

955,739.

A. ADAMSON.
 REMOVABLE COVER FOR VULCANIZERS.
 APPLICATION FILED OCT. 24, 1908.

Patented Apr. 19, 1910.

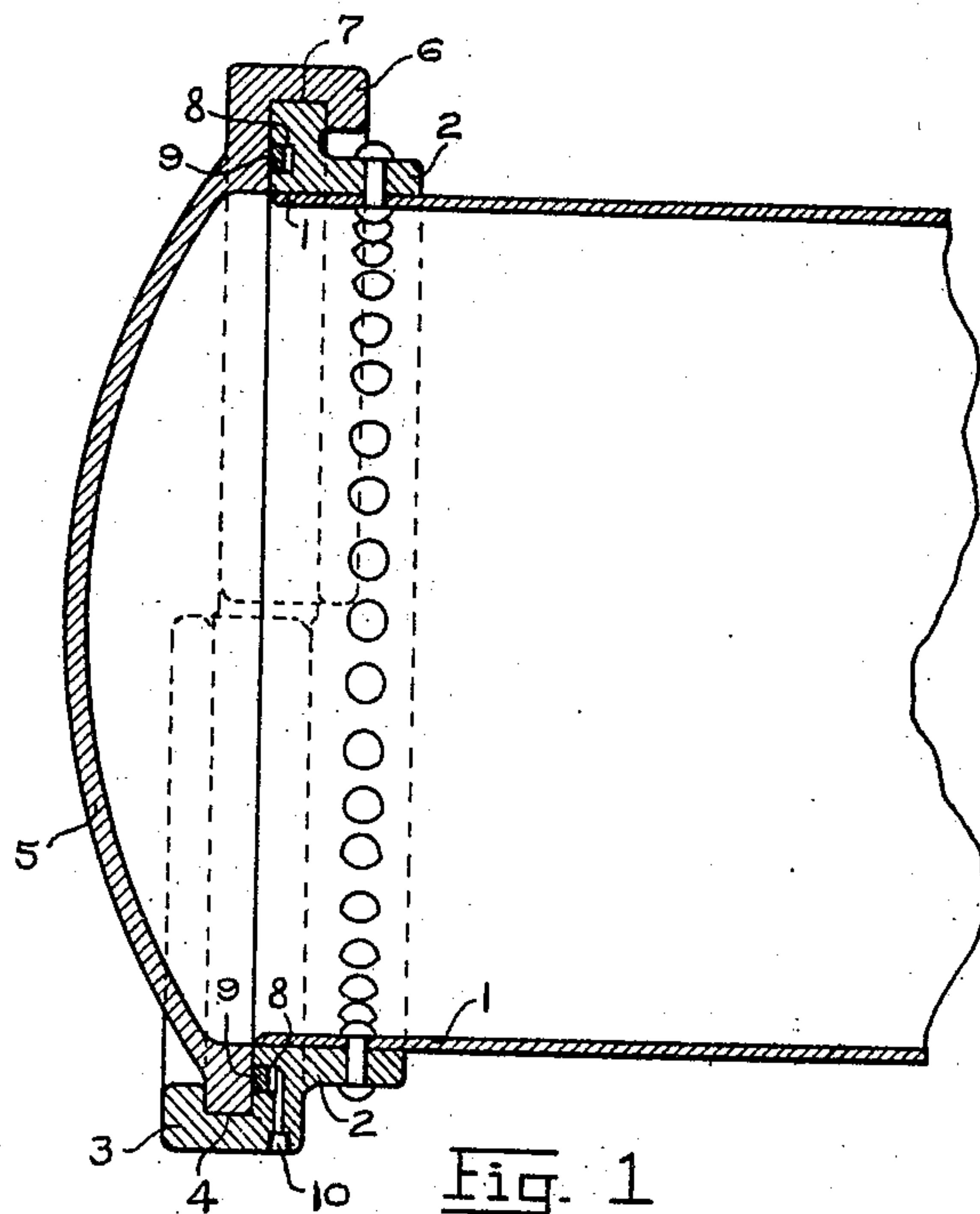


Fig. 1

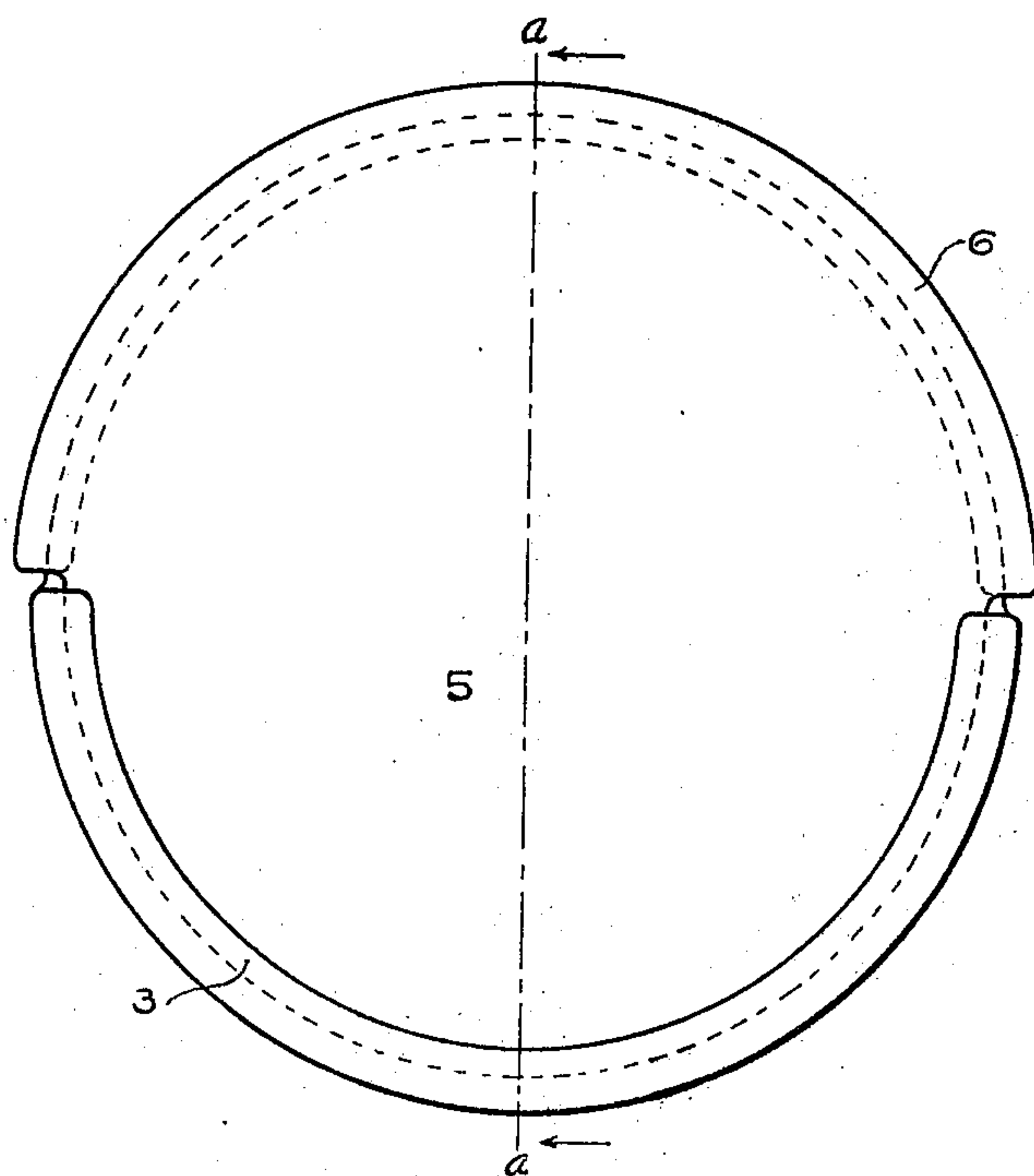


Fig. 2

Witnesses

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UNITED STATES PATENT OFFICE.

ALEXANDER ADAMSON, OF AKRON, OHIO.

REMOVABLE COVER FOR VULCANIZERS.

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Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed October 24, 1908. Serial No. 459,407.

To all whom it may concern:

Be it known that I, ALEXANDER ADAMSON, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a new and useful Removable Cover for Vulcanizers, of which the following is a specification.

