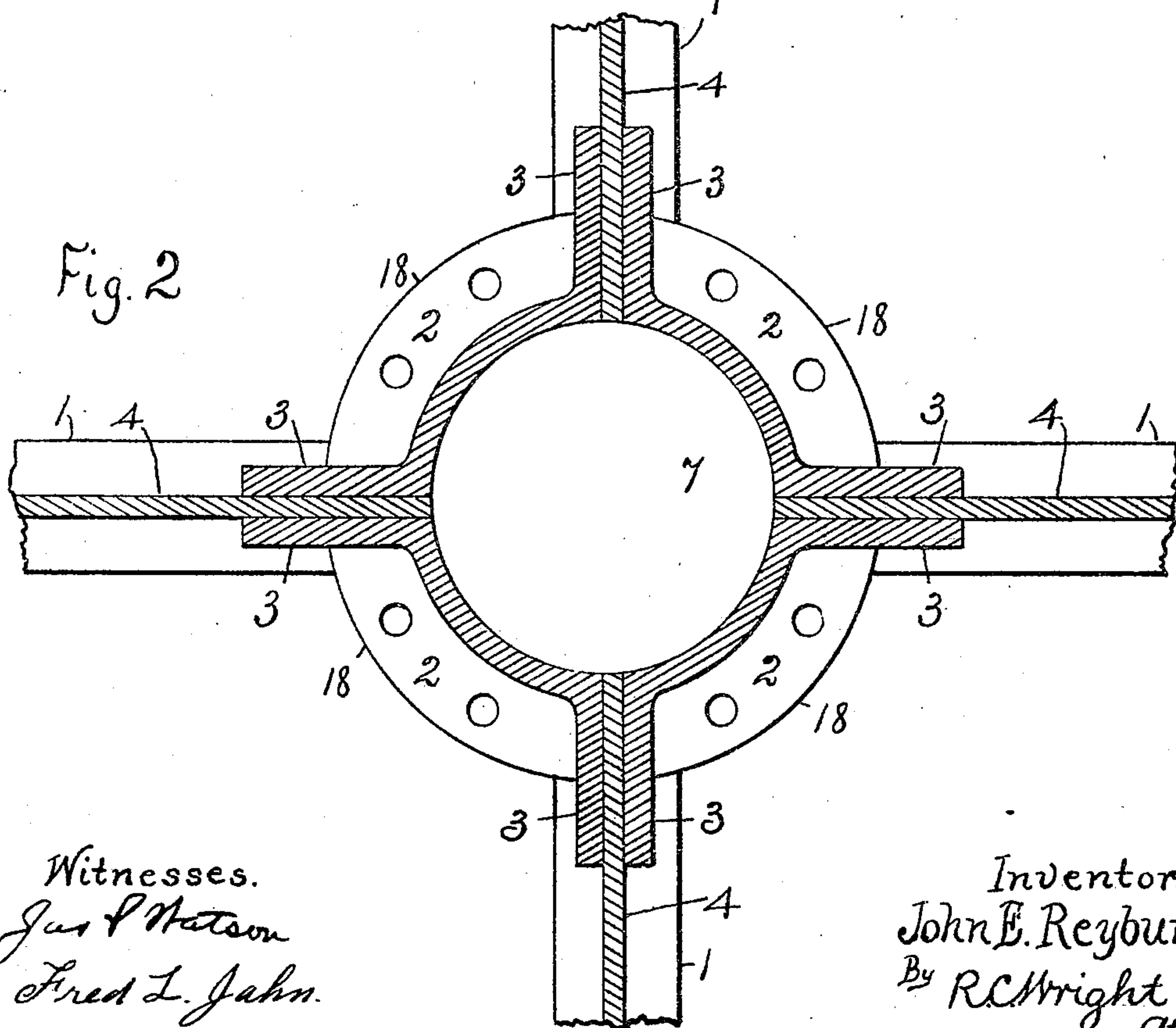
