

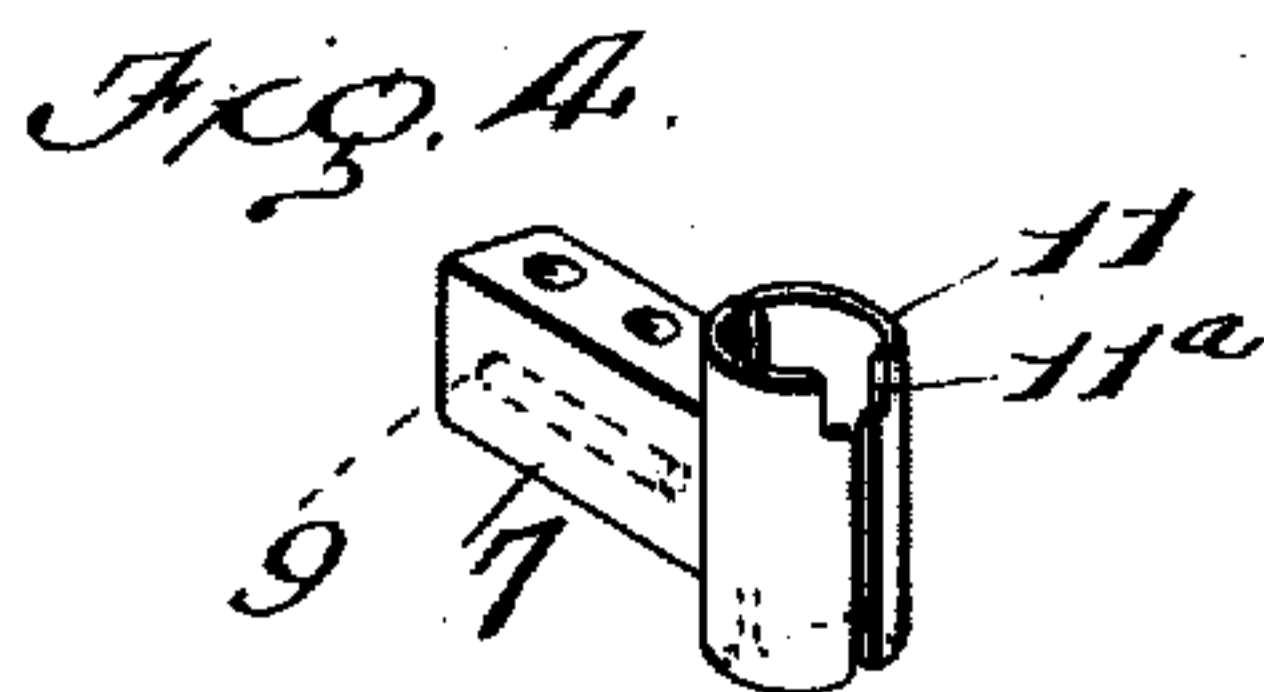
