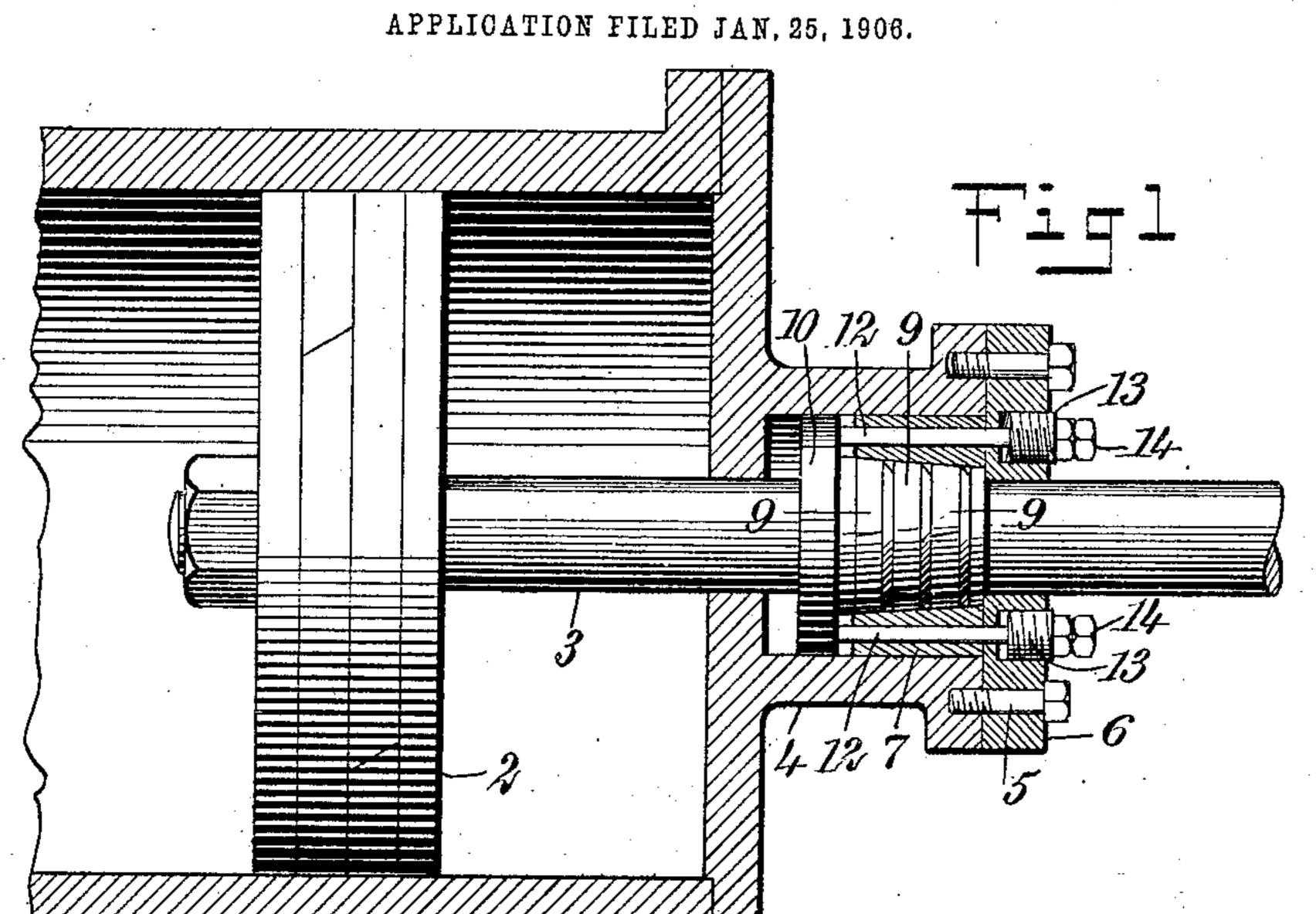
