

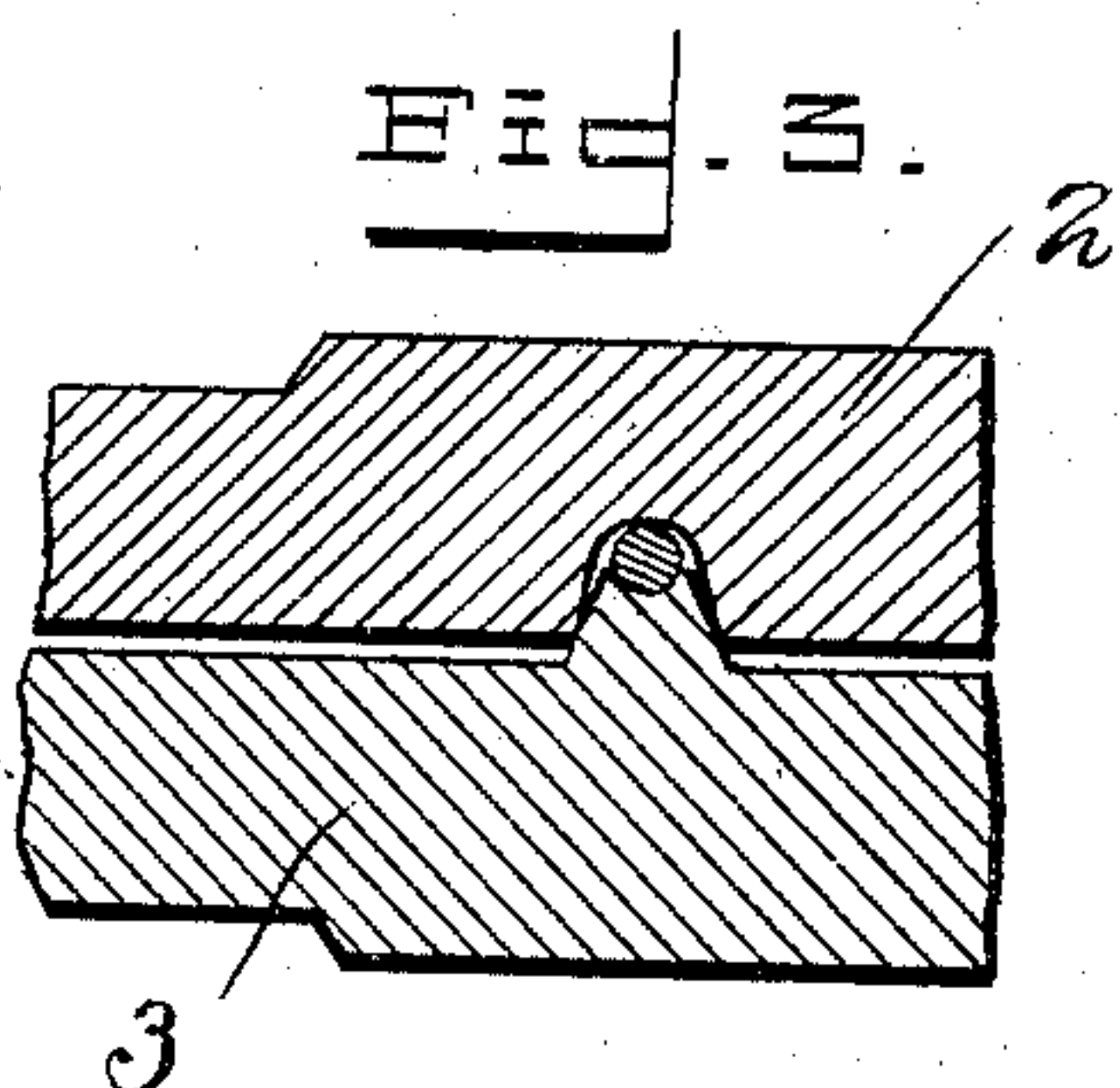
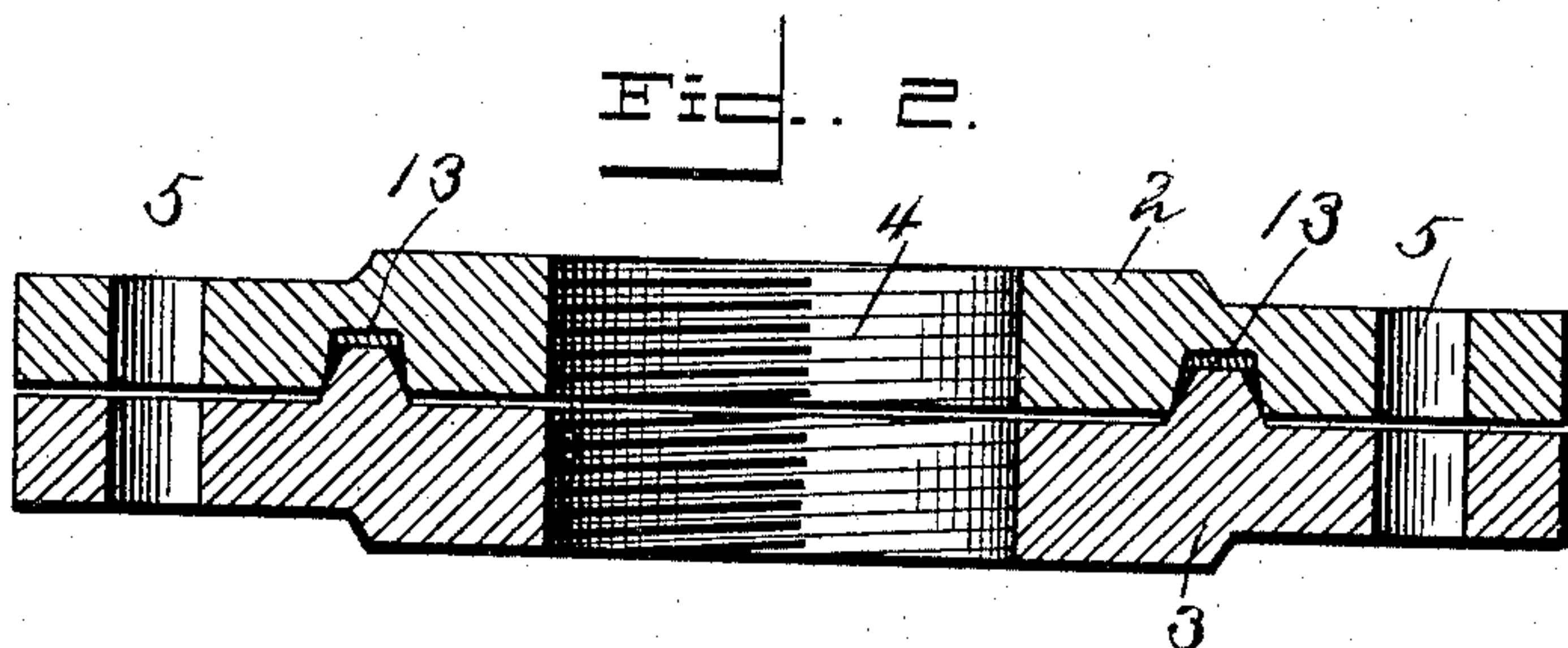