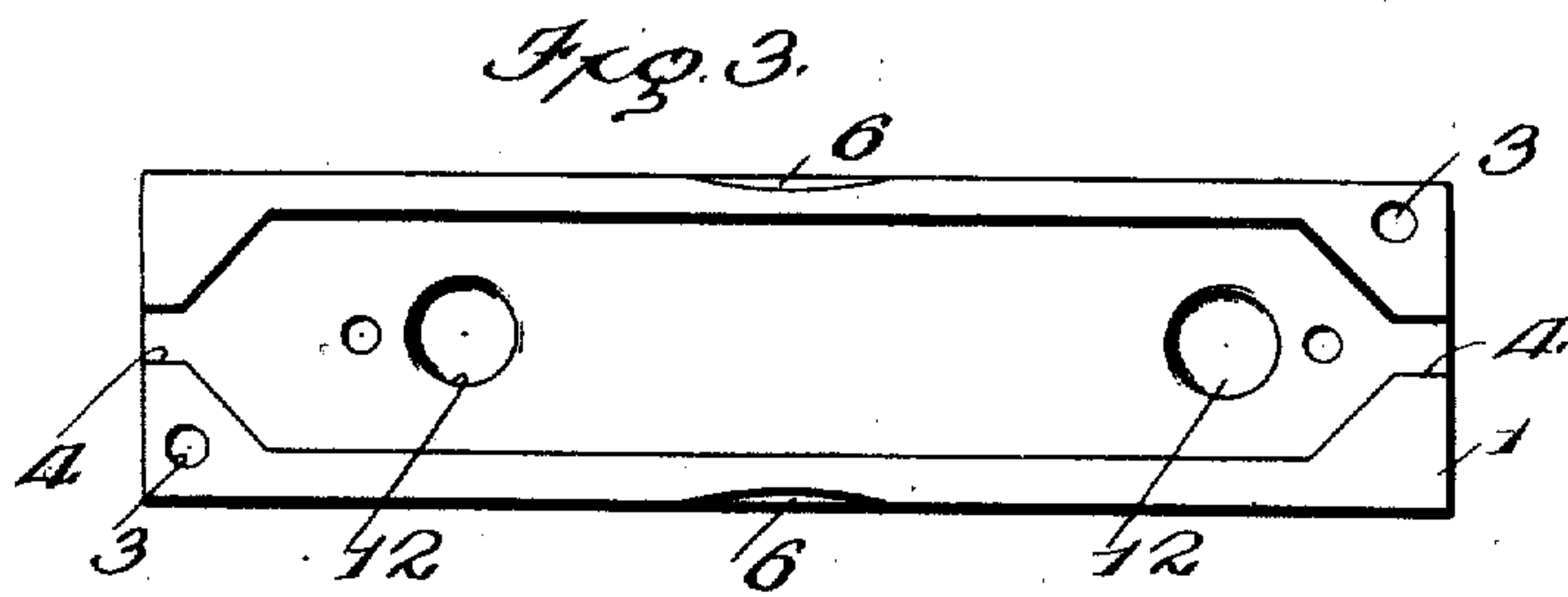
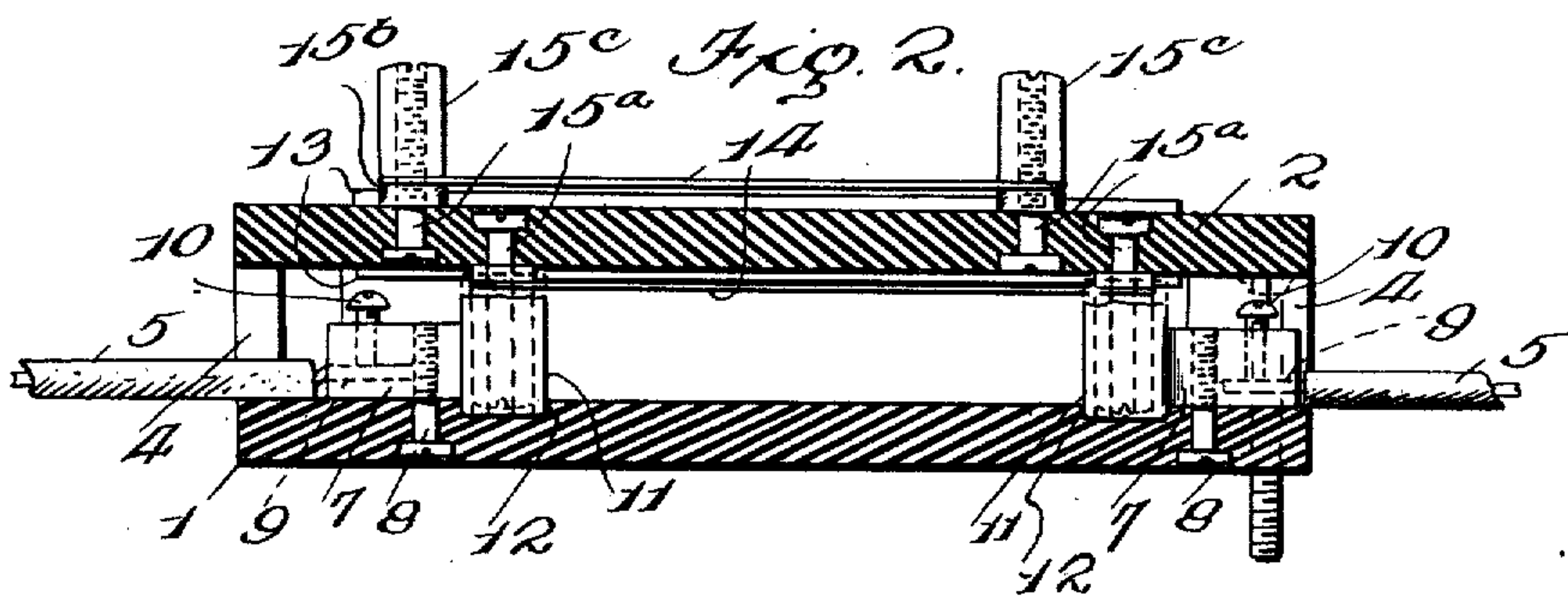
