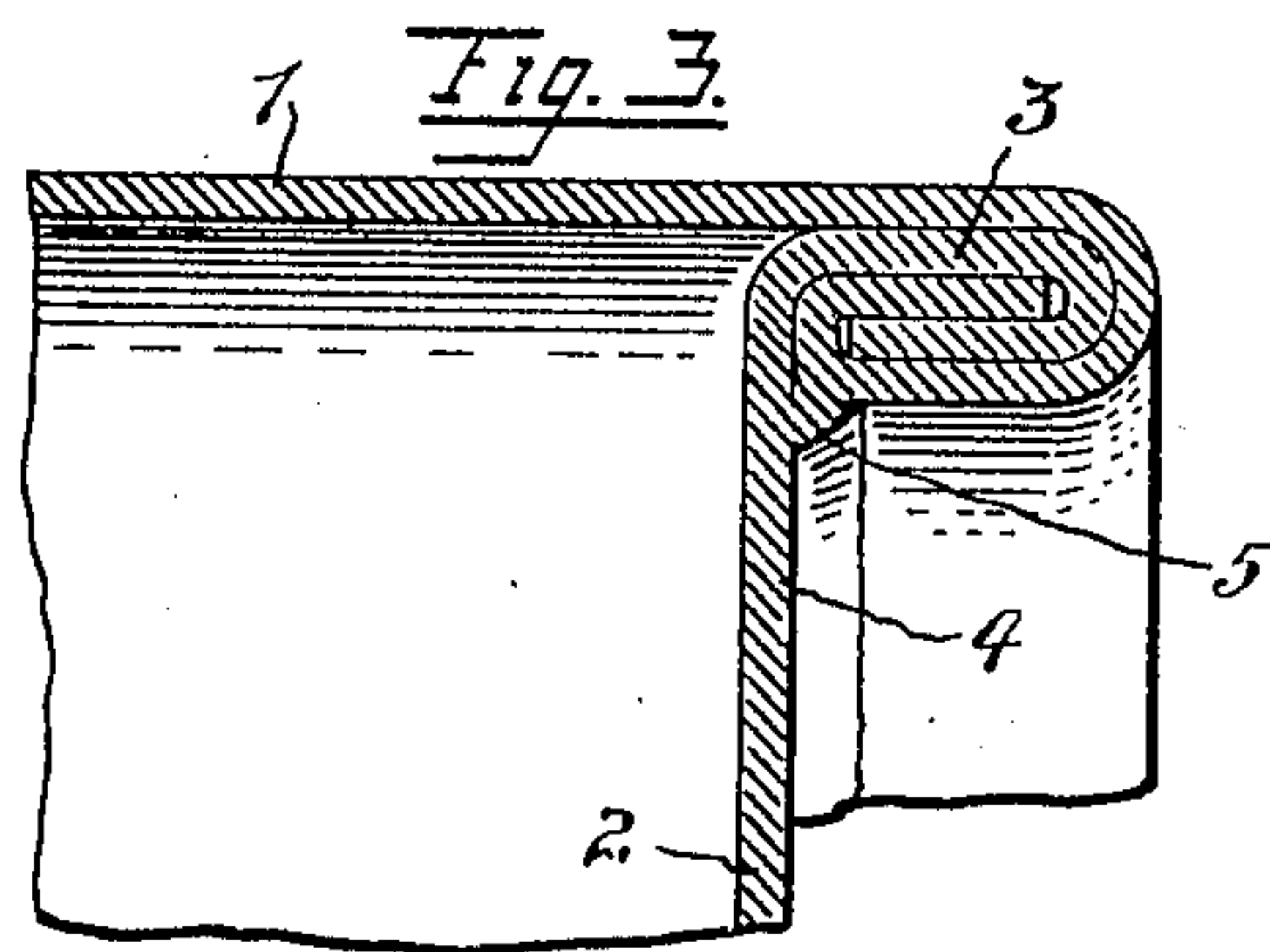
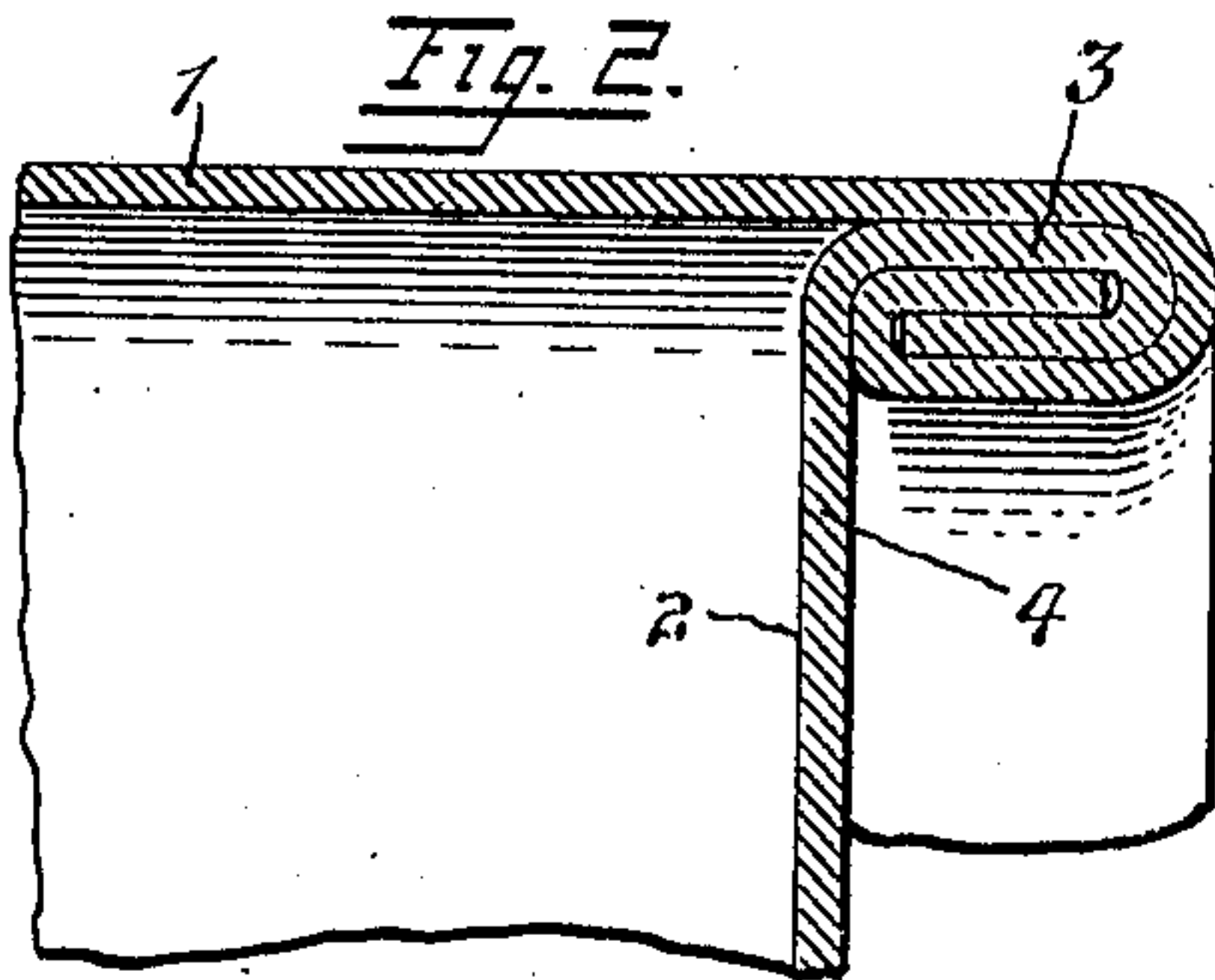
