G. W. THORN.

EXTENSIBLE GAS PIPE.

APPLICATION FILED MAY 25, 1911.

1,015,853. Patented Jan. 30, 1912.

Fig. 1

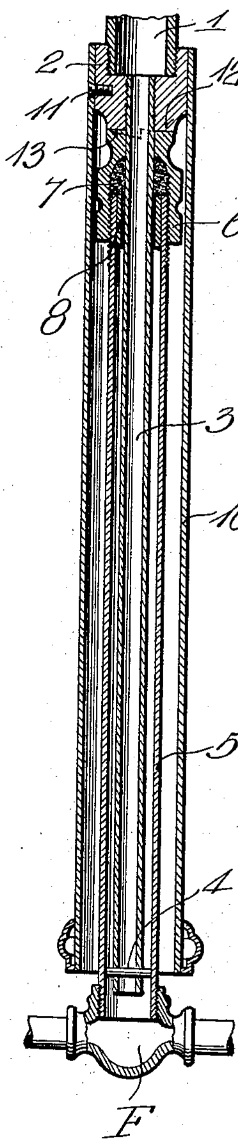


Fig. 2

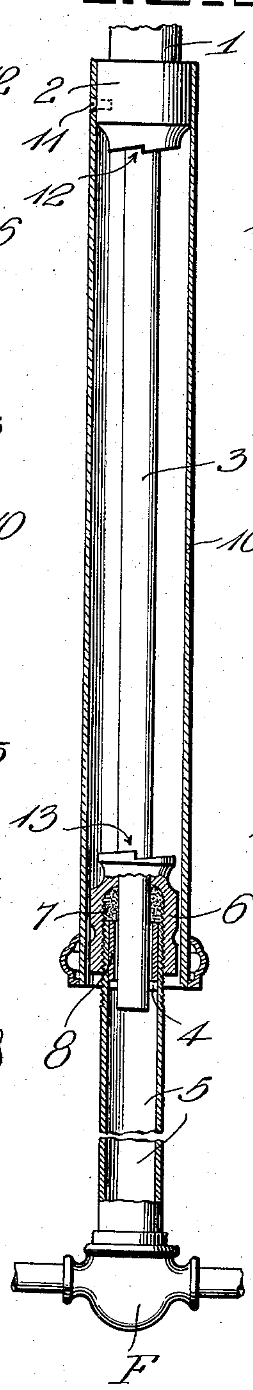


Fig. 3

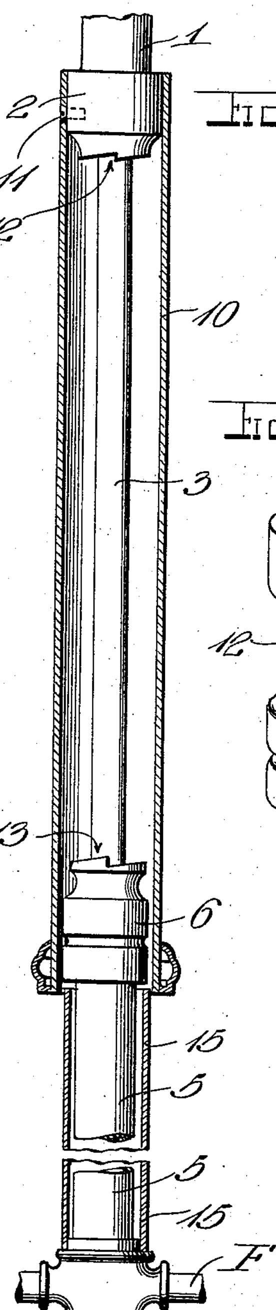
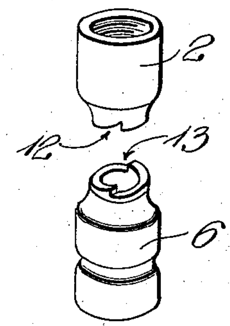


Fig. 4



Witnesses

C. [illegible]

O. B. Hopkins

Inventor

G. W. Thorn

by H. B. Willson & Co.

Attorneys

UNITED STATES PATENT OFFICE.

GEORGE W. THORN, OF CHICAGO, ILLINOIS.

EXTENSIBLE GAS-PIPE.

1,015,853. Specification of Letters Patent. Patented Jan. 30, 1912.

Application filed May 25, 1911. Serial No, 629,474.

To all whom it may concern:

Be it known that I, GEORGE W. THORN, a citizen of the United States, residing at 1529 East Seventy-third street, Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Extensible Gas-Pipes; 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.

This invention relates to gas fixtures, and more especially to those that are extensible; and the object of the same is to produce certain improvements in my Patent No. 851,569, issued April 23, 1907.

To this end the invention consists in the details of construction hereinafter more fully described and claimed, and as shown in the drawings wherein—

Figure 1 is a central vertical sectional view of this extensible gas pipe with the parts closed up. Fig. 2 is a similar view with the parts drawn out. Fig. 3 is a similar view showing how two casings may well be employed. Fig. 4 is a perspective detail of the two clutch members.

In the drawings I have shown the parts in a position the opposite from that illustrated in my former patent; that is to say, I prefer that the fixed tube shall be the inner member and the sliding tube the outer member so that the upper end of the latter is closed by the stuffing box and packing and scales or other particles of dirt and the like cannot fall into it; and I also make use of one or possibly two casings which may be thin ornamented shells surrounding the unsightly gas pipe so as to give the whole device a finished appearance.

