Attest:

M.L. Winston.

Inventor:

a.B. Pratt,

By 6.B. Whitmore, atty.

A. B. PRATT.
PACKING GASKET.

(Application filed Oct. 3, 1900.) (No Model.) Fig. 2. Fig. 3. Fig. 4. a Fig. 5.

United States Patent Office.

ALBERT B. PRATT, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE GAR-LOCK PACKING COMPANY, OF PALMYRA, NEW YORK.

PACKING-GASKET.

SPECIFICATION forming part of Letters Patent No. 669,047, dated February 26, 1901.

Application filed October 3, 1900. Serial No. 31,919. (No model.)

To all whom it may concern:

Be it known that I, Albert B. Pratt, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Packing-Gaskets, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention is an improved flexible into elastic packing-gasket and the process or method of forming it, the same being hereinafter fully described, and more particularly

pointed out in the claims.

Referring to the drawings, Figure 1 shows a sheet of packing material, partly broken away, ready to be rolled in forming a gasket. Fig. 2 is a transverse section taken on the dotted line 2 2 in Fig. 1. Fig. 3 shows the gasket completed. Fig. 4, drawn to a large scale, is a transverse section of the gasket on the dotted line 4 4 in Figs. 3 and 5. Fig. 5 shows portions of the joined ends of the gasket, parts being longitudinally sectioned on the dotted line 5 5 in Fig. 4.

A in the drawings is a sheet of packing material of common kind—as, for example, made up of layers of india-rubber and cloth alter-

nated.

B is a strip of flexible inelastic material, as sheet-lead, having its two parallel sides f f beveled to thin edges, as shown. This strip is placed longitudinally of the sheet A and at one side of the middle thereof or nearer to one edge of the sheet, as shown.

C is a mandrel around which to roll the sheets A and B together into the form of a tube. Previous to rolling, the surface of the sheet A is covered with an adhesive substance, except where in contact with the mandrel, which serves to hold the metal strip B in place and to cement the involute layers into a compact tubular mass when rolled.

The roll or tubular body is primarily straight, and the mandrel is withdrawn after the tube is complete, leaving a central hollow or opening b, Fig. 5. A short shaft c, Figs. 4 and 5, of yielding material, as lead, in the nature of a dowel, is inserted in one end d of the roll and secured in place, projecting therefrom,

50 as shown. The tube is then bent to a circular or oval form and the empty end e passed over

the projecting end of the dowel and brought to abut squarely against the opposing end d, as shown in Figs. 3 and 5. The gasket is now practically complete and only needs to be 55 bent to the form necessary to fit the part or place for which it is intended in any given case. In shaping the gasket in any case it is preferably so bent that the transverse joint a shall be at one of the flat sides of the gasket 60 if it have a form having flat sides. On account of the flexibility of the parts the gasket may be readily bent to any form, the inelastic leaden member causing it to keep the form given it, the yielding dowel also partaking of 65 the curved form of the gasket.

In constructing this gasket it is purposely made so that there shall be substantially an equal number of thicknesses or plies of the india-rubber within and without the lead 70 sheet—that is to say, so the metal sheet shall be at about the middle of the mass between its convex and concave surfaces. This will be readily understood by viewing Fig. 4. There are practically the same number of 75 thicknesses of india-rubber within the coiled metal sheet B as without it, with one ply between the coils of the metal. To produce this result, the lead strip is originally placed upon the india-rubber sheet A, nearer the edge of 80 the latter first rolled, as shown in Fig. 1 and above stated.

The adhesive substance applied to the india-rubber sheet may be only for temporary use, to hold the parts together while being 85

rolled, and the whole body vulcanized, if found desirable for any particular use.

What I claim as my invention is—

1. The process of constructing packing-gaskets, consisting in placing upon a sheet of 90 packing material covered with an adhesive substance a narrower sheet of metal and rolling the two around a mandrel to the form of a tube, withdrawing the mandrel and inserting a flexible dowel in one end of the tube so 95 as to project therefrom, and bringing the two ends of the tube together, and inserting the projecting end of the yielding dowel into the adjacent end of the tube whereby the flexibility of the dowel keeps the ring in shape, 100 substantially as described.

2. The herein-described process of con-

structing packing-gaskets, consisting in placing upon a sheet of packing material covered with an adhesive substance, a narrow sheet of soft metal with beveled edges, winding the two upon a mandrel, so that the edges of the metal overlap, compressing them and then withdrawing the mandrel, substantially as specified.

3. A tubular packing-gasket composed of a rolled sheet of packing material coated with an adhesive substance, and a narrow strip of metal with beveled edges placed upon said

sheet of packing material said metal strip being disposed near one end of the said sheet the whole being rolled into compact tubular 15 form and compressed, substantially as specified.

In witness whereof I have hereunto set my hand this 26th day of September, 1900, in the presence of two subscribing witnesses.

ALBERT B. PRATT.

Witnesses:

E. B. WHITMORE, M. SMITH.