

O. KROMER & W. ROYCE.
STOP-COCK.

No. 176,321.

Patented April 18, 1876.

Fig. 1

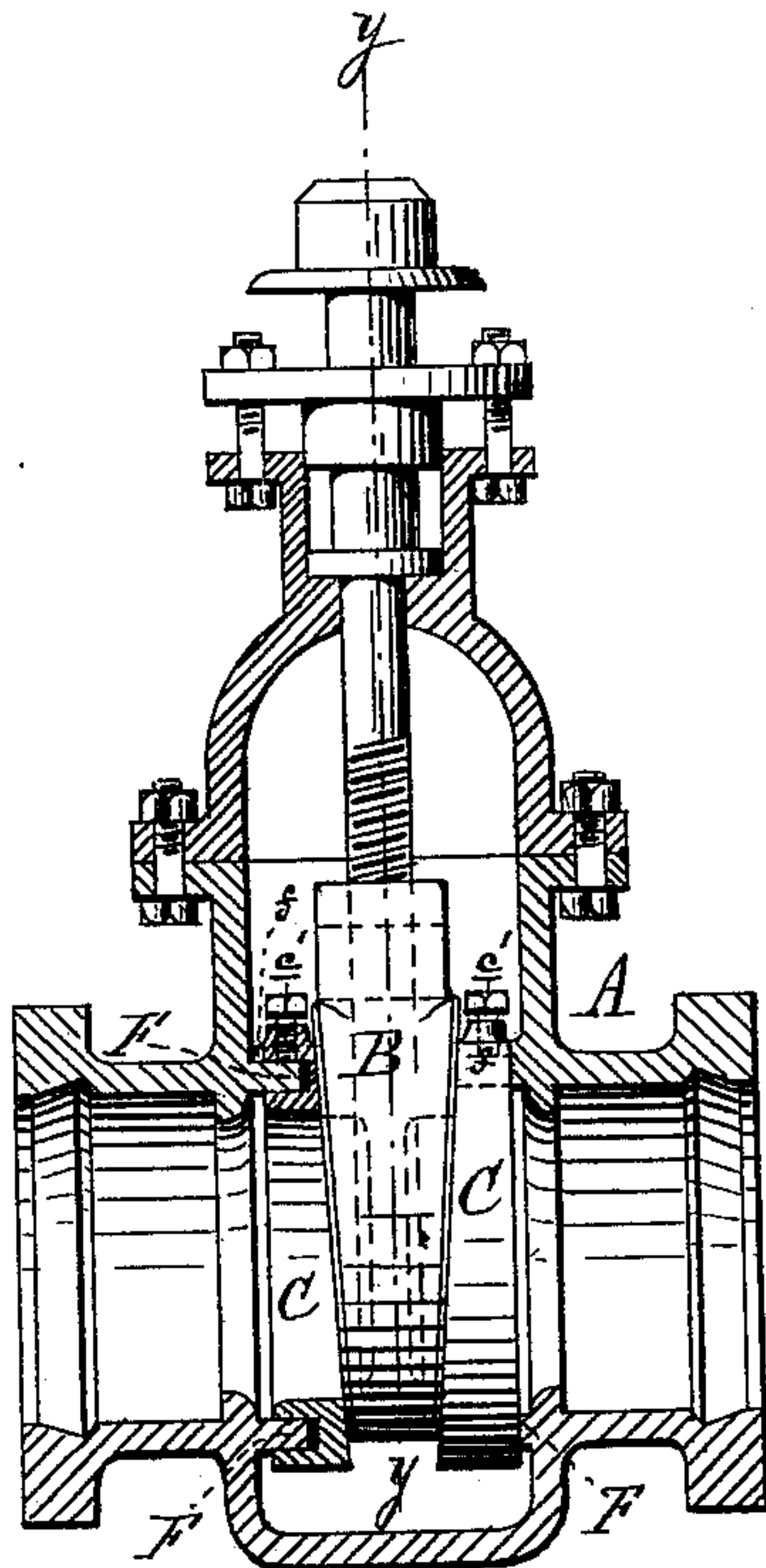
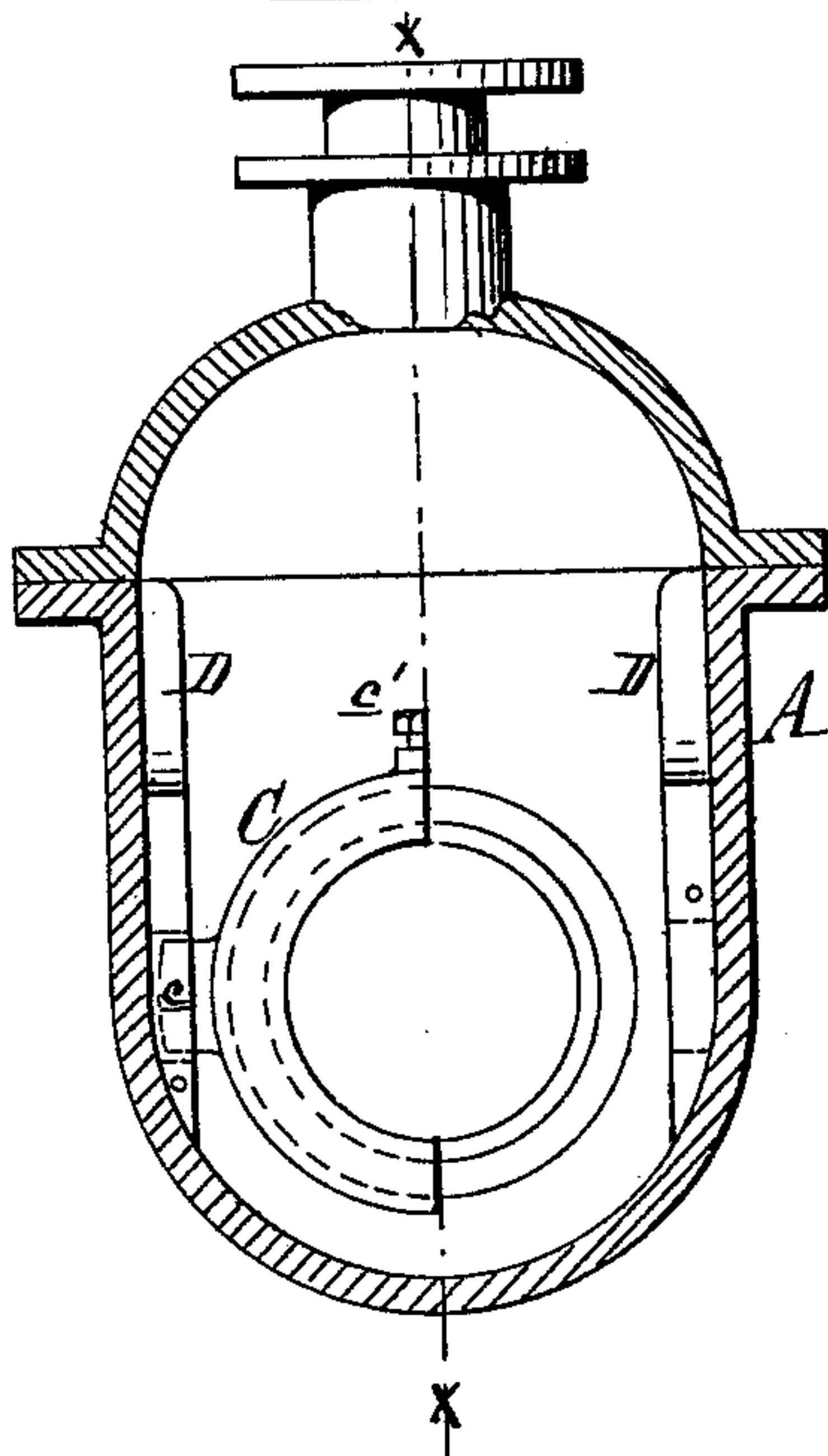


