

No. 713,503.

Patented Nov. 11, 1902.

H. R. SARGENT.
FUSE CARRIER.

(Application filed Mar. 5, 1901.)

(No Model.)

Fig. 1

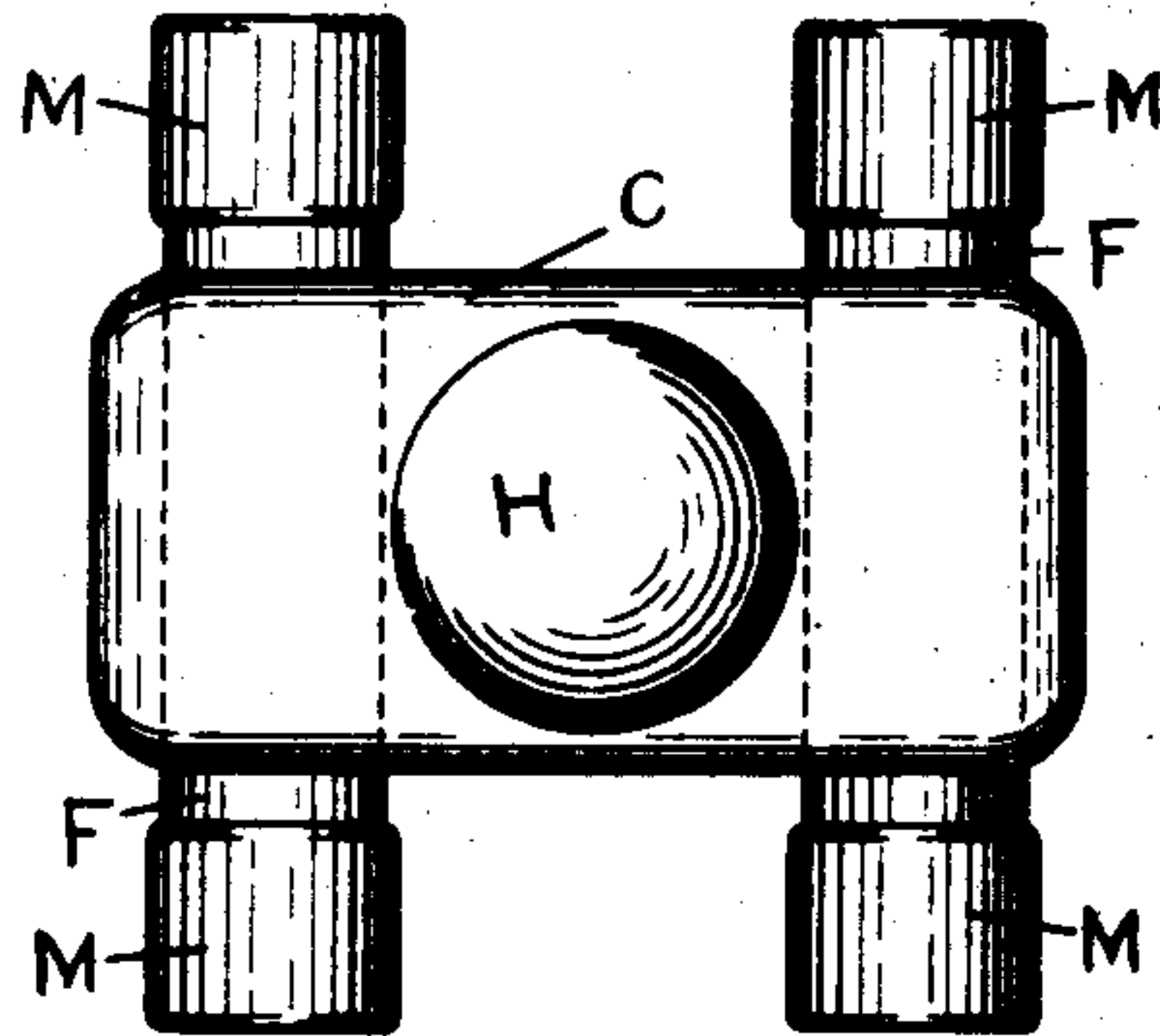


Fig. 2.

