

L. HULL.
Gasalier Extension Apparatus.

No. 123,022.

Patented Jan. 23, 1872.

Fig 1

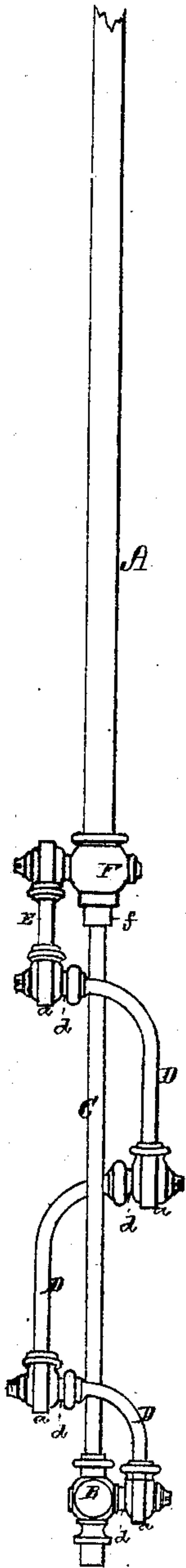


Fig 2.

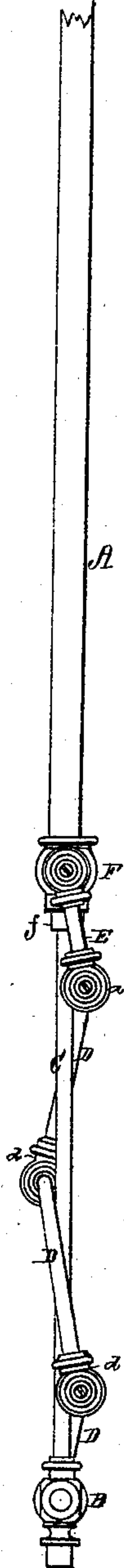


Fig 3.

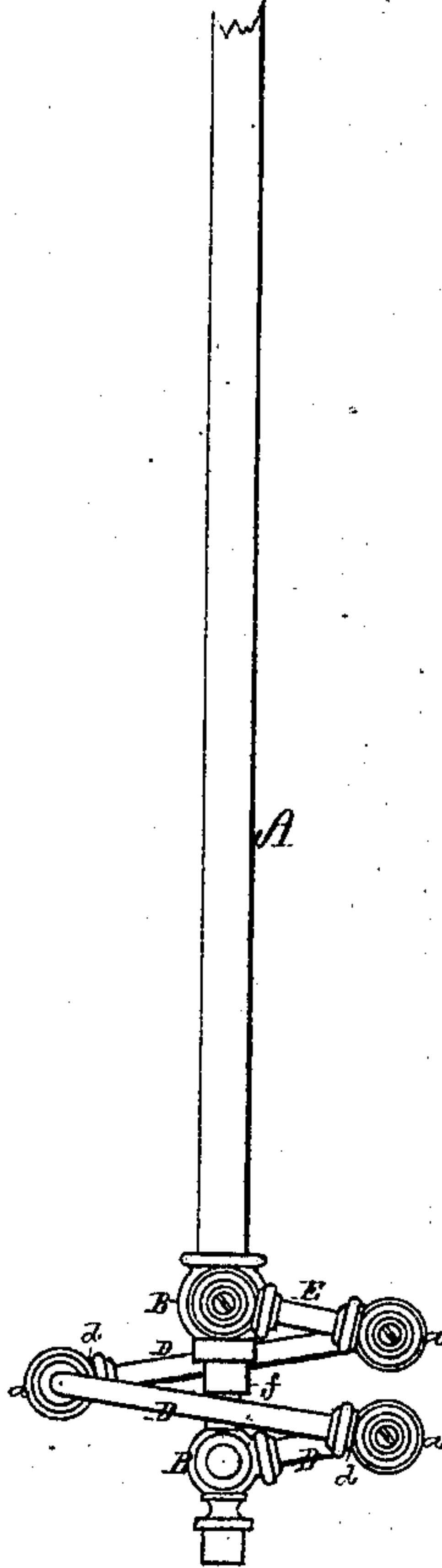


Fig 4.