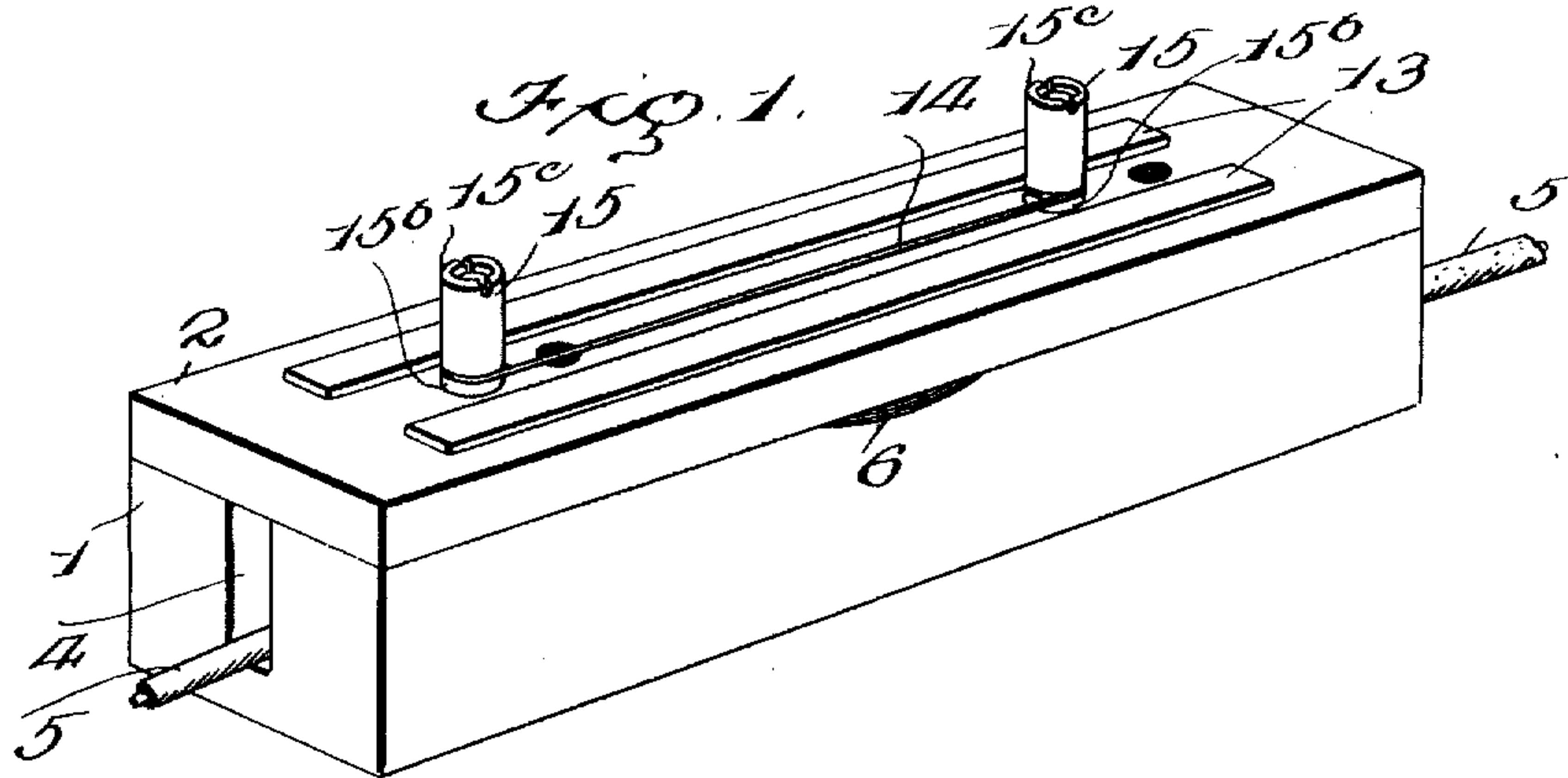
H. W. SHEEHY.