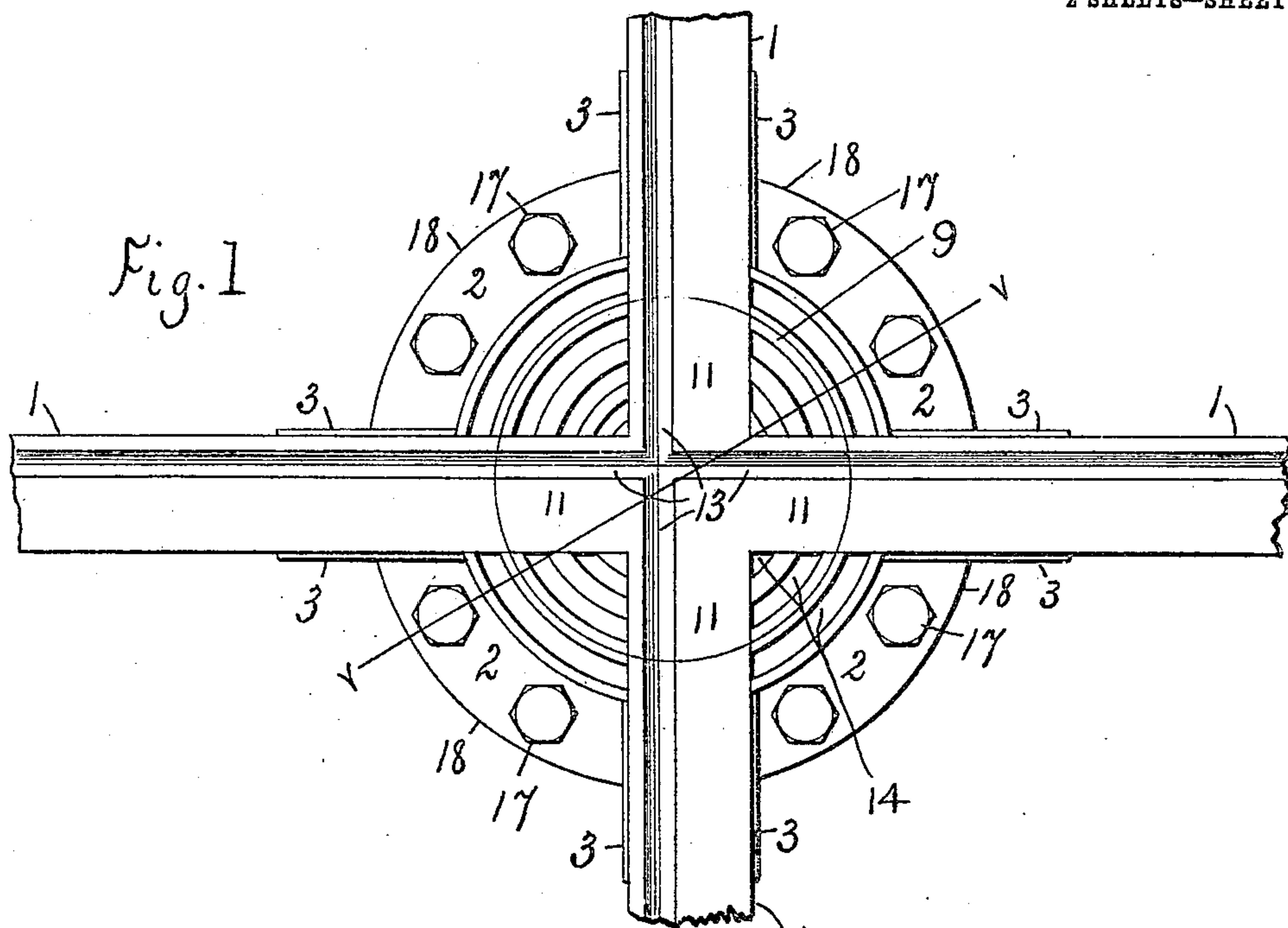


