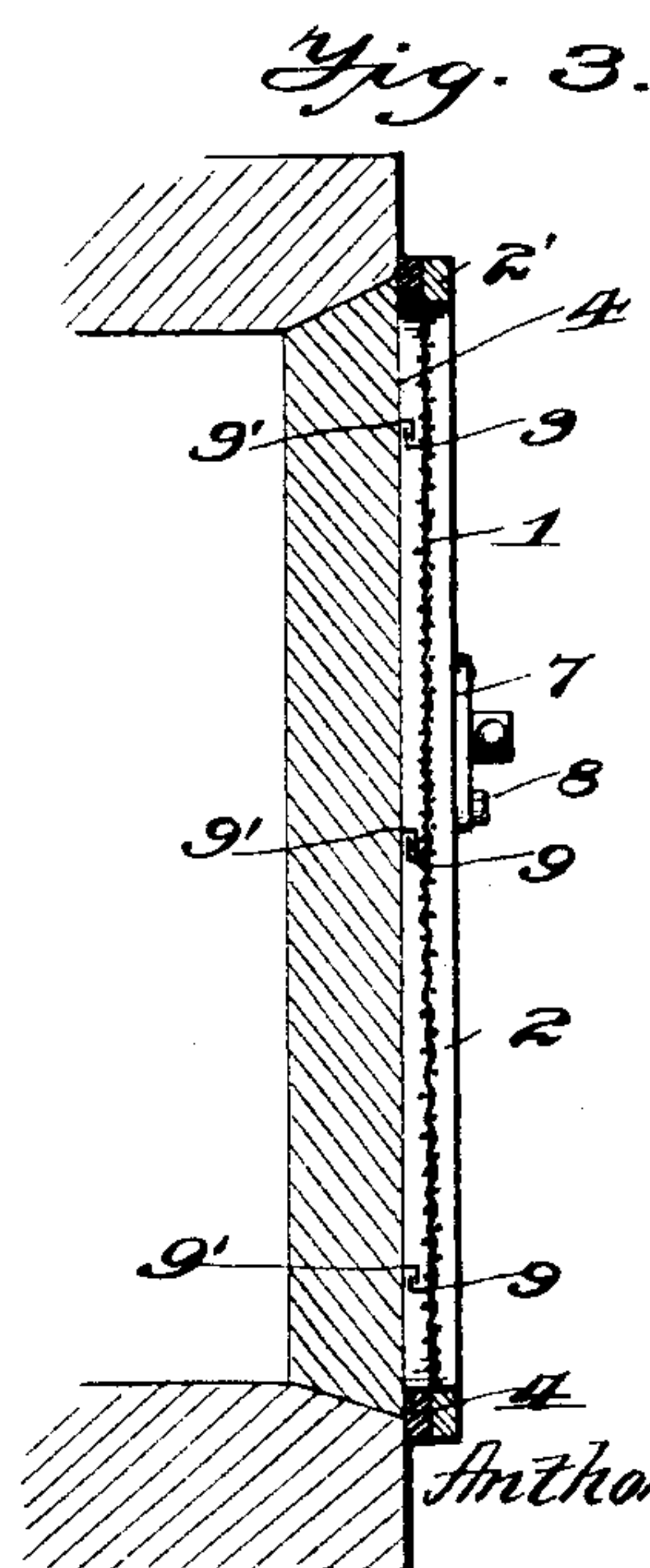
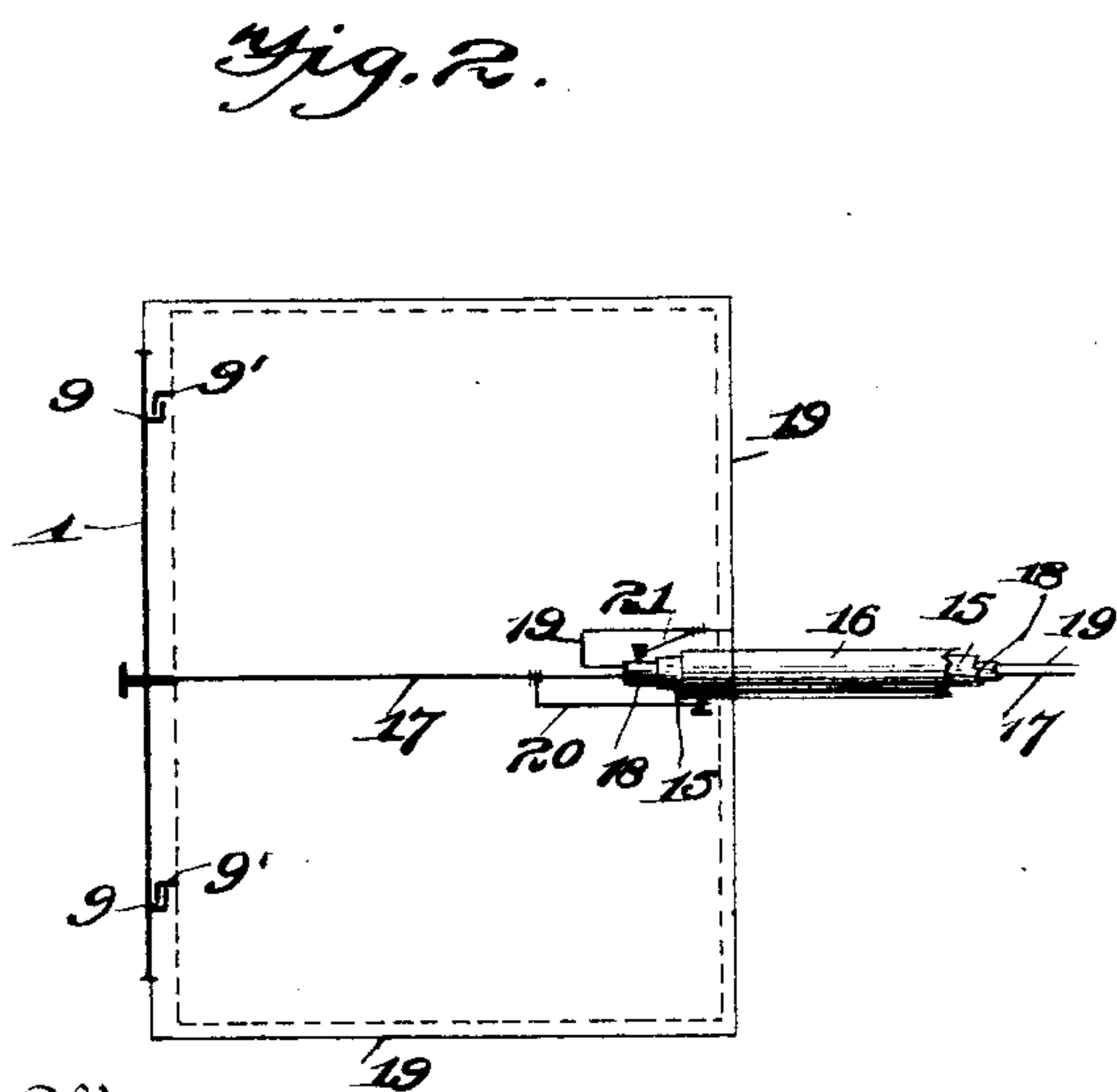