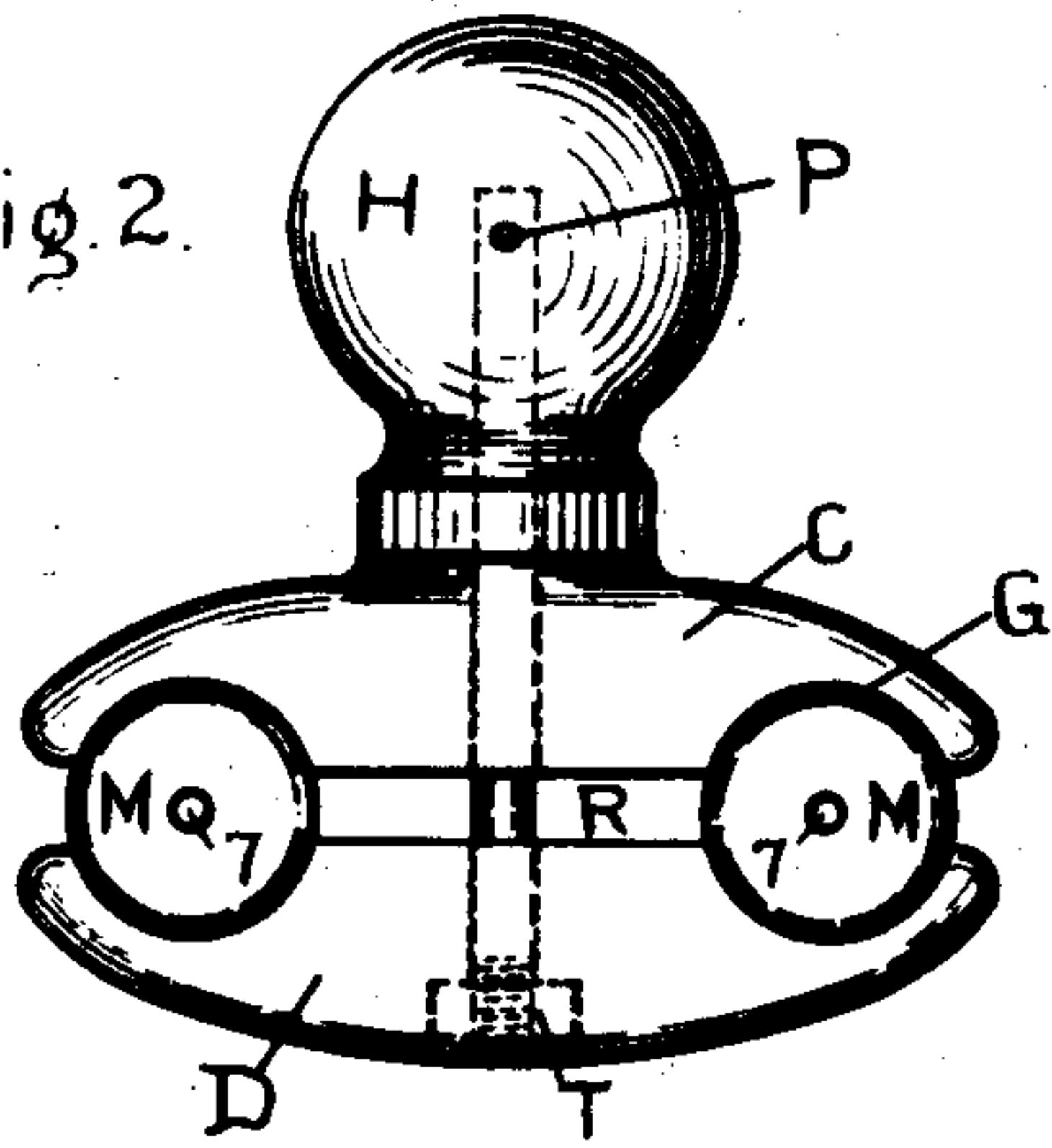


Fig. 3.