J. E. REYBURN.  
 NOISELESS RAILROAD CROSSING.  
 APPLICATION FILED AUG. 26, 1908.

936,477.

Patented Oct. 12, 1909.

2 SHEETS—SHEET 1.



Witnesses.  
 Jas. P. Watson  
 Fred L. Jahn.

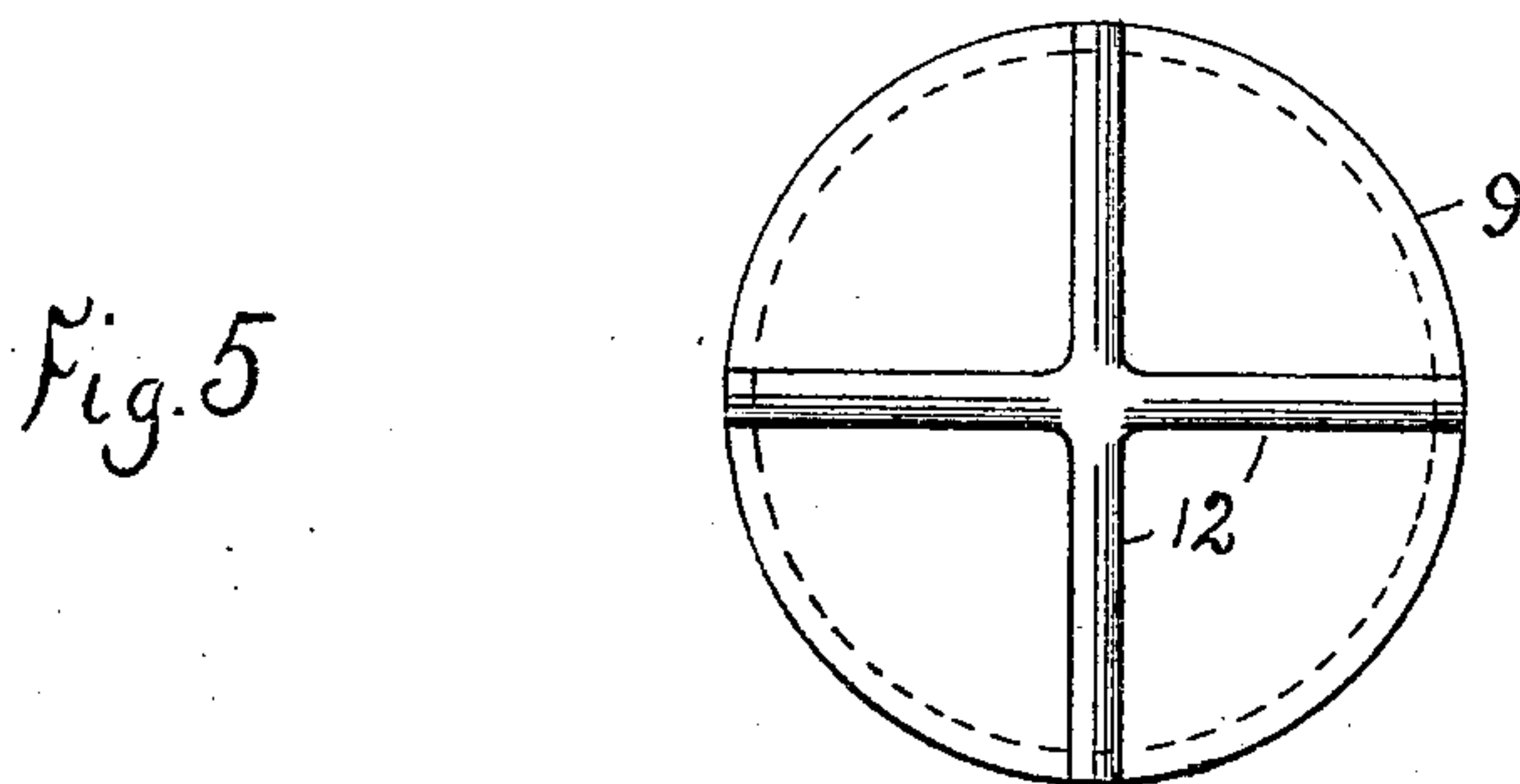