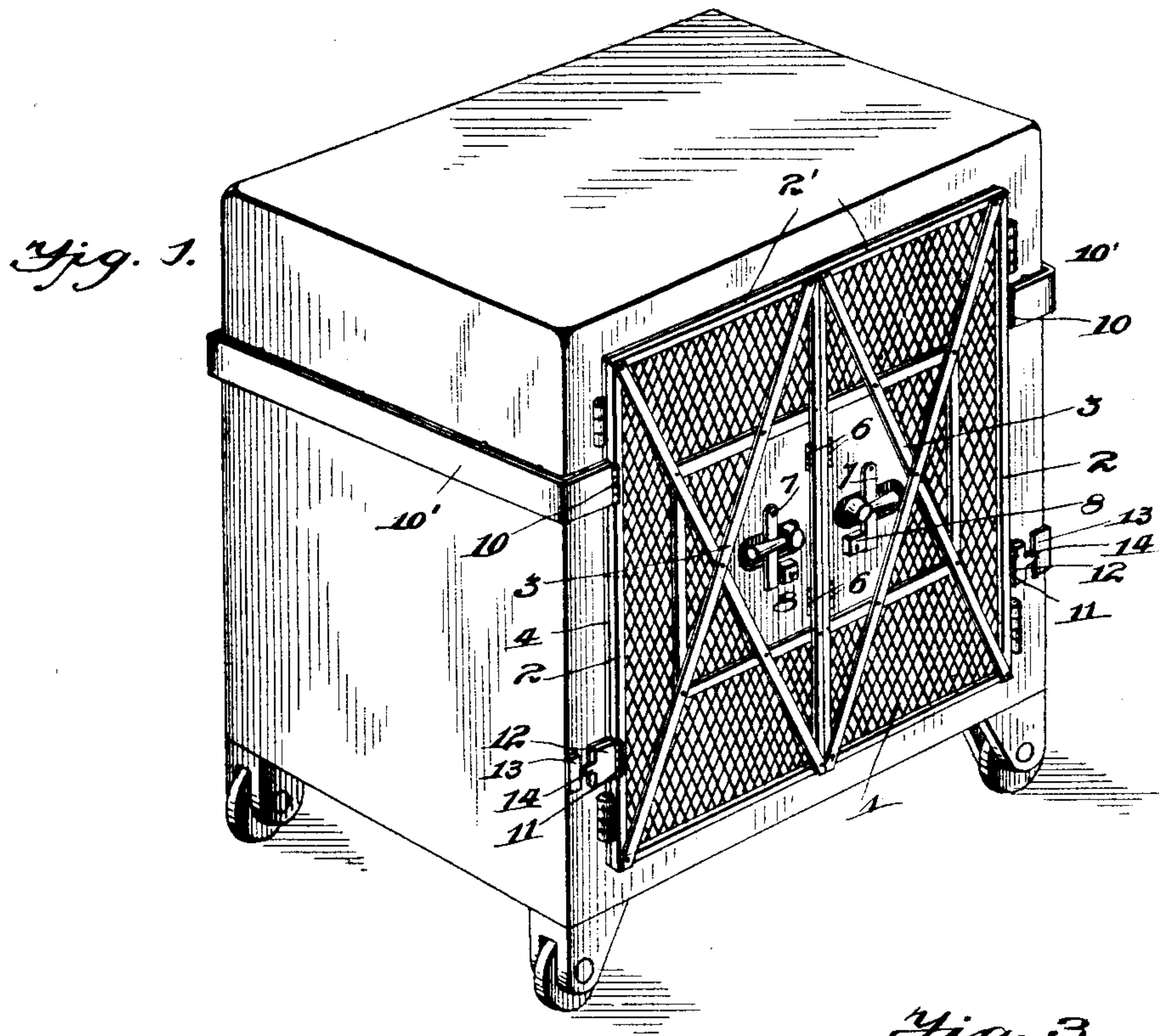
No. 607,877.

