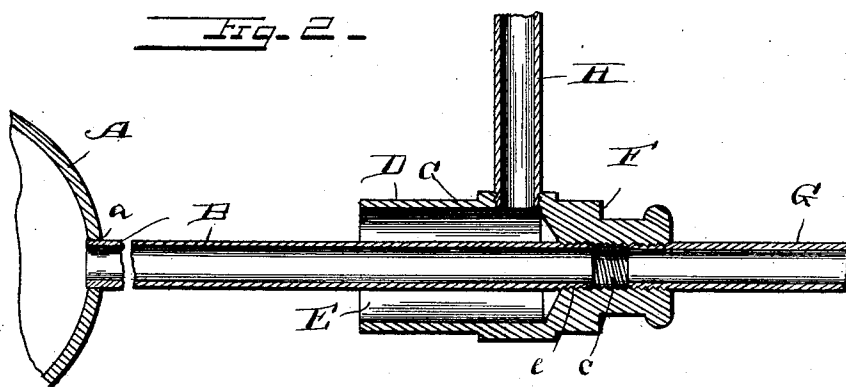
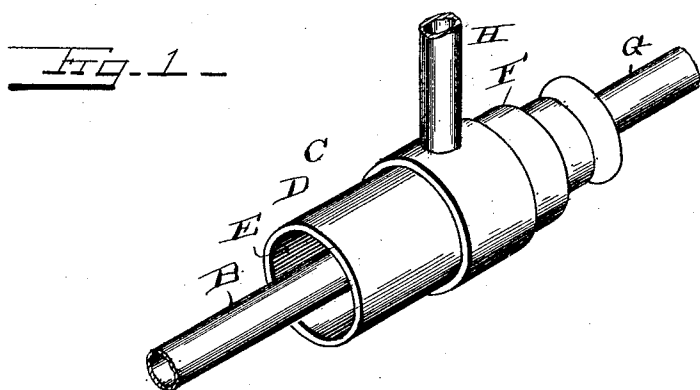


(No Model.)

A. GARRETSON.
SAFETY COUPLING FOR GAS MAINS.

No. 481,397.

Patented Aug. 23, 1892.



Witnesses
Jesse Heller
Philip L. Mason

Inventor
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UNITED STATES PATENT OFFICE.

AMOS GARRETSON, OF FALL CREEK, INDIANA.

SAFETY-COUPPLING FOR GAS-MAINS.

SPECIFICATION forming part of Letters Patent No. 481,397, dated August 23, 1892.

Application filed March 31, 1892. Serial No. 427,211. (No model.)

To all whom it may concern:

Be it known that I, AMOS GARRETSON, a citizen of the United States, and a resident of Fall Creek, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Safety-Couplers for Gas-Mains; and I do 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a perspective view. Fig. 2 is a longitudinal section.

This invention has relation to safety-couplings for gas-mains; and it consists in the novel construction and combination of parts, as hereinafter specified.

It has been found that a frequent cause for the explosion of natural gas in dwelling-houses and other buildings exists in the fact that when a leak occurs in a main the escaping gas follows along the main until it reaches a point where it is tapped for a house or other connection. The gas is there directed away from the main and follows along the branch pipe into the house or building, and coming in contact with fire or with a lighted match is ignited and explodes.

The object of this invention is to provide a coupling so constructed that the gas escaping from any leak in the main upon reaching the pipe connection will be directed away from the surface thereof and caused to escape into the open air.

In the accompanying drawings the letter A designates a section of a gas-main tapped at *a* with a small pipe B.

C designates my improved coupling having a cylindric or angular portion D of a diame-

ter considerably greater than that of the pipe B, and having therein a chamber E, communicating at its rear end with a threaded aperture *c*. Said pipe B extends into the chamber E, its screw-threaded end *e* fitting the aperture *c*. Said aperture extends along the other portion F of the coupling and is fitted to the pipe G, leading into the house or other building.

Through the wall of the chamber E is an aperture into which is fitted an escape-pipe H, which carries the gas to a point where it will escape freely into the open air.

The operation of the device, which will be readily apparent from the above, is as follows: The gas escaping from a leak in the main, following along the short pipe B, enters the chamber E, from which it passes into the pipe H and escapes into the open air, being directed away from the pipe G and prevented from entering the building.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with a gas-main and a service-pipe leading therefrom, of a safety-coupling connected to said service-pipe, said coupling having in one end portion a chamber E, opening toward said main, said chamber surrounding a portion of said pipe, an escape-pipe communicating with the inner end of said chamber through the wall thereof, and the passage in said coupling in which the ends of the service-pipe sections are threaded, substantially as specified.

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

AMOS GARRETSON.

Witnesses:

D. C. CHIPMAN,
C. J. LONG.