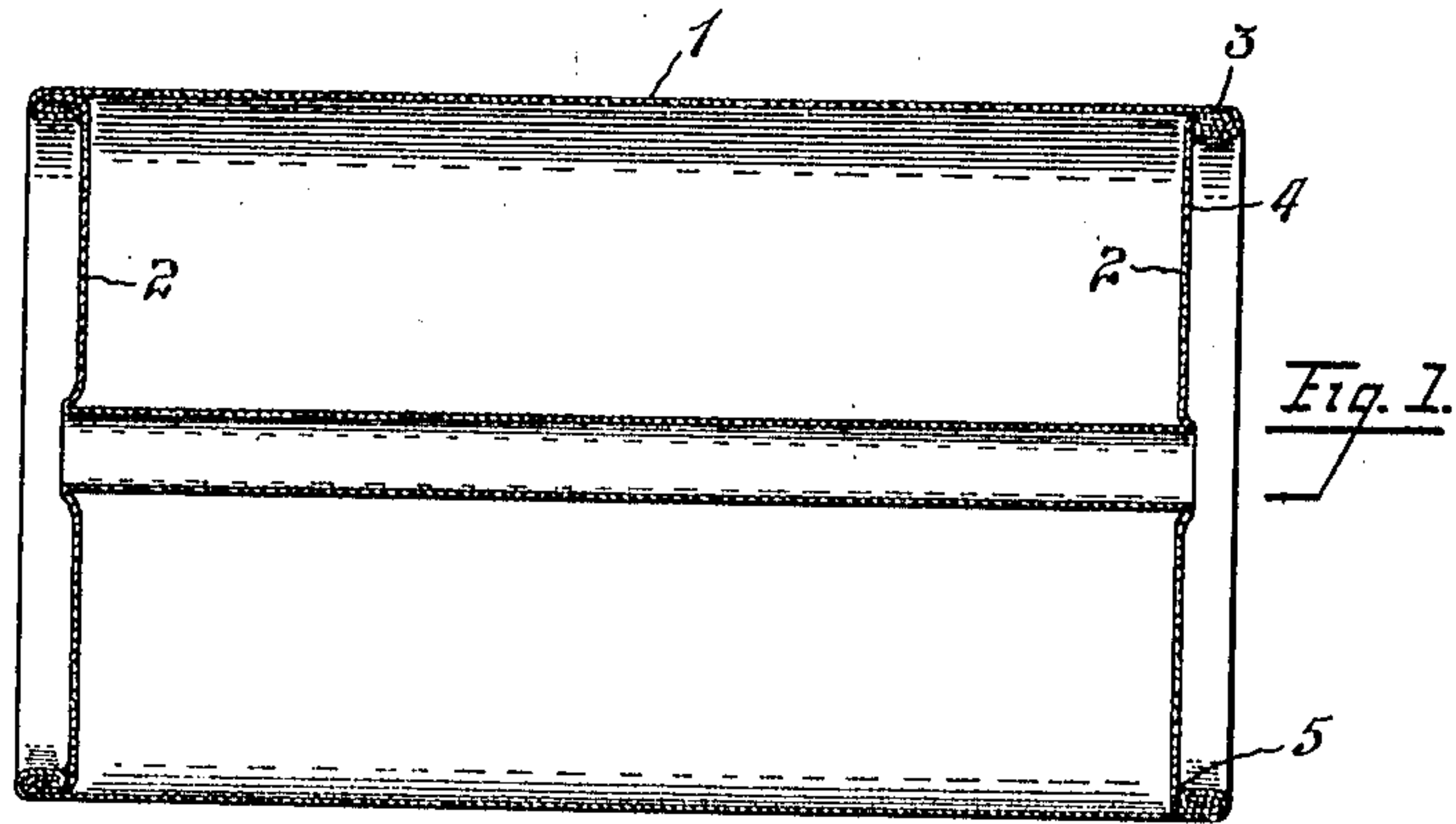