Patented July 26, 1898.

A. P. PRICHARD.
METALLIC GATE SCREEN.

(Application filed Sept. 9, 1897.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ANTHONY P. PRICHARD, OF TACOMA, WASHINGTON.

METALLIC GATE-SCREEN.

SPECIFICATION forming part of Letters Patent No. 607,877, dated July 26, 1898.

Application filed September 9, 1897. Serial No. 651,047. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY P. PRICHARD, of Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Metallic Gate-Screens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in screens for vaults, safes, &c., employed to establish electric circuit and sound an alarm.

The object of my invention is to construct a device of the character above mentioned adapted to be placed on the outer or inner side of the door or doors of a vault or safe in such a manner that when the door or doors are opened or partially opened or when an attempt is made to pry the doors to insert glycerin or other explosives in the cracks or when the screen is moved outwardly electric connections will be made and an alarm sounded.

A further object of the invention is to produce an electric connection with a safe that will prevent all possibility of the electric connections being cut, sawed, or burned without establishing a circuit or sounding an alarm.

Other objects and advantages of my invention will become apparent in the course of the following description, and the points of novelty will be particularly pointed out in the claims.

I am enabled to accomplish the objects of my invention by the simple means illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of a safe with my device applied thereto. Fig. 2 is a diagrammatic view thereof, showing the electrical connections; and Fig. 3 is a vertical central sectional view of the forward portion of a double-door safe, showing the strips of rubber behind the bars of the screen.

Referring to the drawings, the numeral 1 indicates a screen which is composed, preferably, of thin wire braced by metallic side bars 2, top bars 2', and cross-bars 3. Said screen is adapted to be placed on the outer or inner side of the door or doors of the vault or safe, and said screens are so placed upon the door or doors and the cracks or crevices around

them that should said doors be tampered with and the screen thereon be moved inward or outward or any attempt to pry said screen from the door for the purpose of inserting glycerin or other explosives in said cracks or crevices electric connection will be made and an alarm sounded. The cracks or crevices are covered by narrow rubber strips 4, which are preferably secured to the rear sides of the top, bottom, and side bars of the gates or screens, thus effectually preventing the entrance of a liquid or other explosive to said cracks for the purpose of "blowing" the safe.

The numeral 5 indicates two small doors provided in the screen and adapted to be opened in opposite directions upon hinges 6. Said doors are provided with small metallic slides 7, which are pivoted to said doors and adapted to swing thereon, and said slides may be placed on either the inside or the outside of the door or doors, as will be most convenient. The said slides 7 are so pivoted to the door or doors that they will be adapted to swing on their pivots, and when the doors are closed they will lie across the openings made in the screen-doors until the screen is moved from its normal position forward, when said slides will contact with the handle or knob of the safe and the electric circuit will be completed and the alarm sounded.

