J. LOCKHART.

STUFFING BOXES.

No. 195,829. Patented Oct. 2, 1877.

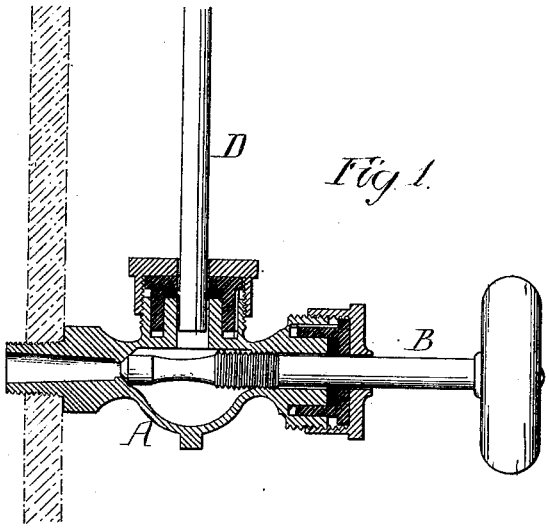

Fig. 1.

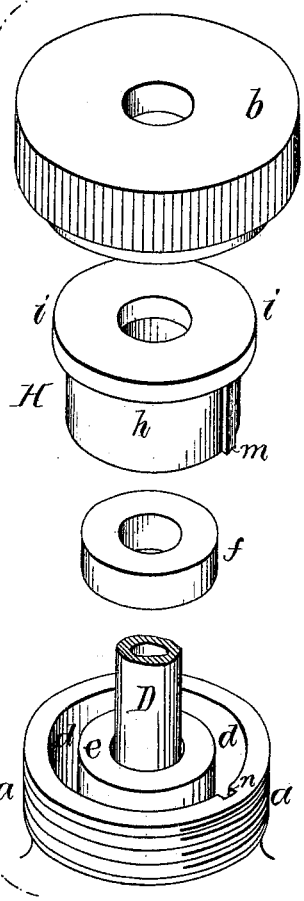

Fig. 2.

Witnesses
Henry Howson
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Inventor
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by his Attorney
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UNITED STATES PATENT OFFICE.

JOHN LOCKHART, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN STUFFING-BOXES.

Specification forming part of Letters Patent No. **195,829**, dated October 2, 1877; application filed August 22, 1877.

To all whom it may concern:

Be it known that I, JOHN LOCKHART, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Stuffing-Boxes, of which the following is a specification:

The object of my invention is to so construct a stuffing-box that the packing cannot be twisted and injured by the turning of the follower.

In the accompanying drawings, Figure 1 is a vertical section of my improved stuffing-box applied to a water-gage; and Fig. 2, perspective views of detached parts of the stuffing-box, drawn to an enlarged scale.

In Fig. 1, A is one of the valve-chests of a water-gage; B, the valve-spindle, and D a part of the glass tube fitted to the chest through the medium of my improved stuffing-box, which may be best explained by referring to Fig. 2.

The branch *a* of the valve-chest is threaded externally for receiving the screw-cap or follower *b*, and in this branch is formed an annular recess, *d*, leaving a central hub, *e*, through which the glass tube D passes freely.

A packing-ring, *f*, of rubber or other equivalent yielding material, is confined between the hub *e* and the intermediate follower H, the annular portion *h* of which fits snugly, but so as to slide freely, in the annular recess *d*, the flanged portion *i* being contained within the screw-cap or follower *b*.

There is a vertical slot, *n*, in the side of the annular recess *d*, and in this slot is arranged to fit snugly, but slide freely, a projection, *m*, on the intermediate follower H, which is thus prevented from turning.

When the several parts are fitted together and the cap *b* is screwed down tight, the packing-ring *f* will be compressed, and will consequently embrace the glass tube so tightly as to produce a perfectly-tight joint.

The objection to ordinary stuffing or packing boxes with screw-caps or followers is, that the packing is in direct contact with the follower, so that in the act of turning the latter there must be a tendency to twist the packing and impair its efficiency.

In my improvement, however, owing to the intermediate follower, which is incapable of turning, the packing, on turning the cap *b*, must be subjected to a direct pressure only.

A stuffing-box similar to that described above is used in connection with the valve-spindle B. The stuffing-box may, in fact, be used in connection with different objects, piston-rods, rotating shafts, &c.

I claim as my invention—

A stuffing-box in which an intermediate follower, made substantially as described, so as to be incapable of turning, is interposed between a screw-cap or follower and a packing, substantially as specified.

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

JOHN LOCKHART.

Witnesses:

HERMANN MOESSNER,

HARRY SMITH.