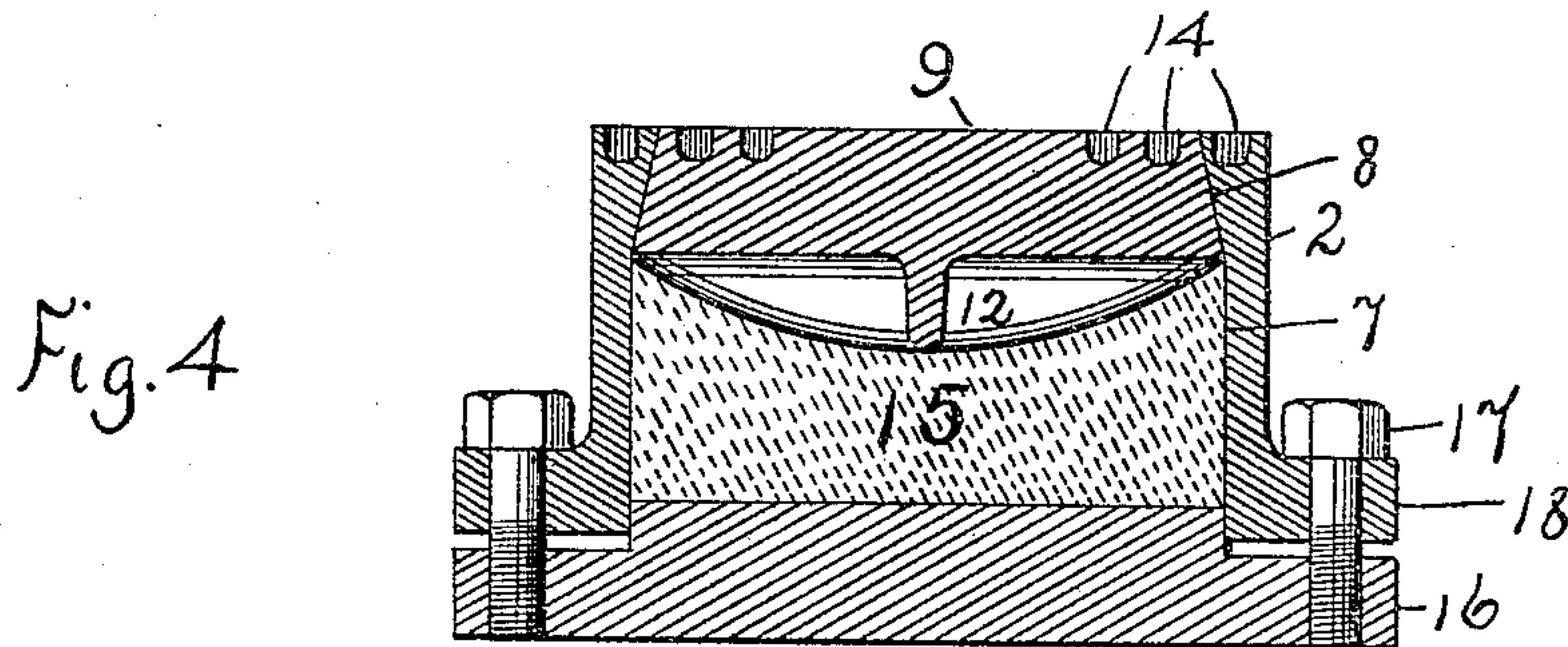
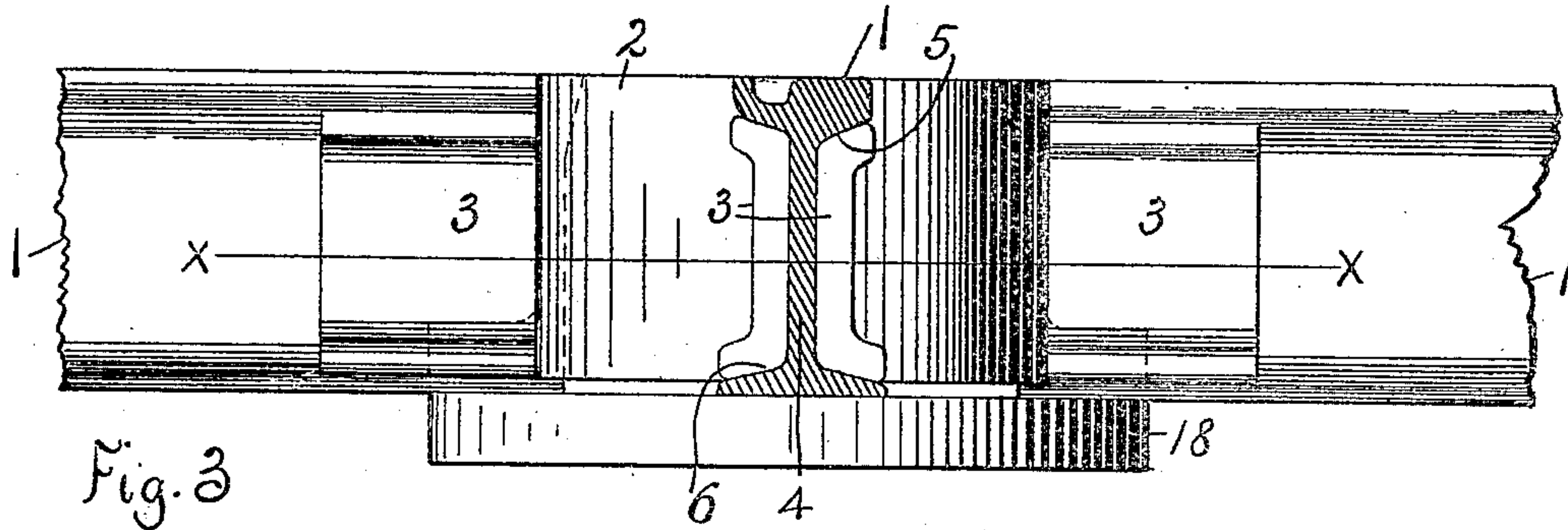
Inventor.  
 John E. Reyburn.  
 By R. C. Wright  
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2 SHEETS—SHEET 2.