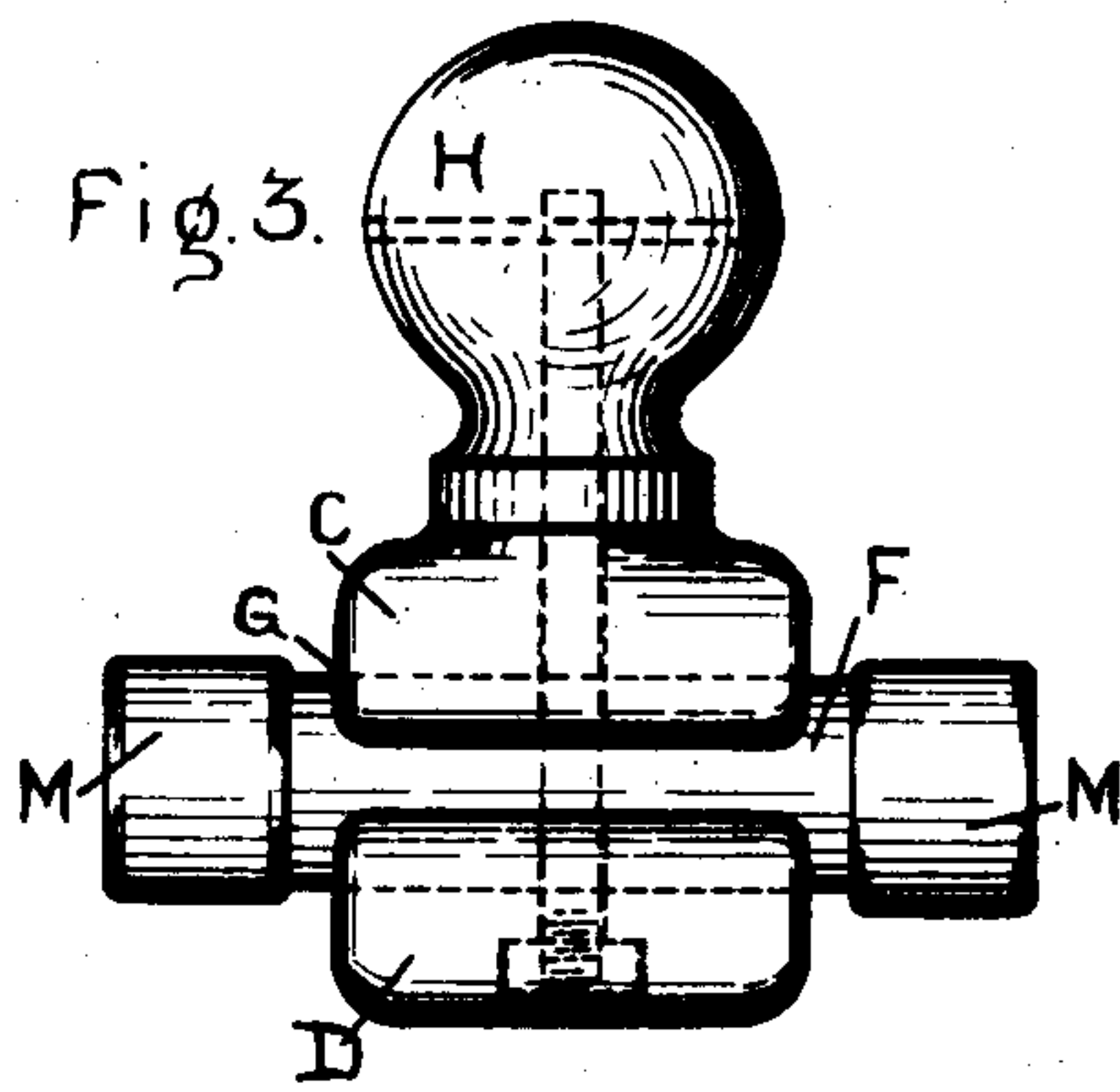
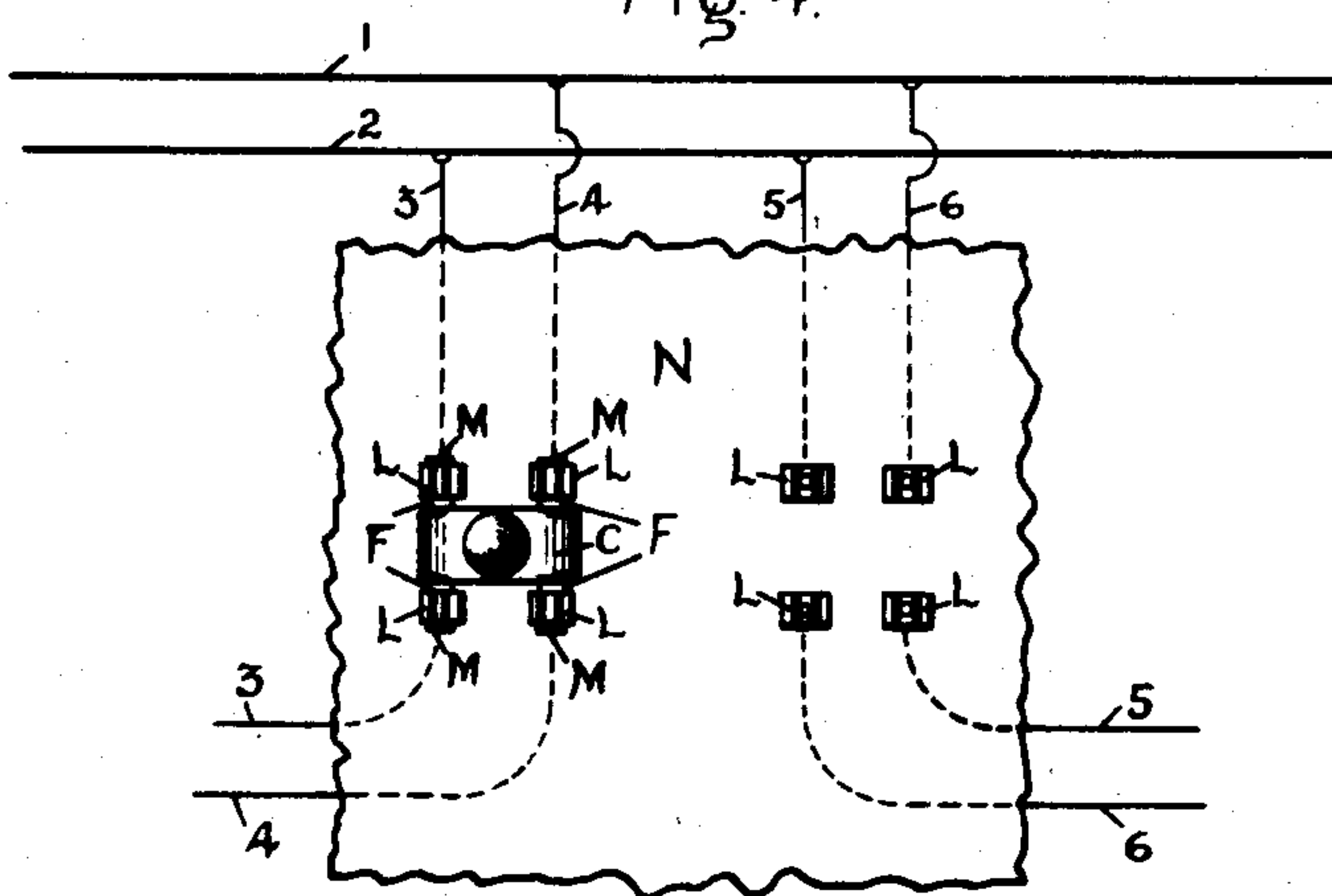


