J. EATON. Rubber or Gum Packing for Oil-Wells.

No. 220,461.

Patented Oct. 7, 1879.

Fig. 1,

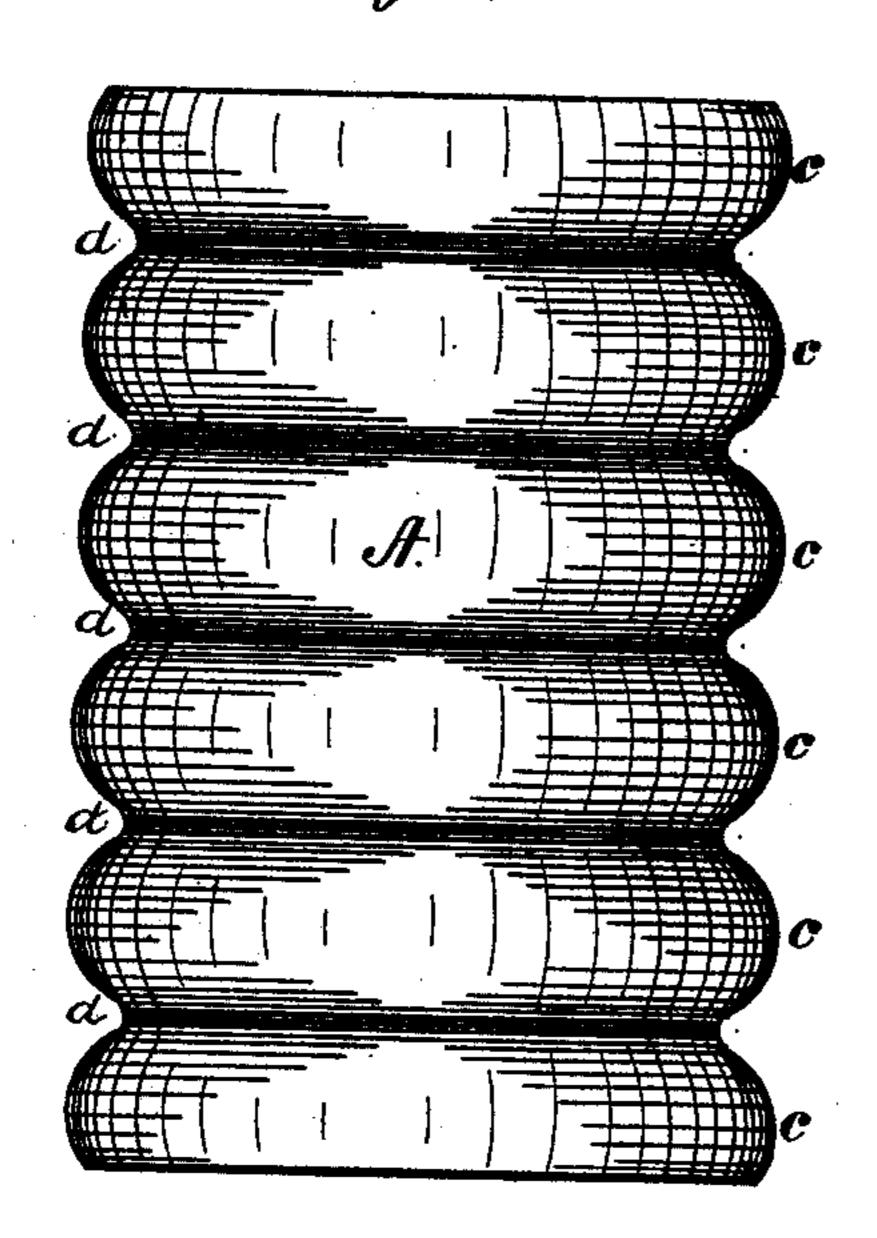