FUSE BOX.

APPLICATION FILED MAY 5, 1908.

924,844.

Patented June 15, 1909.



Witnesses

W. H. Woodson

Inventor

Harry W. Sheehy

By

Harold

Attorneys

UNITED STATES PATENT OFFICE.

HARRY W. SHEEHY, OF AKRON, OHIO.

FUSE-BOX.

No. 924,844.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed May 5, 1908. Serial No. 431,034.

To all whom it may concern:

Be it known that I, HARRY W. SHEEHY, citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Fuse-Boxes, of which the following is a specification.

The object of the present invention is the provision of an improved fuse box embodying a novel construction which admits of a burnt out fuse being quickly and easily replaced without any delay or loss of time, such delay not only being inconvenient but being sometimes accompanied by danger as where a street car provided with air brakes is on a down grade and the fuse in the circuit of the motor operating the air compressor becomes ruptured.

The invention has for its further object to accomplish this result by means of a fuse box which is simple and durable in its construction and enables the burnt out or ruptured fuses to be readily replaced without the necessity of shutting off the current or without danger of contact with a live wire.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a fuse box embodying the invention. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a plan view of the casing. Fig. 4 is a detail view of one of the connecting blocks.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates the casing and 2 the cover therefor, the said members being formed of porcelain, hard rubber, or other material of a similar nature. Diagonally opposite corners of the casing are provided with the openings 3 designed to receive screws or similar fastening members for securing the casing to a wall, panel, switch-board, or other support. Slots 4 through which the wires 5 of the main circuit extend are provided at opposite ends of the casing and the sides of the casing are formed with finger receiving depressions 6 which enable a firm grip to be readily obtained upon the cover when removing the same or placing it in position. A connecting

block 7 is secured within the casing at each end thereof by means of a screw 8 passing through the bottom of the casing and engaging the block, and one end of each of these blocks 7 is formed with a longitudinal opening 9 for receiving the wire 5 which is clamped within the opening by means of a set screw 10. The opposite end of each of the connecting blocks 7 is provided with a socket formed by a pair of spring jaws 11 which project upwardly and downwardly below the block, the downwardly projecting portion being loosely received within a recess 12 in the base, the said recesses cooperating with the screws 8 to properly position the jaws.

The cover 2 is reversible and is provided upon both of its faces with a pair of outwardly projecting parallel ribs 13 between which a fuse wire 14 is arranged, one of the wires being located upon each side of the cover and the said wires being protected against injury by means of the ribs. Opposite ends of the fuse wires 14 are engaged by contact members or binding posts 15 which project outwardly from the cover, those binding posts upon the inner face of the cover being designed to enter the sockets defined by the spring jaws 11 so as to introduce the fuse wire connecting the same into the main circuit. Each of the binding posts comprises a screw 15^a which extends through the cover, a collar 15^b which is threaded upon the screw for cooperation with the head thereof to retain the screw in position upon the cover and a head 15^c provided for clamping the fuse wire against the collar.