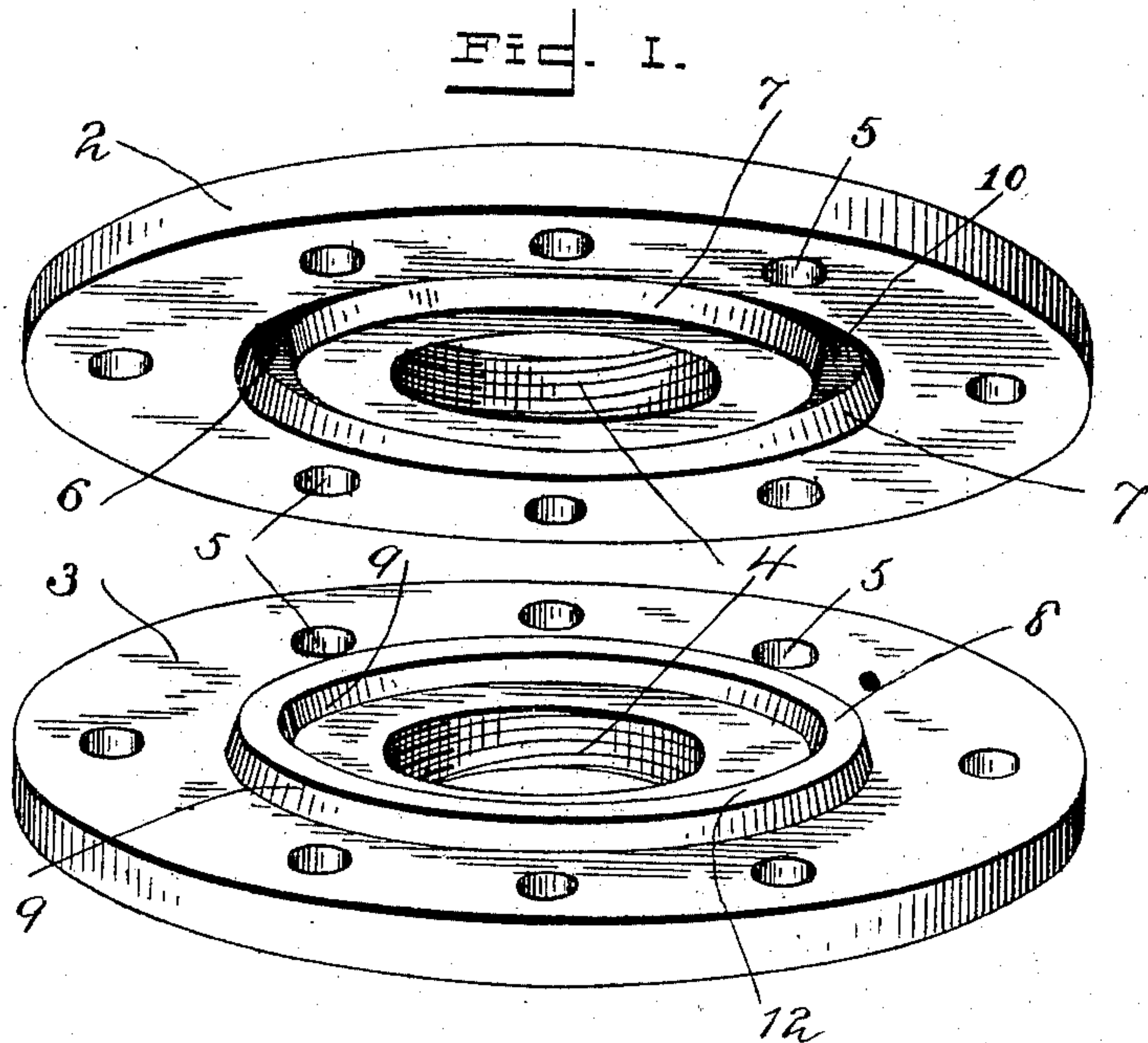
No. 612,455.

