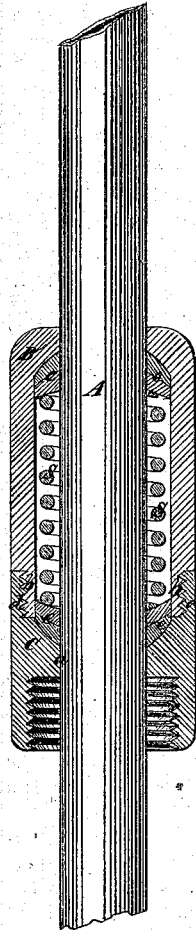


CHARLES DEAVS.

Improvement in Sliding Gas-Joints for Extension Drop-Lights.

No. 115,447.

Patented May 30, 1871.



Witnesses.

*Wm. H. Haynes*  
*R. R. Halsey*

*Charles Deavs*

# UNITED STATES PATENT OFFICE.

CHARLES DEAVS, OF NEW YORK, N. Y., ASSIGNOR TO THE ARCHER AND PANCOAST MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN SLIDING GAS-JOINTS FOR EXTENSION DROP-LIGHTS.

Specification forming part of Letters Patent No. 115,447, dated May 30, 1871.

*To all whom it may concern:*

Be it known that I, CHARLES DEAVS, of the city, county, and State of New York, have invented a new and Improved Sliding Gas-Joint for Extension Drop-Lights and other Gas-Fixtures; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification:

This sliding joint consists of a box of novel construction intended to be attached to the outer one of the two pipes to be connected, and to slide upon the inner pipe, and fitted with packing-rings and an interposed spring, by which the said rings, owing, in part, to the construction of the interior of the box, are caused to be contracted around the inner pipe and to preserve a gas-tight sliding connection.

The accompanying drawing represents a central vertical section of my improved sliding gas-joint, showing it applied to a gas-pipe.

To enable others to understand the nature of my invention, I will proceed to describe it with reference to the drawing.

A represents a portion of the inner pipe of the joint. B and C are two socket-like pieces which together constitute the box. The upper piece B has a cavity formed in it of considerably larger diameter than that of the pipe A. The bottom of this cavity is of conical form and has extending through it a hole, *a*, which is of a size to fit snugly but easily around the pipe A. Formed on the lower end of this piece is a male-screw thread, *b*, which screws into a

female-screw thread within the mouth of the lower piece C. In the latter piece there is a cavity of similar diameter to that in the piece B, and having a similar conical bottom, with an opening, *a*, for the passage of the pipe A; and below this cavity there is provided within the said piece C a female-screw thread, *d*, into which the outer pipe of the joint is intended to be screwed. In each of the cavities in the pieces B C are leather packing-rings *ee*, which surround the pipe A. The two sets of packing-rings are forced against the conical bottoms of the cavities by an interposed spiral spring, S, which is arranged within the box and surrounds the pipe A.

The packing-rings, being forced into the two conical bottoms of the box by the spiral spring, are by the conical surfaces caused to be compressed forcibly against the pipe A and form a tight joint. The spring, exerting a constant pressure on the rings *ee*, will, as they become worn away or shrunk, contract them and keep them compressed around the pipe A, and so preserve the joint.

What I claim as my invention, and desire to secure by Letters Patent, is—

The case B C, of conical form at its inner extremities, in combination with the flexible packing *ee* at each end, and the interposed spiral spring S, as shown and described.

CHARLES DEAVS.

Witnesses:

FRED. HAYNES,  
R. E. RABEAU.