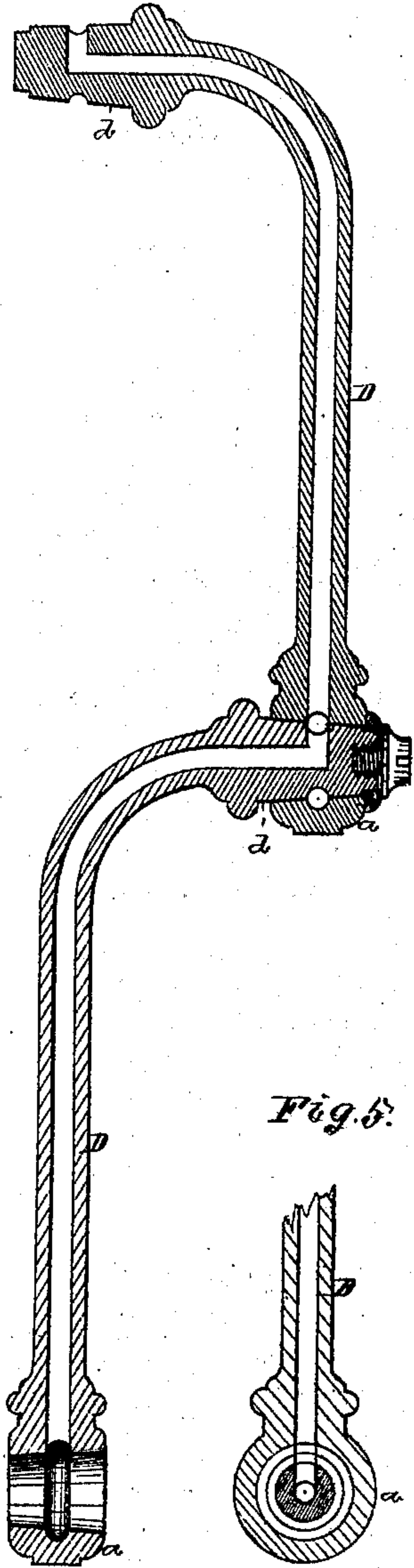
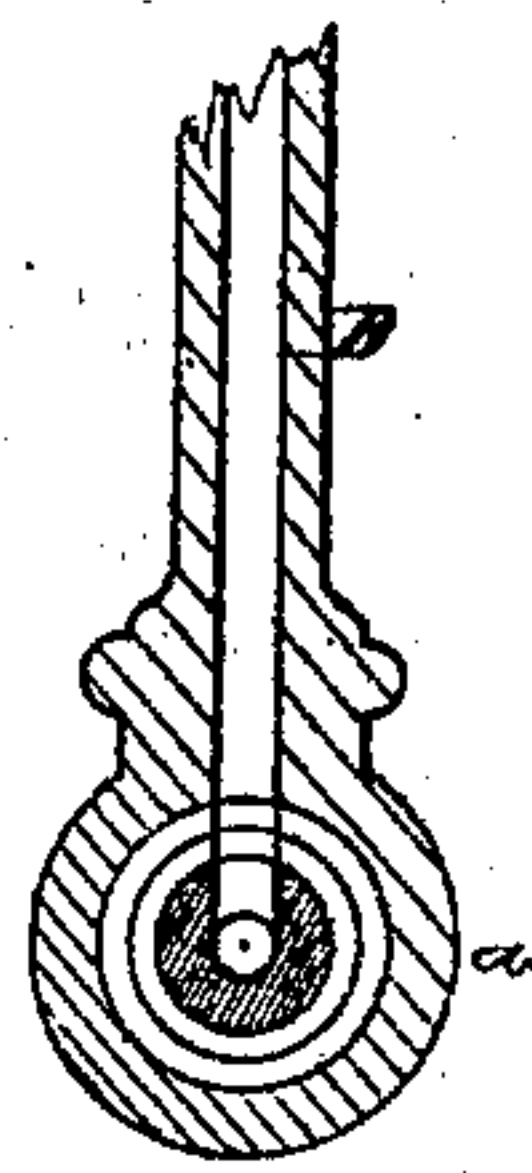


Fig 5.