Fig. 2,

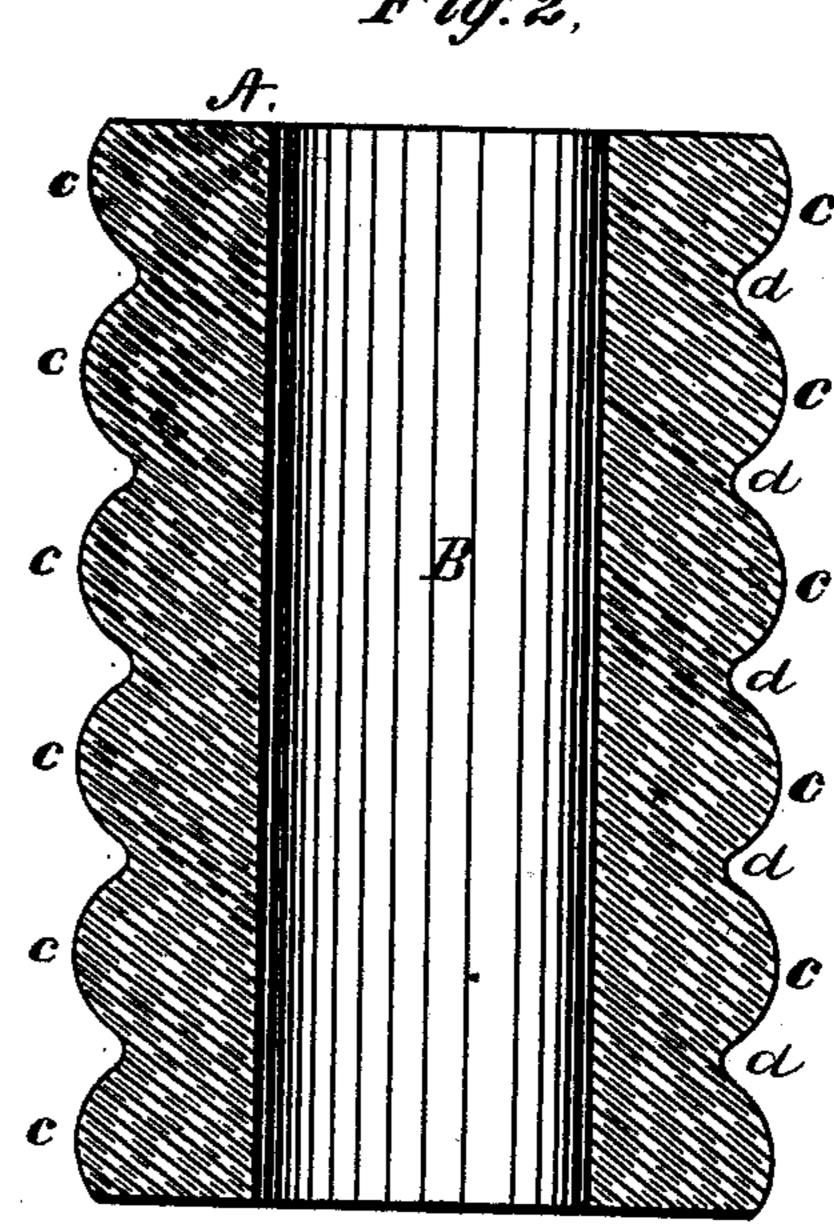
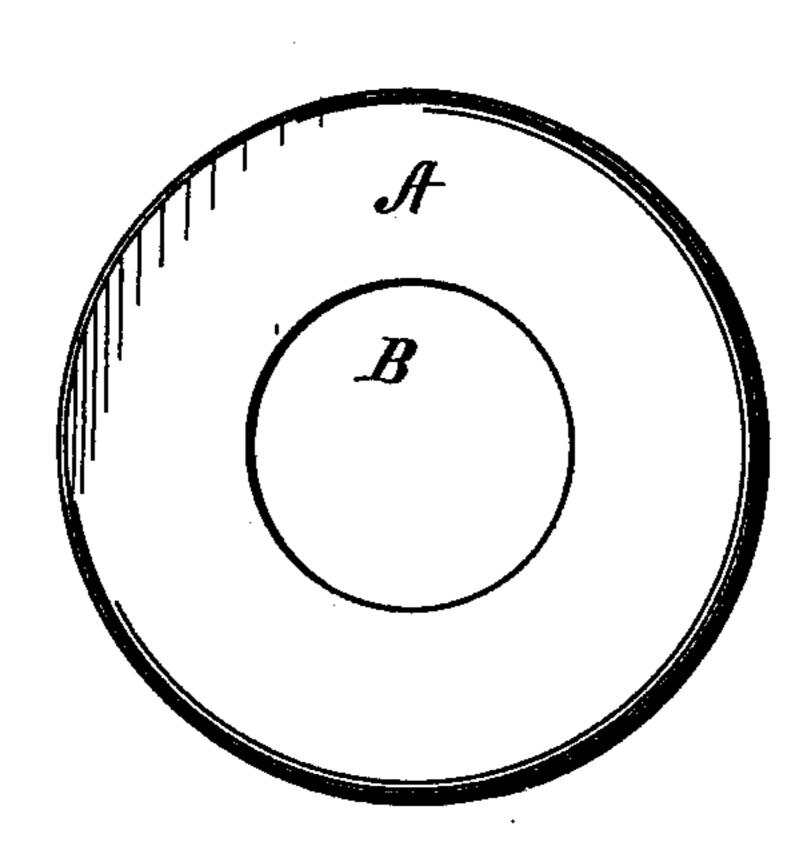
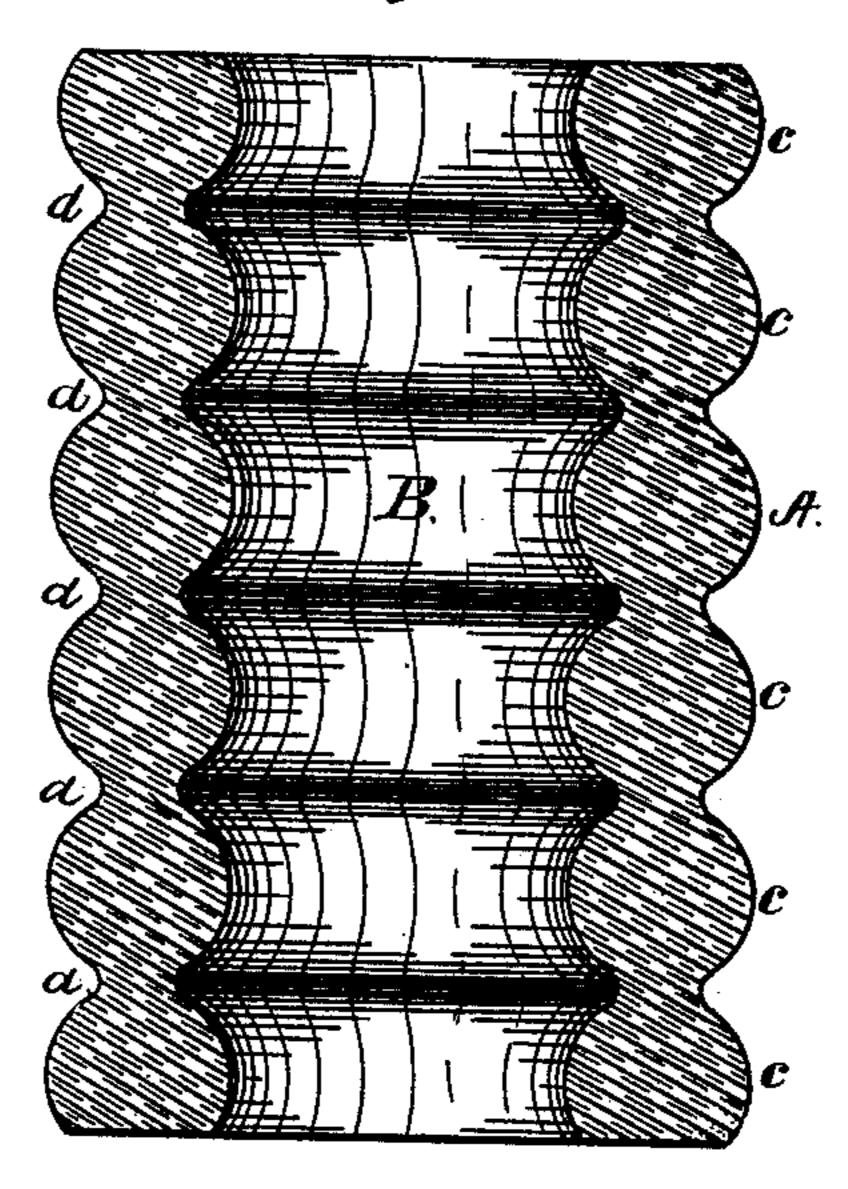


