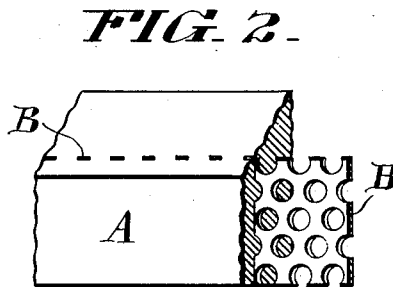
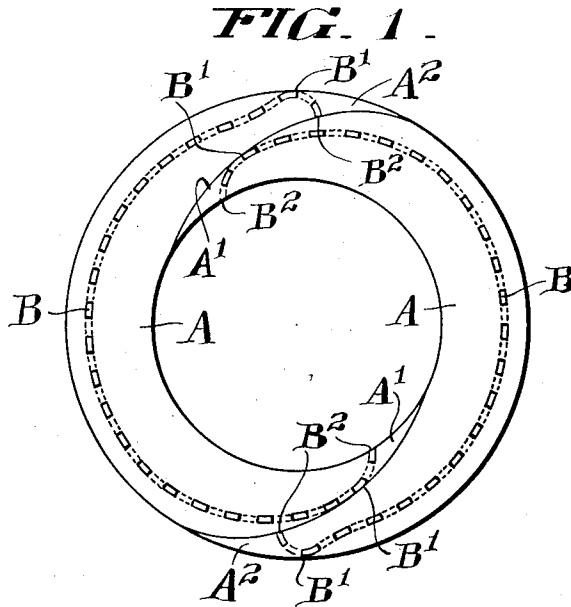


C. W. G. KING.
METALLIC ROD PACKING.
APPLICATION FILED AUG. 14, 1911.

1,052,726.

Patented Feb. 11, 1913.



WITNESSES
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UNITED STATES PATENT OFFICE.

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METALLIC ROD-PACKING.

1,052,726.

Specification of Letters Patent.

Patented Feb. 11, 1913.

Application filed August 14, 1911. Serial No. 643,841.

To all whom it may concern:

Be it known that I, CHARLES W. G. KING, a citizen of the United States of America, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Metallic Rod-Packing, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part thereof.

My invention relates to reinforced metallic rod packing of the kind shown and described in my Patent 1,017,674, granted February 20, 1912, and consists in certain improvements in the packing there described.

The reticular reinforcing strip as described in my former application was located symmetrically in the packing segments, that is to say, at a constant distance from the back wall of the packing segment and was made up of bands or strips of woven wire, and while the metallic packing constructed in this way has proved to be a very material improvement and very satisfactorily accomplished the purposes described in my former application, it has been found in practice, in the first place, that the ring segments require reinforcement in their tapered ends; in the second place, that the more or less flimsy construction of the woven wire fabric renders it difficult to properly locate the reinforcing strips in the packing, and in the third place, that the flow of the soft metal which takes place in use, has a tendency to distort the woven fabric, and with the object of remedying these defects I have devised the improved packing characterized by my use of a reinforcing strip formed of reticular perforated sheet metal, also by so curving the ends of the reinforcing strips that they will extend into and reinforce the tapered ends of the segments, and in the fourth place, by so curving the ends of the reinforcing strips that they will not only extend to the tapered ends of the segment, but will also, at or near their ends, extend from wall to wall of the tapered segment ends, but without extending to the extreme end of the tapered sections.

My improved packing ring construction

will be best understood as described in connection with the drawings in which,

Figure 1 is a plan view of two abutted packing rings each constructed in accordance with my invention, and Fig. 2 is a perspective view of a portion of one of the packing rings shown in Fig. 1, partly broken away to illustrate the character of the reinforcing strip.

In the construction shown in the drawings, the packing ring is formed of two similar segments A, A, each formed with tapered ends A' and A² adapted to overlap and fit upon each other when the segments are assembled as shown in Fig. 1.

B is the reinforcing strip which in my improved construction is formed of a reticular strip of perforated sheet metal, the metal being of such a character as will not injure the rod when it comes in contact with it; I find that copper plates give entirely satisfactory results.

The reinforcing strips are cast in the ring segments, but in place of being symmetrically disposed with regard to the center of the ring as described in my former application, the ends of the strips are so bent, that, as shown in the drawings, they extend toward the points of the tapered end sections of the segments so that these portions of the segments will be reinforced as well as the central portions. As however, the extension of the reinforcing strips to the extreme ends of the tapered sections would leave too little of the soft metal body of the segments at the ends even if it were practicable to induce the metal to flow to the extreme ends of the mold. I bend the ends of the reinforcing strips so that one portion B' will abut against one wall of the segment while the other portion B² abuts against the other wall of the segment. The reticular makeup of the reinforcing strips enabling the metal both hot and cold to flow freely through the bent ends of the strips, thus insuring that the tapered ends of the segments will not at any time be deprived of proper soft metal supply. I may also mention that this construction is of advantage in the casting of the ring segments as it provides a means for anchoring the reinforcing strips in proper position in the mold prior to and

during the pouring of the soft metal to form the ring segments.

Having now described my invention what I claim as new and desire to secure by Letters Patent is,

5 1. A reinforced metallic packing ring segment comprising a cast body portion of metal sufficiently plastic to flow in its container under the conditions of use to make
10 up for wear, and a reinforcement strip of perforated sheet metal harder than the metal of the body and about which said body is cast.

15 2. A reinforced soft metal packing ring segment having tapered ends and having embedded in it a reticular reinforcing strip so curved at its ends as to extend into and reinforce the tapered ends of the ring segment.

20 3. A reinforced soft metal packing ring segment having tapered ends and having embedded in it a reticular reinforcing strip

so curved at its ends as to extend into the tapered ends of the segment and, near the extreme ends of said tapered portions, to
25 extend across from the front to the back wall thereof, but without reaching to the extreme ends of the tapers.

4. A reinforced metallic packing ring segment comprising a cast body portion of
30 metal sufficiently plastic to flow in its container under the conditions of use to make up for wear, and a reinforcement strip of perforated sheet metal harder than the
35 metal of the body and about which said body is cast, said strip comprising a body portion curved in general conformity to the curvature of the segment and having transversely bent end portions.

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Witnesses:

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