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

HOWARD R. SARGENT, OF SCHENECTADY, NEW YORK, ASSIGNOR TO
GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

FUSE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 713,503, dated November 11, 1902.

Application filed March 5, 1901. Serial No. 49,676. (No model.)

To all whom it may concern:

Be it known that I, HOWARD R. SARGENT, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Fuse-Carriers, (Case No. 2,101,) of which the following is a specification.

This invention relates to carriers for fuses for electric circuits; and it consists in providing means for supporting the fuses so that they can be readily placed in the circuits or removed therefrom both for the purpose of inserting new fuses and to break the circuit.

The particular embodiment of the invention illustrated herein is a structure adapted to carry two fuses of the inclosed type of the specific form disclosed in my application for patent, Serial No. 1,407, filed March 14, 1900; but departures may be made for use with different fuses which will also include the invention. Fuses of this type were formerly inserted directly by hand into spring terminal clips, and there was thus considerable danger of shock from the circuit-terminals as well as inconvenience in having loose fuses lying about. By the use of a device constructed in accordance with this invention such danger is avoided, since the handle H of the device is some distance away from the spring terminal clips, and, furthermore, the device is very convenient as a carrier, especially for two fuses when fuses can be simultaneously inserted or removed, and in any case it can serve a very useful purpose as a switch.