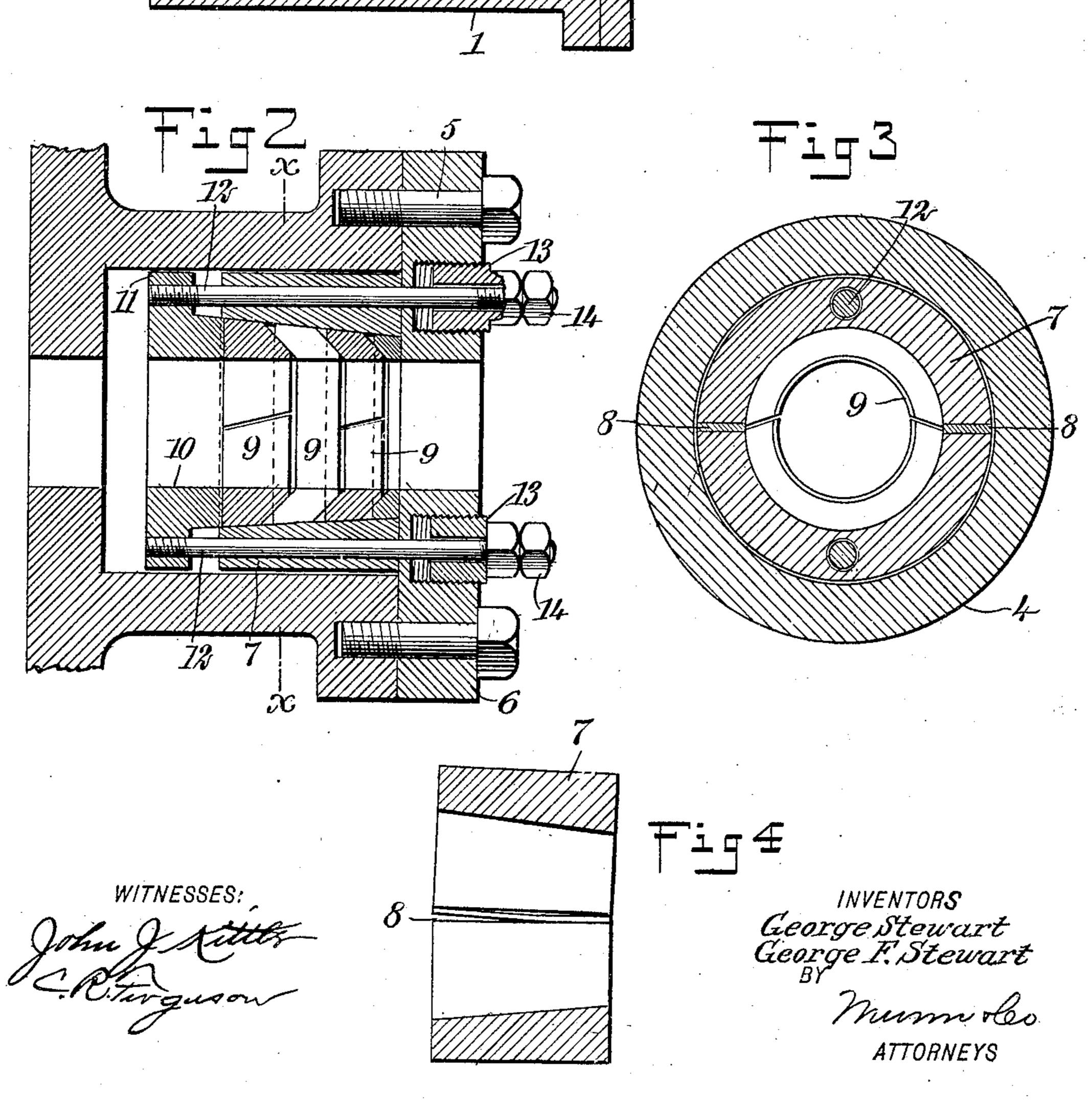
G. & G. F. STEWART.
ROD PACKING.