Referring to the drawings, the numeral 1 designates a pipe depending from a ceiling or overhead support, and 2 is a collar attached to its lower end and preferably threaded inside. Into these threads engages the upper end of the inner pipe or tube 3 which is comparatively small and has a transverse pin 4 extending loosely through its lower end as shown, this pin sliding freely laterally and being of a length to extend across the interior of the outer pipe 5. The interior diameter of the outer pipe is somewhat larger than the exterior diameter of the inner pipe to permit of inequalities in or deflection of the latter and yet allow the two pipes to slide one upon the other. The upper end of the outer pipe 5 is externally threaded and screwed thereon is a stuffing box or collar 6 whose upper extremity is contracted so as to contain packing 7 above the end of the pipe and below the contracted end of the collar; and obviously by screwing the latter onto the pipe this packing is compressed more tightly around the inner pipe or tube. Within the upper end of the outer pipe depends a bushing 8 which, when the two telescopic pipes are drawn out as seen in Fig. 2, strikes upon the pin 4 and limits the extension of this entire device. To the lower end of the outer pipe 5 is attached a fixture F of any suitable type.

Telescopic pipes of this character almost invariably hang from an overhead support such as a ceiling and are drawn down for use or pushed up when they are to be out of the way; and it often occurs that a slight leak will disclose itself and it becomes desirable to overcome the same without the necessity for climbing on a piece of furniture or seeking a step ladder. In order to effect this I provide the adjacent faces or ends of the collars 2 and 6 with clutch members 12 and 13 as best seen in Fig. 4, their detailed construction being unimportant. When the leak occurs the operator grasps the fixture F and turns the same to the right. This causes the clutch members to engage each other so that rotation of the collar 6 is resisted by the fixed position of the collar 2 and the engagement of their clutch members, and continued turning in the proper direction screws the outer pipe 5 upward into the collar 6 and compresses the packing 7 so that the leak is overcome. I consider this an important feature of my invention. Telescopic pipes of this character are usually of iron and rather unsightly, and one feature of the present invention is to cover them by a casing which may be suitably ornamented and is preferably of light brass or other metal having a polished and tasteful exterior.

In Fig. 1 a single casing member 10 is shown, being a thin tube attached at its upper end at the point 11 to the collar 2, from which point it depends loosely around the collar 6 and throughout the length of the outer pipe 5 to its lower end where it carries a fanciful rosette or similar orna-

ment. Obviously such a casing will hide or conceal the entire telescopic elements when the same are compressed or assembled as seen in Fig. 1, but would not hide the lower portion when the parts are drawn out as seen in Fig. 2.

In Fig. 3 I have shown a second casing 15 somewhat smaller than the outer casing 10 and sliding or moving telescopically within it, and this second inner or smaller casing is secured at its lower end to the lower portion of the outer pipe 5 or to the fixture F and is obviously drawn downward when the parts are drawn apart or distended as seen in Fig. 2. Therefore at this time the two casing sections completely conceal the gas pipes and the entire device is rendered more tasteful in appearance. These casing sections are not gas-tight, and by preference the inner one does not fit so closely within the outer as to scratch its exterior when the parts are moved.

I do not limit myself to the exact details of construction except as hereinafter described, nor to the size and materials of parts.

What is claimed as new is:

1. An extensible gas pipe or fixture comprising a stationary inner section and an extensible outer section slidably mounted upon said inner section, a stuffing box at the upper end of the outer section surrounding the inner section, and a transversely-disposed element loosely mounted in and slidable laterally through the lower end of the inner section to limit the outward movement of the outer section, substantially as described.

2. An extensible gas pipe or fixture comprising a stationary inner section and an extensible outer section slidably mounted upon said inner section, a stuffing box at the upper end of the outer section surrounding the inner section, a bushing depending from said box within the outer section, and a transversely-disposed element loosely mounted in and slidable laterally through the lower end of the inner section and adapted to be struck by said bushing when the sections are drawn outward.

3. In an extensible gas pipe, the combination with a ceiling pipe, a collar secured thereto and having a clutch element at its lower end, an inner pipe section depending from this collar, and a stop-pin through its lower end; of an outer section having a fixture at its lower end, a collar screwed upon its upper end and having a clutch element, packing within said collar and beyond the upper extremity of this section, and a bushing depending from said packing within the upper end of the outer section and adapted to strike said stop-element when the sections are drawn out.

4. In an extensible gas fixture, the combination with a fixed inner pipe having a stop-element at its lower end, a sliding outer pipe having a fixture at its lower end, and a collar at the upper end of this pipe containing packing closely surrounding the inner pipe; of a casing rigidly connected at its upper end with the inner pipe and loosely depending over said collar and throughout the length of the outer pipe, and a rosette at its lower end.

5. In an extensible gas fixture, the combination with a fixed inner pipe having a stop-element at its lower end, a sliding outer pipe having a fixture at its lower end, and a collar at the upper end of this pipe containing packing closely surrounding the inner pipe; of a casing rigidly connected at its upper end with the inner pipe and depending over the outer pipe, and a second and inner casing rigidly connected at its upper end with the upper end of the outer pipe and depending throughout the length of the latter and within the outer casing.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE W. THORN.

Witnesses:
WARREN L. JAQUES,
CHARLES RUNBERG.