One of the connecting blocks 7 is disposed somewhat nearer the adjacent end of the casing than the opposite connecting block and the binding posts disposed upon the cover are arranged in a similar manner so that when the heads of the inner set of binding posts are engaged by the jaws 11 the cover will fit accurately upon the casing. It will be observed however that the binding posts upon the opposite sides of the cover are arranged in a reverse manner so that when the cover is reversed to introduce the opposite fuse wire into the circuit it is necessary to revolve the cover endwise as well as transversely. With this construction the two binding posts at each end of the cover are thrown out of alinement with each other so that there is no danger of the screws 15^a

being brought into electrical connection. When one of the fuses burns out or becomes ruptured for any reason the cover 2 is removed from the casing and again applied thereto in a reverse manner as previously set forth so that the opposite set of binding posts enter the sockets defined by the spring jaws 11 and the opposite fuse is introduced into the circuit. The fuse which was previously burnt out may then be readily replaced without the necessity of cutting off the circuit or without danger of coming into contact with a live wire. At this point it may be noted that the free ends of the spring jaws 11 are notched at 11^a to receive the fuse wire so that there is no danger of cutting or severing the wire when the cover is placed in position.

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

20 1. In a fuse box, the combination of a casing, a reversible cover for the casing, a fuse wire upon each side of the cover, and means for introducing either of the fuse wires into the circuit.

25 2. In a fuse box, the combination of a casing, a reversible cover for the casing, a pair of spaced ribs projecting from each side of the cover, a fuse wire upon each side of the cover, said fuse wires being arranged between the ribs, and means for introducing either of the fuse wires into the circuit.

35 3. In a fuse box, the combination of a casing, connecting blocks within the casing, a reversible cover, and a fuse upon each side of the cover, either of the fuses being adapted to be introduced into the circuit between the connecting blocks.

40 4. In a fuse box, the combination of a casing, connecting blocks arranged within the casing, a reversible cover for the casing, contact members projecting from opposite sides of the cover, and fuse wires connecting the contact members upon each side of the cover, either set of the contact members being designed to engage the connecting blocks when the cover is in position.

45 5. In a fuse box, the combination of a casing, connecting blocks arranged within

the casing and formed with sockets, a reversible cover for the casing, contact members projecting from opposite sides of the cover, and a fuse wire connecting the contact members upon each side of the cover, either set of the contact members being designed to enter the sockets of the connecting blocks when the cover is in position. 50 55

6. In a fuse box, the combination of a casing, connecting blocks arranged within the casing and provided with spring jaws, a reversible cover for the casing, contact members projecting from opposite sides of the cover, and a fuse wire connecting each set of contact members, either set of contact members being designed to engage the spring jaws of the connecting blocks when the cover is in position. 60 65

7. In a fuse box, the combination of a casing, connecting blocks arranged within the casing, a reversible cover for the casing, contact members projecting from opposite sides of the cover, a fuse wire connecting the contact members upon each side of the cover, and ribs projecting from opposite sides of the cover, the said ribs receiving the fuse wires between them and either set of contact members being designed to engage the connecting blocks when the cover is in position. 70 75

8. In a fuse box, the combination of a casing, connecting blocks arranged within the casing and formed with sockets, a reversible cover for the casing, a pair of spaced ribs projecting from each side of the cover, contact members projecting from each side of the cover, and a fuse wire connecting the contact members upon each side of the cover, the said fuse wires being disposed between the ribs and either set of the contact members being designed to engage the connecting blocks when the cover is in position. 80 85

In testimony whereof I affix my signature in presence of two witnesses. 90

HARRY W. SHEEHY. [L. s.]

Witnesses:

GEO. W. MERZ,

WALTER HERBERICH.