Witnesses.

S. N. Piper
L. N. Möller

Liverus Hull.

by his attorney.

N. W. Wadby

UNITED STATES PATENT OFFICE.

LIVERUS HULL, OF CHARLESTOWN, MASSACHUSETTS.

IMPROVEMENT IN GASALIER EXTENSION APPARATUS.

Specification forming part of Letters Patent No. 123,022, dated January 23, 1872.

To all persons to whom these presents may come:

Be it known that I, LIVERUS HULL, of Charlestown, of the county of Middlesex and State of Massachusetts, have invented an Improved Gasalier Extension Apparatus; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a front elevation, and Fig. 2 a side view of it.

My apparatus is intended for the support of a gasalier having a series of gas-burners; or it may be used to support a single gas-burner applied to it in any proper manner. As shown in the drawing, it is composed of an induction-tube, A, an induction-head, B, a guide-rod, C, and a series of tubes, D D D E, jointed together and to the head B, and another head, F, from which the induction-tube is extended, as shown.

My present invention consists in an improved arrangement of each of the tubes D or D and E, in the carrying out of which each tube D is curved, as shown, so as to extend across the guide-rod, one tube crossing it on one side of it and the other crossing it on the opposite side of it, all the tubes being jointed together, as represented at *a*, so as to be capable of being folded in manner as shown in Fig. 3 when the guide-rod *c* is forced upward into the induction-tube, or of being unfolded or drawn into position, as shown in Figs. 1 and 2. Each tube is provided at one end with a joint-piece, *d*, to encompass and turn on the next adjacent tube, the whole being constructed so that there shall be a continuous passage from one head through all the tubes to the other head, whether such tubes be in a folded or unfolded state.

Fig. 4 is a longitudinal section of two of the tubes entire and their joint. Fig. 5 is a transverse section of the joint.

My improvement enables the folding system of tubes to be constructed with but one joint at the junction of each two of the tubes,

and to arrange the joints on opposite sides of the guide-rod in manner as shown, all of which is advantageous as well as ornamental.

It will be seen that each of tubes D, by its peculiar arrangement with the rod C, is made to cross it in two directions. The tube E, which is the upper connecting-tube of the jointed set, is straight, and shorter than each of the others, and is jointed to the set and the upper head. In constructing the apparatus I design to have in the tube A a tube to encompass the guide-rod, and insulate it from the gas while passing through the tube A; and I also design to apply to the head F and the rod C a chambered thimble or nut to encompass the guide-rod and to screw upon the head F or the lower part *f* thereof, and contain a packing to make friction on the rod, so as to support it and whatever may be connected with it at any desirable altitude within the range of its movement.

I am aware of the extension gas-fixture patented March 29th, 1870, by Henry Kruger, and make no claim thereto. It differs from mine in having each of its links semicircular, whereas each of mine is practically quarter circular; also, in having each link arranged with its end in the same circle with the next one, whereas each of the links or tubes of my extension apparatus is at a right angle with that next to it. Furthermore, the joints in my apparatus are essentially different in construction from those of Kruger's apparatus, and have the pipes arranged in a different manner with respect to them.

I therefore claim—

My extension gas-fixture, as having its parts arranged and constructed in the manner as hereinbefore described, and as represented in the accompanying drawing.

LIVERUS HULL.

Witnesses:

R. H. EDDY,
J. R. SNOW.