UNITED STATES PATENT OFFICE.

GEORGE STEWART AND GEORGE F. STEWART, OF NEW YORK, N. Y.

ROD-PACKING.

No. 832,431.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed January 25, 1906. Serial No. 297,790.

To all whom it may concern:

Be it known that we, George Stewart and George F. Stewart, citizens of the United States, and residents of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Rod-Packing, of which the following is a full, clear, and exact description.

This invention relates to improvements in rod-packings, the object being to provide a packing of simple construction that will effectually prevent the escape of steam or other motive agent, but permitting of a free movement of the rod.

We will describe a rod-packing embodying our invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference
indicate/corresponding parts in all the figures.

Figure 1 is a longitudinal section of a portion of a cylinder with a rod-packing embodying our invention thereon. Fig. 2 is a section of the rod, drawn on a larger scale than that of Fig. 1. Fig. 3 is a section on the line x x of Fig. 2; and Fig. 4 is a sectional view of the packing-ring sleeve or portion of the gland.

Referring to the drawings, 1 designates a cylinder within which is a piston 2, having a rod 3, which is movable through the packing now to be described.

The packing comprises a stuffing-box casing 4 on the head of the cylinder, and secured by means of bolts or screws 5 to the outer end of the casing is a gland 6. Extended inward from the gland 6 into the casing is a sleeve 7 for receiving the packing-rings. This sleeve 7 may be integrally connected to the gland 6. Preferably, however, it will be made separate therefrom and formed in two sections longitudinally separated, as indicated at 8, so that the sleeve may be readily removed and separated for the purpose of removing old glands and putting in new ones. The interior of the ring is longitudinally tapered, the smaller diameter being at the end adjoining the gland 6.

Operating in the sleeve is a series of metal-

lic packing-rings 9, which are exteriorly tapered to correspond to the taper of the sleeve. These rings are split, so as to readily yield, and each ring has one side tapered to fit in a corresponding tapered recess formed in the 55 adjoining ring.

Engaging against the inner packing-ring is a follower-ring 10, having an annular flange 11, provided with tapped perforations to receive threaded ends of rods 12, which are 60 slidable through small stuffing-boxes 13, adjustably arranged in the gland 6.

The outer ends of the rod 12 are threaded and engaged by adjusting-nuts 14, and obviously by manipulating these nuts the rings as 65 they become worn may be adjusted in the sleeve.

In the operation on the outward stroke of the piston-rod the frictional contact between the rod and packing-rings will force the pack- 70 ing-rings tightly together and also in close contact with the sleeve, and upon the return stroke of the rod it releases the friction, as the rod will not leak on the instroke.

Having thus described our invention, we 75 claim as new and desire to secure by Letters Patent—

1. A piston-rod packing comprising a stuffing-box casing, a gland thereon, an interiorly-tapered sleeve extended inward from the 80 gland, exteriorly-tapered packing-rings arranged in the sleeve, a follower engaging with the inner ring, and adjusting-rods extended from the follower and through the gland.

2. A piston-packing comprising a stuffing-85 box casing, a gland thereon, stuffing-boxes adjustable in the gland, an interiorly-tapered sleeve extended inward from the gland, exteriorly-tapered packing-rings arranged in the sleeve, a follower for engaging with the rings 90 at the inner end of the sleeve, and adjusting-rods having screw-thread engagement with said follower and extended outward through said stuffing-boxes in the gland.

3. A rod-packing comprising a casing, a 95 gland thereon, a sleeve extended inward from the gland and consisting of two longitudinally-separated sections, the said sleeve being tapered at the inner side, packing-rings exteriorly tapered to correspond to the taper 100

of such sleeve, a follower, stuffing-boxes adjustable in the gland, adjusting-rods having screw connection with the follower and passing outward through openings in the sleeve and through said stuffing-boxes, and adjusting-nuts on the outer ends of said rods.

In testimony whereof we have signed our

names to this specification in the presence of two subscribing witnesses.

GEORGE STEWART. GEORGE F. STEWART.

Witnesses:

G. W. EGBERT, E. F. Tousey.