R. E. DUNHAM.
LAND ROLLER.
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1,298,482.

Patented Mar. 25, 1919.



Inventor:
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By W. E. Merkel
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UNITED STATES PATENT OFFICE.

RAY E. DUNHAM, OF BEREA, OHIO, ASSIGNOR TO THE DUNHAM COMPANY, OF BEREA, OHIO, A CORPORATION OF OHIO.

LAND-ROLLER.

1,298,482.

Specification of Letters Patent.

Patented Mar. 25, 1919.

Application filed August 20, 1915. Serial No. 46,535.

To all whom it may concern:

Be it known that I, RAY E. DUNHAM, a citizen of the United States, resident of Berea, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Land-Rollers, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to land rollers and particularly that type of land rollers known as water ballast rollers, in which water or sand is used as ballast.

The object of the invention is to provide a roller construction in which the drum may be manufactured economically and in a water-tight manner, and in which at the same time, the end portions of the drum are so arranged as to avoid marking or marring the lawn or other surface upon which it may be used.

The said invention consists of means hereinafter fully described and particularly set forth in the claim.

The annexed drawing and the following description set forth in detail certain means embodying my invention, the disclosed means, however, constituting but one of various mechanical forms in which the principle of the invention may be applied.

In said annexed drawing:—

Figure 1 represents an axial section of a drum embodying my invention.

Fig. 2 represents an axial section of a fragmentary portion of such drum, showing the parts in a semi-complete condition.

Fig. 3 represents a view similar to that of Fig. 2, showing the parts in their completed condition.

The illustrated embodiment of my invention consists of a sheet of metal bent in cylindrical form and forming a shell 1, the meeting edges being united by butt welding in the usual manner.

Two end heads 2, 2, fit in the ends of the shell as shown, each such head being pro-

vided with a flanged portion 3. The heads are first inset into the ends of the shell so as to permit a portion of the latter to extend beyond the extremities of the flanges. The overlapping portions of the shell are then bent around the flanges and such bent portions and the flanges are then bent around and in an outward direction so as to assume the form shown in Fig. 2. This bending is effected in a manner such that the inner ends of the parts so bent will lie immediately adjacent to and preferably in contact with the body portion 4 of the heads.

The bending operation is effected by means of suitable machinery well-known to those skilled in the art and suitable tools are used to pinch the flanges and contacting shell portions tightly together so as to form a smooth and finished product and may be effected in a manner such as will produce a water-tight joint. The adjacent metal of the heads and flanges may be welded as at 5, Fig. 3, in any suitable manner.

In this manner an efficient joint is made between the shell and heads which in addition to forming rounded ends of the drum, are also water-tight and hence suitable for use in connection with water ballast rollers.

It will be noted that the ends of the roller extending beyond the heads, being formed of several thicknesses of sheet metal, welded together or to the heads, are very strong and therefore are not apt to be bent inward or dented in case the roller is banged about, dropped from a truck, allowed to strike a stone while in use, or subjected to other abuse which farming and gardening tools and appliances are likely to get.

Having fully described my invention, what I claim and desire to secure by Letters Patent is:—

In a land roller, the combination with a sheet of metal bent and welded to form a cylindrical shell, circular flanged heads fitted in the ends respectively of said shell, each such head consisting of a main or body portion and a peripheral flange; each end portion of the shell being bent around and

inwardly and then outwardly, the corresponding flange being bent around and inwardly so as to interlock with the bent portion of said shell; the adjacent portions of the main or body portion of the heads and the bent portions of the shell being integrally united.

Signed by me, this 16th day of August, 1915.

RAY E. DUNHAM.

Attested by—

HERMAN EISELE,
D. FINDLING.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D.C."