The numeral 8 indicates two spring-locks adapted to be entered by the catches on the slides 7.

The numeral 9 indicates short angle-arms which are attached to the inner side of the screen, and a number of similar arms 9' are attached to the safe-door, all of said arms being kept out of contact with each other and adapted to make contact and sound the alarm when the screen is tampered with or an attempt is made to pry off the same.

It will be observed that the arms 9' are provided with two downwardly-projecting contact-points between which is adapted to move the upturned arm or contact-point secured to the screen, thus making it possible to sound the alarm when the screen is moved either toward or away from the safe-door. These contact-points may be provided wherever they are found necessary between the safe-doors and the screen, and it will be seen that as they are out of reach they form an effi-

cient means for sounding the alarm, their location preventing the possibility of inserting insulating material between them to prevent the circuit being completed and the alarm
5 sounded. The screen may also be provided with a contact-point adapted to engage with and complete the circuit through the combination-knob, and, in fact, any desired number of connections for establishing the circuit
10 and sounding the alarm may be provided between the screen and the door, so that said alarm will be sounded when the screen is moved in any direction.

Referring particularly to Fig. 1, the numeral 10 indicates the top hinges of the screen, which are in the present instance secured to a strip or band 10', which extends across the sides of the safe and around behind the same, the said band being insulated from the safe
20 by means of any suitable insulating material and provided, preferably, upon its edges with short lateral projections adapted to make contact with the safe-body when an attempt is made to pry the band from the safe.

The numeral 11 indicates the lower hinges of the screen, which are secured to the metallic piece 12 and which are insulated from the safe, and the numeral 13 indicates two short plates secured near the bottom of the safe, which plates are not insulated from the safe.
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I provide on the lower-hinge of the screen a projection 14, adapted to come in contact with the plates 13 to sound the alarm in case the screen-door could be swung back.

Referring now more particularly to the diagrammatic view, the numeral 16 indicates an outer pipe which extends, preferably, a short distance into the safe at any convenient point, but preferably at the back thereof.
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Said pipe 16 contains an inner pipe 18, which is inclosed in rubber tubing or hose 15 to insulate the two pipes 16 and 18 from each other. Extending through the pipe 18 and having connections with the screen is a wire 19, which
45 is also connected to the inner pipe 18 by a short wire 21, branching from said wire 19, and into a binding-post on said pipe 18. Also extending through said inner pipe 18 and having connections with the safe-door is a
50 wire 17, which is connected to the outer pipe 16 by a short wire 20, branching from said wire 17 and extending to the binding-post on said outer pipe 16. The wires 19 and 17 are insulated from each other, and it will be seen
55 that when the screen is moved sufficiently to make contact with any portion of the safe the circuit will be completed and the alarm sounded. It will further be seen that should an attempt be made to cut, saw, or burn the

pipe with a metallic instrument the circuit 60 would be completed when the instrument passed through the outer pipe and came in contact with the inner pipe 18.

I do not desire to be understood as limiting myself to the precise electrical connections 65 shown in the drawings, and I desire it understood that I may employ any suitable means for making said connections and completing the circuit through either the safe-body or through bands surrounding the safe to sound 70 an alarm when an attempt is made to remove the screen or open the doors therein or the safe-doors.

Having thus described my invention, what I claim as new, and desire to secure by Letters 75 Patent, is—

1. In combination with a safe or vault, a screen, doors in the screen provided within openings or cut-away portions whereby they are permitted to fit over the knobs or handles 80 of the doors, pivoted slides lying across the openings, said slides being adapted to come in contact with the handles or knobs by a forward movement of the screen and sound an alarm, substantially as described. 85

2. In a device of the character described, the combination with the door or doors of a vault or safe, of a metallic screen covering said door or doors and the crevices between said doors and the jamb, an insulator there- 90 from to the doors in the screen permitting the same to be closed over the projections on the safe or vault doors, spring-locks mounted on the doors of the screen, pivoted catches or slides on the doors adapted to make contact 95 with the safe-handles and sound an alarm when the doors are opened or when the screen is moved outwardly, substantially as and for the purpose set forth.

3. The combination with the screen and 100 door or doors of a safe or vault, wires connected thereto and extending through a pipe passing into the safe, said pipe being formed of an inner and outer pipe insulated from each other, branch wires connecting the screen- 105 wire with the inner pipe, a branch wire connecting the wire from the door with the outer pipe, whereby the circuit is completed when connections between the outer and inner pipe are established, substantially as and for the 110 purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ANTHONY P. PRICHARD.

Witnesses:

EDW. C. HALL,

A. G. PRICHARD.