

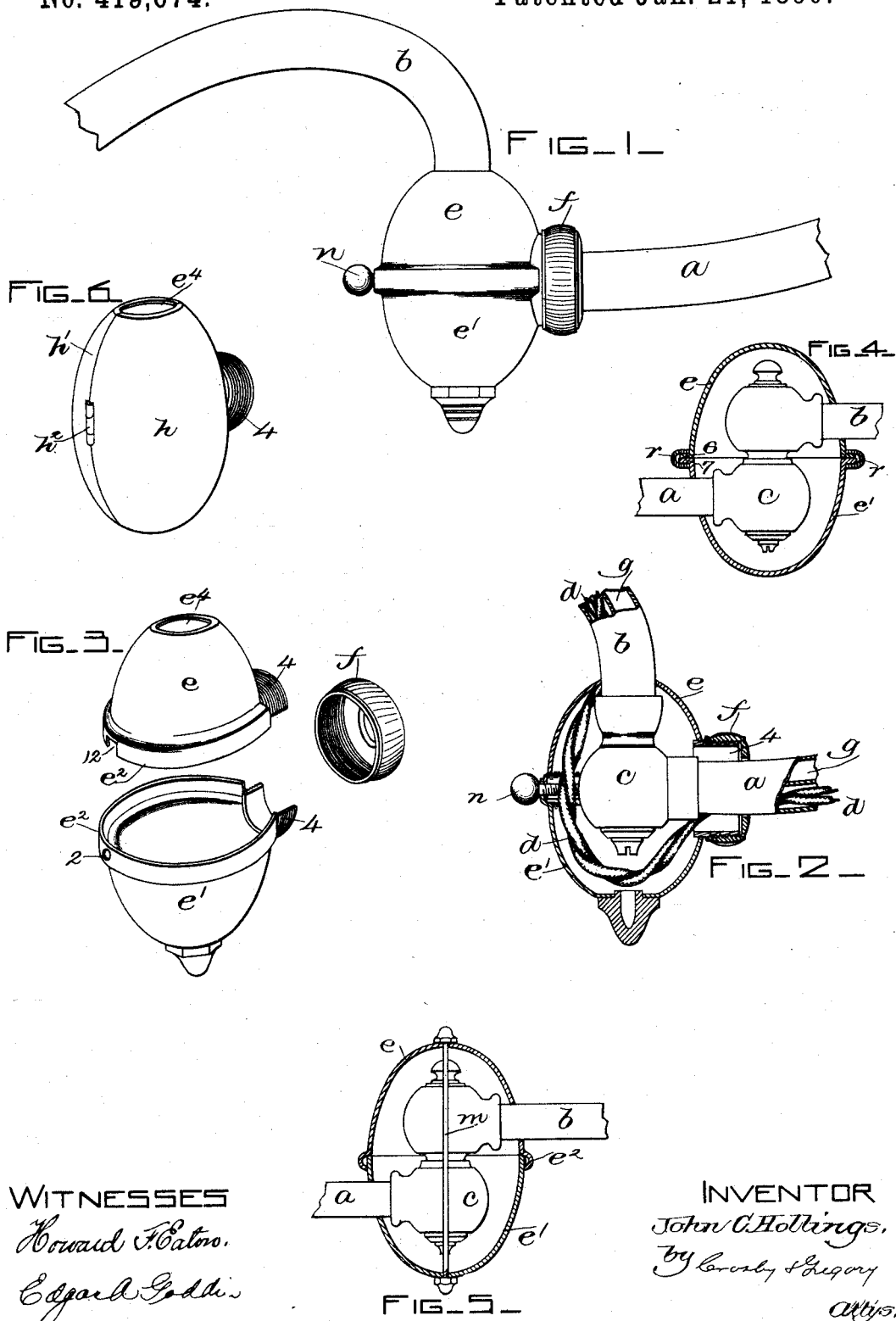
(No Model.)

J. C. HOLLINGS.

SHIELD OR PROTECTOR FOR ELECTRIC CONDUCTORS OF COMBINED
GAS AND ELECTRIC FIXTURES.

No. 419,674.

Patented Jan. 21, 1890.



WITNESSES

Howard F. Eaton.

Edgar D. Goddard.

INVENTOR
John C. Hollings,
by Crosby & Gregory
Attys.

UNITED STATES PATENT OFFICE.

JOHN C. HOLLINGS, OF BOSTON, MASSACHUSETTS.

SHIELD OR PROTECTOR FOR ELECTRIC CONDUCTORS OF COMBINED GAS AND ELECTRIC FIXTURES.

SPECIFICATION forming part of Letters Patent No. 419,674, dated January 21, 1890.

Application filed September 17, 1889. Serial No. 324,194. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. HOLLINGS, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Shields or Protectors for Electric Conductors of Combined Gas and Electric Fixtures, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide an ordinary swing-jointed bracket or fixture used for gas or electric lighting with a shield, which may be readily applied to the said bracket or fixture, practically concealing the swing-joint and the contacting wires leading from one to the other pipe of the fixture and crossing the joint externally.

My invention consists, essentially, in a swing-joint of a fixture and pipes leading thereto, each pipe having an opening at or near the said swing-joint, and an electric conductor leading from one of the said pipes outside the said swing-joint and into the other of said pipes, combined with a shield applied to the said swing-joint to cover and conceal the said electric conductor, substantially as will be described.