Patented Oct. 18, 1898.

W. M. GORE.  
PIPE FLANGE COUPLING.

(Application filed Oct. 12, 1897.)

(No Model.)



Witnesses:

*Fenton S. Belt,*  
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# UNITED STATES PATENT OFFICE.

WILLIAM M. GORE, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO CHALMER O. WILLETT, OF SAME PLACE.

## PIPE-FLANGE COUPLING.

SPECIFICATION forming part of Letters Patent No. 612,455, dated October 18, 1898.

Application filed October 12, 1897. Serial No. 654,972. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM M. GORE, a citizen of the United States, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Pipe-Flange Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to pipe-flange couplings, and more particularly to that class of which the patent, No. 214,812, issued April 29, 1879, to J. H. Clark, may be taken as a type, and the object is to provide a simple, effective, and reliable device for this purpose; and to this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a perspective view of my improved pipe-flange coupling, the parts being separated to show their construction. Fig. 2 is a transverse section, and Fig. 3 is a modification of the same.

2 and 3 represent similar-sized flanges formed with concentric alined threaded orifices 4 4 and an annular series of alined bolt-holes 5 5.

6 represents an annular groove arranged in the face of the flange 2 concentric with the threaded orifice 4, and the walls 7 7 of this groove diverge outwardly, as shown.

8 represents an annular rib or ring on the

contiguous face of the flange 3 and adapted to engage the groove 6 in the flange 2. The converging walls 9 9 of annular rib 8 are formed at a more obtuse angle than the angle formed by the walls of the groove. The bottom 10 of the groove and the top 12 of the rib are formed with parallel plane surfaces, as shown.

An important feature of construction is gained by forming the walls of the rib and groove as above set forth, as a ground-joint can be readily made, before the pipes are screwed into the flanges, and thus dispense with the flexible packing-ring.

13 represents a continuous flexible packing-ring.

In the modification the bottom of the groove and the top of the rib are both formed with a semicircular recess to receive the packing-ring.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

An improved pipe-coupling comprising the flange 2 formed with the annular concentric groove 6 having diverging walls 7 7 in combination with the flange 3 formed with the annular concentric rib 8 having its converging walls 9 9 formed at a more obtuse angle than the walls of the groove 6, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses:

WM. M. GORE.

Witnesses:

CHAS. LUNDGREN,  
LIZZIE DAVIS.