

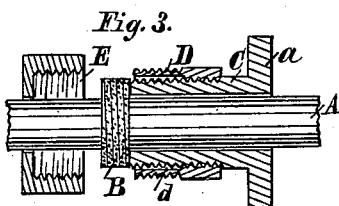
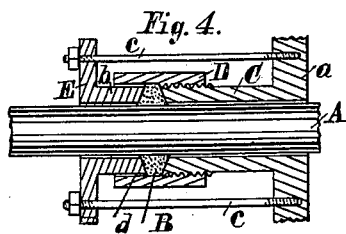
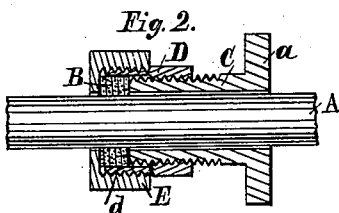
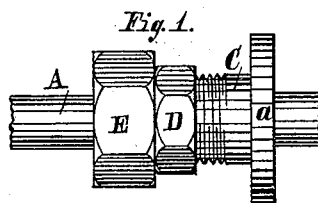
(No Model.)

H. STRATER.

STUFFING BOX.

No. 342,815.

Patented June 1, 1886.



Attest;
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UNITED STATES PATENT OFFICE.

HERMAN STRATER, OF BOSTON, MASSACHUSETTS.

STUFFING-BOX.

SPECIFICATION forming part of Letters Patent No. 342,815, dated June 1, 1886.

Application filed January 27, 1886. Serial No. 189,975. (No model.)

To all whom it may concern:

Be it known that I, HERMAN STRATER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Stuffing-Boxes, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in stuffing-boxes for packing the joints about tubes, piston-rods, valve-stems, &c. With the ordinary stuffing-boxes for these purposes the packing material is with considerable difficulty applied, since it must, before compression by the cap, be formed and squeezed into the box, as by the fingers, and it is often very difficult to remove the packing from the box, since it becomes hardened therein and there is no way of removing it, except by slowly picking or digging it out.

It is the object of my invention to obviate these difficulties and to make it possible to perform either operation, inserting or removing the packing, quickly and easily.

My invention consists in a stuffing-box wherein the body of the box is of two parts, one movable longitudinally on the other, as hereinafter set forth.

In the drawings, Figure 1 is an external view of a stuffing-box embodying my invention, the box having a cap which screws thereon. Fig. 2 is a longitudinal central section of the same. Fig. 3 is also a longitudinal central section, but showing the cap removed from the body of the box and one of the parts of the latter moved up on the other so as to expose the packing material, which is shown in full. Fig. 4 shows a section of a stuffing-box provided with my improvement, the cap of the box being bolted in place. Fig. 5 is a section by itself of the part D, as shown in Fig. 4.

At A is shown a portion of a tube, rod, or stem, for which the stuffing-box is provided, and around which the packing material B is placed. The body of the stuffing-box is of two parts, C and D. The inner part, C, which is adjacent to and in which the tube, rod, or stem A is to revolve or slide, has a flange, *a*. This flange is a part of or fixedly connected with the tube, cylinder, or valve-chest into which the pipe, rod, or stem is to extend. The other part, D, of the body of the box is open alike at both

ends, and is movable longitudinally on the part C.

In many stuffing-boxes the cap E screws on to the body of the box, as shown in Figs. 1, 2, and 3. In other stuffing-boxes the cap, either with or without a gland, *b*, is forced into place by bolts *c* or screws at the sides, as shown in Fig. 4. My invention is applicable to either style of boxes, as will be readily seen. I prefer to have the outer part, D, of the body of the box screw on the inner part, C. For this purpose the part C has a sufficient thread thereon to allow the part D to be moved completely over the same, the part D having a thread on the interior, which I prefer to be only through a part of its length, leaving a portion, *d*, of the interior surface, which projects over the packing, smooth.

To pack the joint between the tube, rod, or stem and the box, the cap E is unscrewed, or the nuts on the bolt holding the same are loosened, and the cap is moved back, the part D is moved up to be wholly over the part C, and the packing B is fitted or wound on the tube, rod, or stem A, as shown in Fig. 3. The part D is then moved back so as to cover the packing.

As shown in Figs. 1, 2, and 3, the cap is screwed onto the part D till the same comes to a stop on the part D, when the cap E and part D as one piece may be screwed upon the part C, to compress the packing, as required. As shown in Fig. 4, by means of bolts and nuts the gland *b* is forced against the packing. Thus there is no preliminary placing or squeezing the packing material endwise into the box, as by the fingers, which is necessary with the common stuffing-boxes.

To remove the packing, the cap is first removed from the part D, which is then screwed or moved completely over the part C, when the packing is fully exposed, to be readily unwound or cut from the tube, rod, or stem, no picking or digging out of the packing from the box being required, as with the ordinary stuffing-boxes.

I claim as my invention—

1. In a stuffing-box, the combination of the two parts C and D, forming the body of the box, the outer part open alike at both ends and movable longitudinally on the inner part, substantially as and for the purposes set forth.

2. In a stuffing-box, the combination of the

body of the box, formed of two parts, C and D, one open alike at both ends and movable longitudinally on the other, and the cap E, substantially as specified.

- 5 3. The combination of the tube, rod, or stem A, the inner part, C, of the body of the box, the outer part, D, of the body of the box, open

alike at both ends and adapted to screw onto the part C, and the cap E, substantially as set forth.

HERMAN STRATER.

Witnesses:

FRANCIS A. STRATER,
THEODORE G. STRATER.