The shield referred to will preferably be made in two or more parts, which will be suitably secured together to surround the said swing-joint, but yet permit the same to move freely, and it is at all times readily removable from the fixture.

Referring to the drawings, Figure 1 is a partial side elevation of a combined gas and electric fixture provided with a shield or protector; Fig. 2, a partial section of the fixture shown in Fig. 1. Fig. 3 shows the said shield separated. Figs. 4, 5, and 6 represent modified forms of shield to be described.

Referring to Figs. 1, 2, 4, and 5, *a b* represent gas-pipes connected by a swing-joint *c* of usual construction. The pipes *a b* have usual passages—one *g* for gas and the other to receive any usual electric conductor *d*. Each pipe *a b*, near where it is joined to one member of the swing-joint *c*, has a hole to enable the electric conductor *d* to be led, for instance, from the pipe *a* outside the usual swing-joint *c*, and thence into the pipe *b*. A fixture having the conducting-wire led out-

side of a usual swing-joint would be objectionable and unsalable; but to overcome such objections I have devised and combined with such fixture and swing-joint a shield which substantially conceals the joint and electric conductors, and at the same time permits the free movement of the joint when it is desired to swing a part of the fixture aside.

In Figs. 1 to 3 the shield is represented as composed of two concavo-convex shells *e e'*, represented as flanged, as at *e²*, so that one shell may fit into or partially embrace the other, and I have also in said figures shown each shell as provided with a projection 4 to receive a suitable locking device, represented as a ring *f*, the said shield when applied to the fixture, as best represented in Figs. 1 and 2, embracing the pipe *a*, the locking device serving to keep the two shells in position with relation each to the other. The shell *e* has an opening *e⁴*, through which is extended the pipe *b* of the fixture.

In the form of my invention embodied in Figs. 1 to 3, and also in the form of my invention as embodied in Fig. 6, the pipe *b* is free to revolve in the said opening *e⁴*, the two parts of the shield being fixed with relation to the fixture and the swing-joint.

To help sustain the shield I may, as represented in Figs. 1 and 2, insert a screw, as *n*, through the hole 2 in the shell *e'* and abut the end of the said screw against the fixed part of the swing-joint, a notch, as 12, in the shell *e* embracing the said screw.

In the form of my invention represented in Figs. 4 and 5 the shell *e* is provided at its side with a hole, through which is extended the pipe *b*, the shell *e'* having a hole at one side, through which is extended the pipe *a*, such construction requiring that one shell shall rotate on the other when the fixture is turned about the swing-joint as a center.

In Fig. 4 I have represented the contiguous edges of the two shells as flanged at 6 7 and embraced loosely by a suitable clip *r*.

In Fig. 5 a flanged part *e²* of the shell *e* overlaps the edge of the shell *e'*, and the two shells are kept from separating by means of a connection *m*, (shown as a piece of wire extended from one into the other shell,) the said connection being bent around outside the swing-joint, the connection passing loosely

through holes in the shell, so that the latter may turn on the connection.

In the modification, Fig. 6, the shield is divided in the direction of its longer axis rather than in the direction of its shorter axis, as in Fig. 3, the shield *h h'* in Fig. 6 being represented as hinged together at *h*².

From the foregoing it will be understood that the shield may be variously modified as to shape without departing from my invention.

I am aware that rosettes have been applied to fixtures, the said rosettes surrounding stationary parts of the fixture to conceal an electric conductor, and I am also aware that a jointed fixture has had a specially-contrived swing-joint with a hole through its central part to permit an electric conductor to pass through the central part of the joint, the said joint necessitating the employment of a threaded cap to complete a part of the gas-passage and requiring another threaded cap to conceal the electric conductor at the bottom of the joint; but in my invention it will be understood that the swing-joint is unaltered—that is, it is the common established form of swing-joint, such joint being much less expensive and more durable than the joint referred to as having been used.

I claim—

1. The combination, in a fixture, of a swing-joint and two pipes connected therewith, each provided with an opening, and an electric conductor led through one of the said openings in one of the said pipes outside the said swing-joint and into the opening of the other of the said pipes, and an attachable conductor-concealing device made independent of the

fixture, and constructed as a shield applied to the said swing-joint to envelop the same and said electric conductor, leaving the swing-joint free to be turned in the usual manner, substantially as described.

2. The two pipes *a b* of a fixture, a swing-joint *c* connecting them, and an electric conductor led from one of the said pipes outside the said swing-joint and into the other of the said pipes, combined with an attachable conductor-concealing device made independent of the fixture, and constructed as a shield having two openings through which extend, respectively, the said pipes, the said shield embracing the said swing-joint and concealing it and the said electric conductor, substantially as described.

3. The two pipes *a b* of a fixture, a swing-joint *c* connecting them, and an electric conductor led from one of the said pipes outside of and across the said swing-joint and into the other of the said pipes, combined with an attachable conductor-concealing device made independent of the fixture, and constructed as a shield having two openings through which extend, respectively, the said pipes, the said shield embracing the said swing-joint and concealing it and the said electric conductor, and with means to retain the two parts of the shield together and in position about the said swing-joint, substantially as described.

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

JOHN C. HOLLINGS.

Witnesses:

GEO. W. GREGORY,
B. DEWAR.