C. E. HAGUE

MOISTURE AND GAS PROOF TELEPHONE CASE.

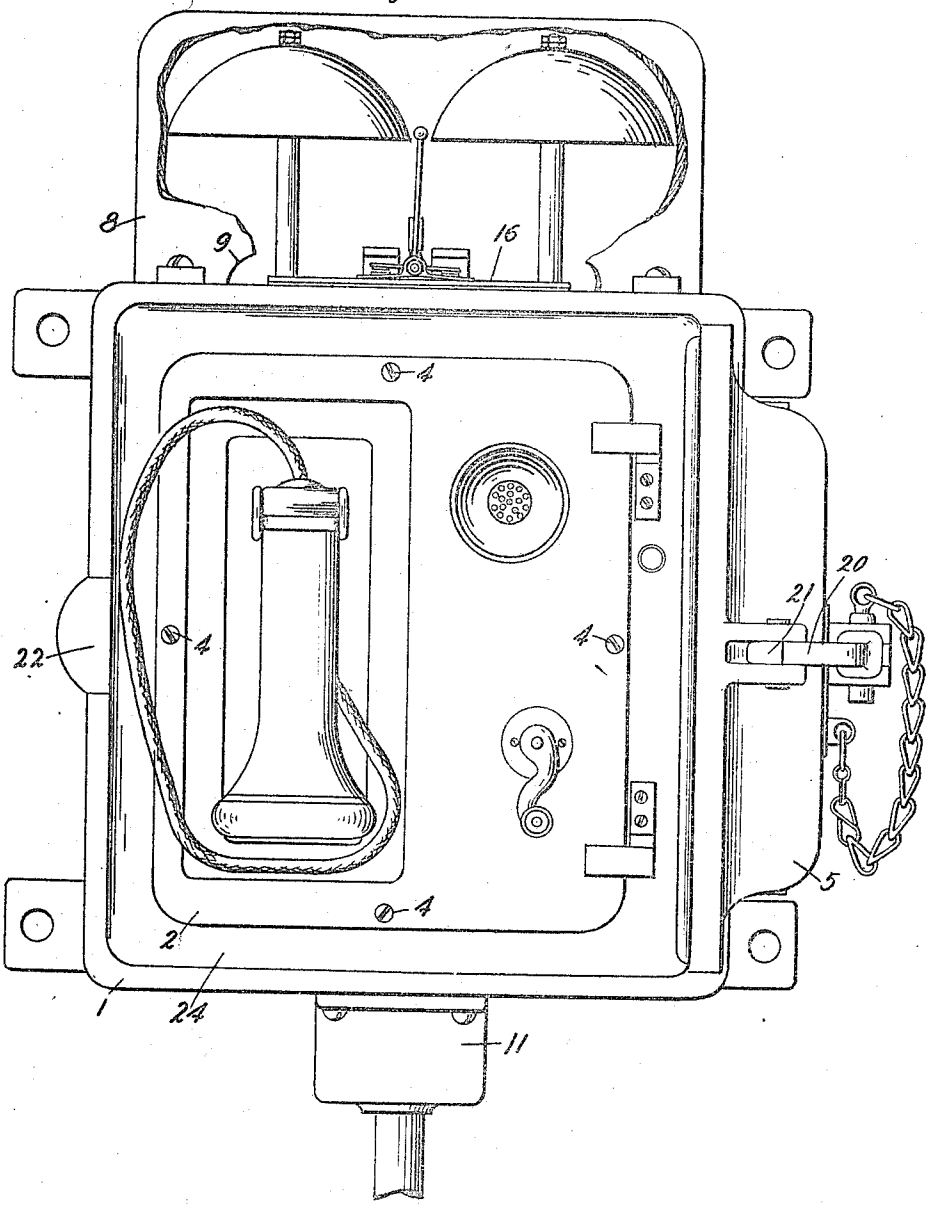
APPLICATION FILED JULY 8, 1914.

1,247,825.

Patented Nov. 27, 1917.

2 SHEETS—SHEET 1.

Fig. 1.



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Inventor:
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by C. C. Bradbury
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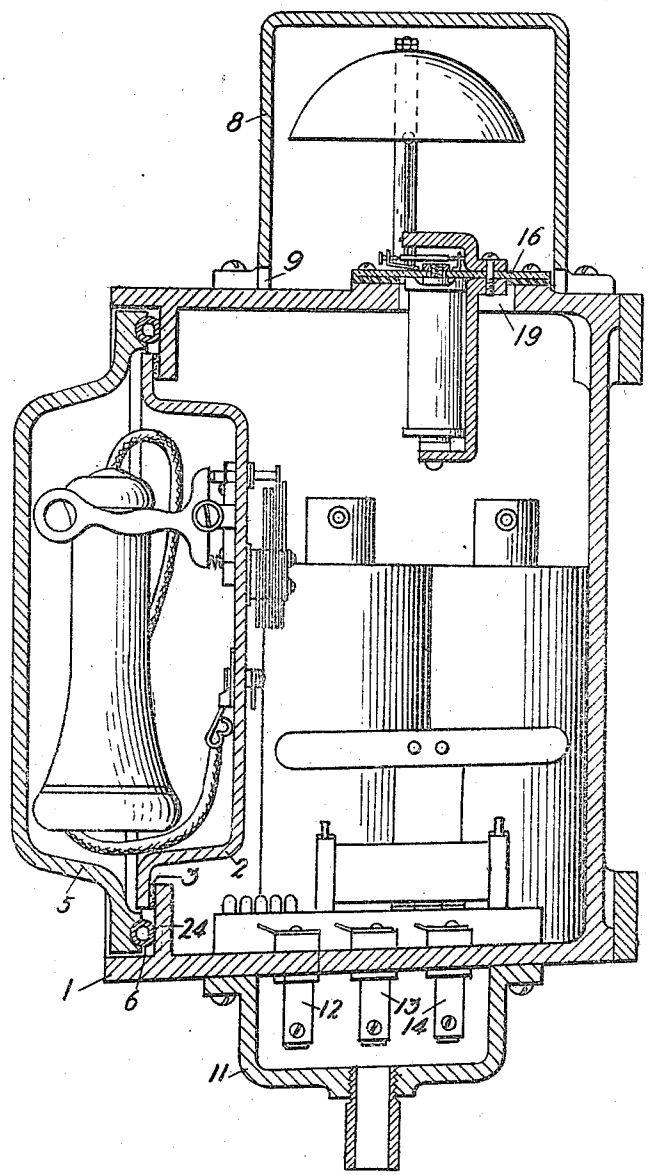
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2 SHEETS—SHEET 2.

Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES E. HAGUE, OF ROCHESTER, NEW YORK, ASSIGNOR TO STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

MOISTURE AND GAS PROOF TELEPHONE-CASE.

1,247,825. Specification of Letters Patent. Patented Nov. 27, 1917.

Original application filed May 25, 1910, Serial No. 563,260. Divided and this application filed July 8, 1914. Serial No. 849,739.

To all whom it may concern:

Be it known that I, CHARLES E. HAGUE, a citizen of the United States, residing in Rochester, county of Monroe, and State of New York, have invented certain new and useful Improvements in Moisture and Gas Proof Telephone-Cases, of which the following is a specification.

My invention relates to water and gas proof cases for telephone sets of the character adapted for use in mines or other places where the apparatus must necessarily be protected from moisture and from gases which would cause corrosion if allowed to come in contact with the delicate apparatus contained in the box.

This is a division of my application Serial No. 563,260, filed May 25, 1910, which resulted in Patent No. 1,108,166, dated August 25, 1914.

The principal feature of my invention resides in the arrangement by which the telephone box or case is sealed against moisture and gas, while still permitting the outer door of the case to be opened and closed so as to have access to the receiver and transmitter of the telephone set.

My invention is illustrated in the accompanying drawing in which Figure 1 is a front view partially broken away with the door open, and Fig. 2 is a section through Fig. 1 with the door closed.

The illustrated embodiment of my invention comprises a cast iron box portion 1, having an open front into which the inner door 2 is fitted, this door being held tightly against the sealing ring 3 by means of screws 4 so that no moisture or gases may pass the inner door and enter the inner chamber. The outer door 5 is hinged to the main casing 1 and is provided with a rubber or other sealing cushion 6, which, when the door is closed, prevents moisture and gases from entering the space between the outer and inner doors.

The cap 8 forms a cover and partial protection for the bells and the moving mechanism for sounding the gongs, this cap having the opening 9 at the front and sides to permit the sound to emanate freely in all directions.

The exterior circuit wires are brought to the telephone through water-proof conduit, this conduit terminating in the connection box 11 which is adapted to be tightly secured against the lower surface of the main inclosing case so that the connection terminals 12, 13 and 14 are completely protected from moisture and gas.

A non-magnetic metal plate 16 spans the opening in the top of the box between the working moving parts of the annunciator bell which are located outside of the box and the coils for operating these moving parts which are located within the box, this plate serving to completely seal the opening 19 against the passage of gas or moisture.

The door 5, which is shown in Fig. 1 as standing open, carries a pivoted locking member 20 having a projecting catch 21 adapted to fit into an opening on the inner side of the case where it is expanded at 22. The movement of this lever about its pivot to the position shown brings about a lever-like action between the catch 21 and the outer edge of the opening in the part 22 such that the door 5 and its tubular sealing cushion 6 are pressed very firmly against the face 24 which entirely surrounds the opening.

A particular advantage is obtained by the use of a tubular sealing cushion resulting from the fact that it is more pliable than the solid rubber sealing cushion and does not become set or lifeless by reason of long non-use.

It will be seen that with my invention the parts of the telephone which would be damaged by moisture or gases are entirely inclosed so that even though the telephone should become entirely submerged in water it would not be damaged and could be used immediately after the water had subsided below the level of the door. This becomes of considerable importance in the operation of mine telephones, since it is very important that the telephones should at no time become disordered.

Though I have shown my invention applied to a mine telephone, it is to be understood that it is also applicable to police or outdoor telephones and in fact to extension

bells or any other device wherein it is important to protect the electrical parts of the device from moisture and gases.

What I claim is:

1. In a moisture proof case for telephone apparatus, a flange extending inwardly and surrounding the opening into the case, an inner partition secured against the outer face of said flange, water and gas proof sealing material between said inner partition and said flange, an outer door for the case also engaging the outer face of said flange, and a gas proof cushion carried by the door and pressed against the outer face of said flange when the door is closed.

2. In a moisture and gas proof case, a flange extending inwardly from the walls of the case and completely surrounding the opening into the case, a dished partition having its rim secured to the outer face of said flange and serving to inclose a portion of said case, a door hinged to the case and adapted to swing into proximity with the outer face of said flange, and a tubular sealing cushion carried by the door and adapted to be pressed against the outer face of said flange when the door is closed.

Signed by me at Rochester, county of Monroe, and State of New York, in the presence of two witnesses.

CHARLES E. HAGUE.

Witnesses:
E. A. REINKE,
ROSCOE R. STITT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."