Fig.3.





Witnesses

Inventor.

## UNITED STATES PATENT OFFICE.

JOHN EATON, OF OIL CITY, PENNSYLVANIA.

## IMPROVEMENT IN RUBBER OR GUM PACKINGS FOR OIL-WELLS.

Specification forming part of Letters Patent No. 220,461, dated October 7, 1879; application filed June 19, 1879.

To all whom it may concern:

Be it known that I, John Eaton, of Oil City, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Rubber or Gum Packings for Oil-Well Packers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is an elevation of my improved packing. Fig. 2 is a sectional view of one form thereof. Fig. 3 is a top view, and Fig. 4 is a sectional view, of a second form.

In packers for oil-wells it is common to use a cylindrical block of rubber made to fit around the tubing, and large enough in external diameter to nearly fill the bore of the well, for the purpose of so packing the oil-well around the tubing at any particular point that water cannot get below the packing, or water or oil arise above it, except as it goes through the tubing.

In the drawings, A represents a block of rubber pierced with the hole B.

My improvement consists in making depressions, as shown at d d, &c., in the block, leaving the projections c c c, &c., and thus corrugating the surface. These corrugations may be either on the inside or outside, or both, and the depressions may be of any desired shape, size, or depth.

In this form of block much more elasticity is obtained, so that it can be more readily forced against the walls of the well and a more perfect union with such walls effected, and when it is necessary to withdraw the packer the gum detaches more readily from the sides

I do not limit myself to any particular material, as gutta-percha or any other substance of similar elasticity and firmness can be used.

What I claim as my invention is—

In an oil-well packer, a cylindrical elastic block pierced longitudinally, so as to fit around the tubing, and provided with depressions and projections on its exterior and interior surfaces, or either, substantially as shown and described.

JOHN EATON.

Witnesses:

JAMES C. BOYCE, W. R. EDELEN.