J. SIEGER.

METALLIC RING PACKING.

APPLICATION FILED SEPT. 20, 1907.

922,635. Patented May 25, 1909.

Fig. 1.

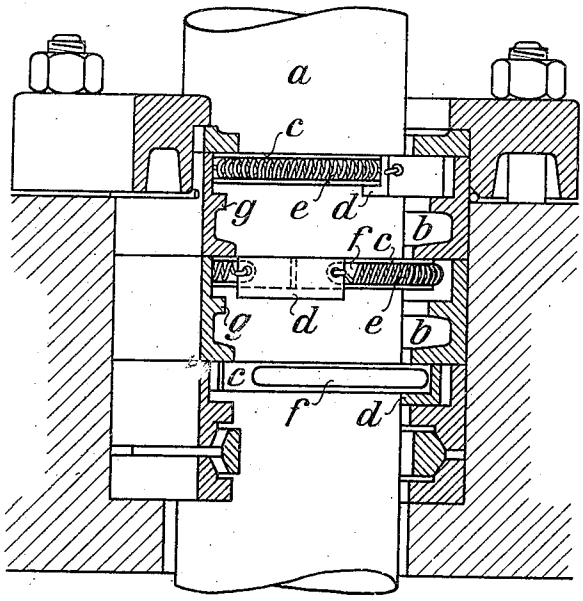
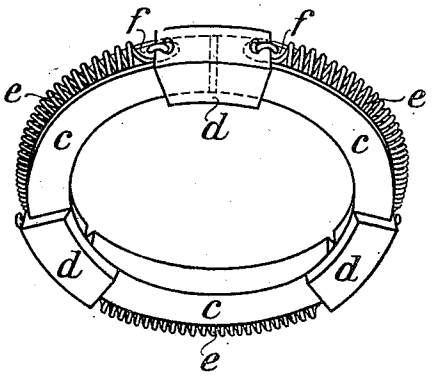


Fig. 2.



Witnesses:

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JOSEF SIEGER, OF HÖRDE, GERMANY.

METALLIC RING-PACKING.

No. 922,635. Specification of Letters Patent. Patented May 25, 1909.

Application filed September 20, 1907. Serial No. 393,791.

To all whom it may concern:

Be it known that I, JOSEF SIEGER, a subject of the German Emperor, residing at Hörde, in Westphalia, in the Kingdom of Prussia, Germany, have invented certain new and useful Improvements in Metallic Ring-Packings, of which the following is a specification.

The subject of my invention is a metallic ring-packing, consisting of recessed inclosing-rings, containing split, spring-actuated packing-rings, whose butt joints on the pressure side and on the periphery are covered by flanged segmental plates. This arrangement admits of free entry of the motive agent into the chambers of the inclosing-rings, for the purpose, firstly, of preventing access of the motive agent (steam, gas, etc.) to the butt joints of the packing-rings, and of thus hindering the latter being forced apart; and with a view, secondly, to aiding the direct packing by means of a species of labyrinth packing.

One form of construction of the invention is illustrated in the accompanying drawing, in which—

Figure 1 is a longitudinal section through a stuffing-box, and Fig. 2 a perspective view of a packing-ring with its fittings.

The rod *a* to be packed is surrounded by the inclosing-rings *b*, in which are contained the split packing-rings, each consisting in the present case of three segmental pieces *c*. The butt joints of these segments are covered by flanged plates *d*, whose radially directed web covers the gap in the face on the pressure side, while the vertical web covers the gap at the periphery of the ring. In order that there may be no joints which favor the tendency of the motive agent to force the ring segments apart, the covering-plates *d* are not let into the packing-rings. The fact of the radial web of the covering-plates projecting over one of the two faces of the packing-ring, in no wise affects the efficiency of the packing, since the close fit of the other face (that is, the one turned away from the pressure side) against the surface of the inclosing-ring is sufficient. Nor are the covering-plates let into the walls of the inclosing-rings, so that the free motion of the packing-rings may remain as far as possible unobstructed. The spaces thus presented between the faces of the packing-rings and the inclosing-rings also offer the advantage that, on the one hand, the motive agent enters freely into the chambers and can aid the spring pressure, and, on the other hand, the direct packing is assisted by a kind of labyrinth packing.

The covering-plates *d* are pressed against the segments of the packing-rings *c*, and the latter against the rod *a*, by spiral springs *e*, connected to the covering-plates. The ring-segments *c* are furnished with peripheral grooves *f*, which, however, must not, when the segments are assembled, present one continuous channel, as in this case the packing of the joints at the periphery of the packing-ring would be rendered illusory. By means of this arrangement there is the additional advantage secured, that, without the employment of any pins, or screws, the springs *e* and the covering-plates *d* are prevented from turning relatively to the ring-segments *c*.

The inclosing-rings *b* may be of any desirable cross-section. They are shown as being of F-section, so that a hook may be inserted below the smaller radial web *g* and the entire ring readily withdrawn from the stuffing-box neck.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. In a metallic packing, a recessed inclosing-ring, a segmental packing-ring contained therein, and angle-plates applied to the packing-ring, and covering each joint on the periphery and on the pressure side, and elastic means applied peripherally between and connecting said angle-plates.

2. In a metallic packing, a recessed inclosing-ring, a segmental packing-ring contained therein, and angle-plates applied to the packing-ring at each joint and covering the latter on the periphery and on the pressure side, those peripheral portions of the packing-ring not covered by the angle-plates being grooved to receive spiral spring means connecting said angle-plates and holding them in position both in axial and in peripheral direction.

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

JOSEF SIEGER. [L. S.]

Witnesses:
OTTO KÖNIG,
AUG. LEHNHOFF.