My invention relates to improvements in removable covers, and more particularly to that type adapted for vulcanizers or heaters, such as is used for vulcanizing rubber. The cover forms part of the vulcanizing chamber within which steam is confined under pressure.

My invention has for its primary object to provide a novel construction whereby the cover of a vulcanizer can be removed and replaced quickly and conveniently, thus saving time and labor. The common method of securing the cover of vulcanizers is by means of a number of bolts which require considerable time and labor to tighten and release. My improved cover embodies a simple construction which will prove durable and efficient.

In carrying out the above novel idea my invention embodies certain novel details of construction as will be hereinafter more definitely pointed out and claimed.

I attain these objects by the construction hereinafter described, and illustrated in the accompanying drawing, in which—

Figure 1 is a vertical sectional view on a line *a a*, Fig. 2, of my improved cover, and a portion of the vulcanizer shell to which it is secured. Fig. 2 is an end elevation of the cover, showing hidden portions by dotted lines.

Similar characters of reference denote corresponding parts in the different views.

In the said drawing the reference numeral 1 denotes the open end of the vulcanizer shell, to which is riveted about its circumference, the annular flange 2. Extending from the lower half of the annular flange 2 is a lip 3 forming a concentric groove 4, which receives the lower half of the circumference of the cover 5. Extending from the upper half of the circumference of the cover 5 is a lip 6 forming a concentric groove 7, which engages the upper half of the outer circumference of the annular flange 2. In the face of the flange 2 is an annular groove 8 which retains a packing ring 9 adapted to be forced against the cover 5 by admitting a fluid under pressure to the bottom of the

groove 8 and beneath the ring 9 through a hole 10 which is tapped to receive a pipe.

From the above description the operation of my improved construction will be understood to be as follows: When the vulcanizer is under pressure the cover is in its closed position as is shown in the drawing, steam or water under pressure is admitted through the hole 10 and the packing ring 9 is forced against the head 5 thus making a secure joint against leakage. The cover 5 has a complete annular bearing about its circumference to resist the pressure within the vulcanizer, the lip 3 supporting the lower half of the cover and the lip 6 supporting the upper half of the cover.

To remove the cover, after the pressure within the vulcanizer has been released, the pressure back of the packing ring 9 is first released through the hole 10, the cover 5 is then simply lifted vertically until it clears the opening in the vulcanizer.

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

1. The combination of a vulcanizer shell provided at its open end with an annular groove and also with a duct leading to the annular groove, a cover for the open end of the shell, and a packing received within the before mentioned annular groove so as to form a tight joint with the cover when fluid under pressure is admitted to the annular groove through the before mentioned duct leading thereto.

2. The combination of a vulcanizer shell, a flange at the open end of the shell, the said flange being formed with an annular groove and also with a duct leading to the annular groove for admitting a fluid under pressure thereto, a cover for the open end of the shell, and packing received within the groove of the flange so as to form a tight joint with the cover when the fluid under pressure is admitted to the groove.

3. The combination of a vulcanizer shell, an annular flange at the open end thereof, a cover fitting against the flange, a segmental lip projecting from the flange and removable in a direction parallel to its face and engaging the edge of the cover, and a complementary segmental lip projecting from that portion of the cover not engaged by the lip of the flange, the said complementary lip of the cover engaging the flange.

4. The combination of a vulcanizer shell,

- an annular flange at the open end thereof, a cover fitting against the flange, a segmental lip projecting from the flange and removable in a direction parallel to its face and engaging the cover, a complemental segmental lip projecting from the cover and engaging the flange, and means independent of the lips for securing a tight joint between the cover and the flange.
- 5 5. The combination of a vulcanizer shell, an annular flange at the open end of the shell, the said flange being formed with an annular groove and also with a duct through which fluid under pressure can be admitted
- 10 to the annular groove, a cover fitting against the flange, a segmental lip projecting from the flange and engaging the cover, a complemental segmental lip projecting from the cover and engaging the flange, and a packing ring fitted within the annular groove of the flange so as to be forced against the cover and form a tight joint when fluid under pressure is admitted to the groove.
- 15 In testimony whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

ALEXANDER ADAMSON.

Witnesses:

J. D. PALMER,
C. T. ADAMSON.