Of the drawings, Figure 1 is a plan of the device, showing in position inclosed fuses of the "cartridge" type described in my application for patent above mentioned; Fig. 2, a side elevation of the same. Fig. 3 is an end elevation; and Fig. 4 is a plan of a portion of a switchboard or cabinet-panel, showing the circuits and the manner in which the device may be used.

The carrier comprises two clamping members C and D, of suitable insulating material, such as porcelain, one or both of which are provided with grooves G for the reception of the fuses. The fuses F are provided with end pieces M, of conducting material, to which

the ends of the inclosed fuses are soldered, as shown at 7 in Fig. 2. The shell intermediate these ends is usually of insulating fiber, and, as shown in Fig. 3, the clamping members C and D grip these intermediate portions, thereby leaving the end pieces M free to engage the spring terminal clips L. (Shown in Fig. 4.) The clamping member C is provided with a handle H, which may be either integral with the member or independently constructed. As shown in the drawings, it is independent, and a bolt R is secured in it by a pin P. When the fuses are inserted in the grooves G of the clamping members, the handle H is grasped to push the bolt R down through the hole in the clamping member C and the hole in the clamping member D to engage the nut T, which is located in a recess in the lower portion of the clamping member D. The grooves G are formed in the clamping members on opposite sides of the bolt R, so that the clamping members can grip the fuses in a symmetrical manner without subjecting either fuse to greater pressure than the other. As the two fuses are intended to be inserted in the same circuit, they are of uniform size, and hence as the grooves G are of corresponding size neither pair of adjoining ends of the clamping members will meet before the fuse between the other pair of ends is gripped thereby.

As shown in Fig. 4, spring-clips L, of any desired construction, are mounted on the panel N and constitute the terminals of the different circuits 3, 4, 5, and 6, which branch from the bus-bars 1 and 2. These spring-clips grip the metallic ends M of the cartridge-fuses to make good contact and complete the circuit through the fusible conductor within the cartridge-casing. With the fuses inserted and gripped between the clamping members the handle H is grasped and the metallic ends M are inserted in the spring-clips, the clamping members taking a position intermediate the pairs of clips. When it is desired to break the circuit, the device may be used as a switch by simply removing it from the spring-clips. Furthermore, after one or both of the fuses have been blown the handle may be grasped to remove both fuses

from the spring-clips, when the device can be taken apart, the blown fuse or fuses removed, and new ones inserted.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A fuse-carrier which comprises two clamping members of insulating material provided with grooves for the reception of the fuses, and means for clamping said members about the fuses in the grooves.

2. The combination with two cartridge-fuses having metallic end pieces and intermediate portions of insulating material, of two clamping members of insulating material shorter than said intermediate portions and provided with grooves for the reception of said portions.

3. The combination with two inclosed fuses, of two clamping members provided with grooves for the reception of the fuses, and a handle on one of said clamping members whereby the fuses can be removed from the circuit as a switch, or for the purpose of replacing the fuses.

4. A fuse-carrier which comprises two clamping members provided with grooves for the reception of the fuses, a handle on one member, and means for clamping said members about the fuses in the grooves.

5. A fuse-carrier which comprises two clamping members of insulating material adapted to receive the fuses, and a bolt for clamping said members about the fuses.

6. A fuse-carrier which comprises two

clamping members, one of which is provided with a handle, and a bolt fixed to the handle to clamp said members about the fuses.

7. A fuse-carrier which comprises two clamping members of insulating material adapted to receive the fuses, one of said members being provided with a handle, and a bolt fixed to the handle to clamp the members about the fuses.

8. A fuse-carrier which comprises two clamping members of insulating material, grooves for receiving the fuses, and a handle provided with a bolt which passes through the members and engages a nut to clamp them about the fuses in the grooves.

9. A fuse-carrier which comprises two clamping members of insulating material, grooves for receiving the fuses, a handle on one of said members, and a bolt which extends into the handle to clamp the members about the fuses in the grooves.

10. A fuse-carrier which comprises two clamping members, a central handle on one member, a central clamping-bolt which extends into said handle, and grooves in said members for the fuses, on opposite sides of said bolt.

In witness whereof I have hereunto set my hand this 28th day of February, 1901.

HOWARD R. SARGENT.

Witnesses:

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MARGARET E. WOOLLEY.