Fig. 2



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UNITED STATES PATENT OFFICE.

OTTO KROMER AND WESLEY ROYCE, OF SANDUSKY, OHIO.

IMPROVEMENT IN STOP-COCKS.

Specification forming part of Letters Patent No. **176,321**, dated April 18, 1876; application filed November 9, 1875.

To all whom it may concern:

Be it known that we, OTTO KROMER and WESLEY ROYCE, of Sandusky, in the county of Erie and State of Ohio, have invented certain new and useful Improvements in Stop-Valves, of which the following is a specification:

Our invention relates to an improvement in stop-valves for steam, water, and gas pipes or mains, which have, in connection with a wedge-shaped valve, two independent and self-adjusting seats, one at each side; and our invention consists in the means for protecting the elastic packing; in the means for holding the valve-seats in place; and in the combination of the various operative parts, all as more fully hereinafter explained.

Figure 1 is a longitudinal vertical section at *xx* in Fig. 2. Fig. 2 which is a transverse vertical section at *yy* in Fig. 1.

In the drawing, A represents the case of the valve, with an annular flange, F, at the inner end of the bore at each side. C is a brass seat, in the form of an annulus, with a circular groove in the back, which slips over each flange F, on which is laid a ring of india-rubber or other elastic material. The face of each ring is oblique, to make a fit with the wedge-shaped valve B when the latter is forced down between said seats by its screw.

The valve is faced at the edges with a brass ring to prevent it from corroding fast to the seats.

The interposition of the elastic ring between the seats and flanges enables the seats to adjust themselves to the faces of the valve, and thus prevent leakage.

To secure the seats in the case, each seat is cast with a lug, *c*, on each side, which lugs rest against the outer faces of the valve-guides D. The seat-rings are also provided with set-screws *c'*, which engage with the slots *f* in the annular flange F.

It will be seen that either seat can be re-

moved from the case by unloosening its set-screw and turning the ring around till the lugs will pass the guides D, in order to be reground or refitted and replaced, without disturbing the main part of the valve or the pipe-line.

The valve B is provided with a lug on each side, which slides in the guides D, and which is operated by the screw-stem in the usual manner.

The principal advantages arising from the peculiar construction lie in the protection given the elastic packing, which, by being placed in the grooves on the back of the valve-seats against the flanges, is prevented from being forced from behind the valve-seats; further, the flanges, in connection with the guides and lugs on the valve-seat, hold the said valve-seats firmly in place, the set-screws in the valve-seats helping to produce the same effect.

What we claim as our invention is—

1. In a stop-valve, in combination, the annular flanges F F, the annular valve-seats C C, having a circular groove in the back of each, and an elastic packing placed on the said flanges in the said grooves, substantially as described and shown.

2. In a stop-valve, the combination with the annular valve-seats C C, having lugs *c c*, of the annular flanges F F, the guides D D, and set-screws *c' c'*, substantially as described and shown.

3. In a stop-valve, the combination with the case A of the wedge-shaped valve B, the guides D D, the oblique annular valve-seats C C, having lugs *c c*, set-screws *c' c'*, and grooved backs, the annular flanges F F, and the elastic packing, substantially as described and shown.

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Witnesses:

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