Witnesses.  
 Thos. F. Bennett  
 W. H. Rankin

Inventor.  
 John E. Reyburn  
 By R. L. Wright  
 atty.



# UNITED STATES PATENT OFFICE.

JOHN E. REYBURN, OF PHILADELPHIA, PENNSYLVANIA.

NOISELESS RAILROAD-CROSSING.

936,477.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed August 26, 1908. Serial No. 450,261.

To all whom it may concern:

Be it known that I, JOHN E. REYBURN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Noiseless Railroad-Crossings, of which the following is a specification.

This invention is for deadening the noise caused by the passing of street cars over crossings and frogs, where, owing to the necessary gaps for the passage of the wheel flanges the wheel treads drop into the openings and create a blow which renders a noise which in quiet residential districts and near hospitals is not only very unpleasant but to nervous people or patients is a serious disturbance. When it is remembered that with the large cars now in use there are eight blows struck at every crossing, and also considering the frequent passing of the cars, and especially at night when everything is quiet, it can readily be understood that a means to deaden the sound is much to be desired.

In this invention I employ as a deadener a block of compressed paper, or any equivalent compact and non-yielding material which will overcome the ringing noise created by the wheel as it strikes the opposite side of the groove at a crossing or frog.

The best means which I have developed up to the present time to put the invention into operative use is disclosed in the accompanying drawings, in which—

Figure 1 is a top view. Fig. 2 is a section on line  $x-x$  Fig. 3. Fig. 3 is an elevation. Fig. 4 is a section on line  $y-y$  Fig. 1. Fig. 5 is an under side view of the crossing plate. Similar reference characters indicate similar parts throughout the views.

Rails 1 are united to segments 2 and their projections 3 by casting the segments to the sides of the webs 4, and under the heads 5 and above the bottom flanges 6, this forms an integral structure with a central opening 7. The center 7 is then bored true with a taper 8 at the top. Into the tapered top there is introduced the crossing plate 9 with extensions 11, stiffening ribs 12 and flange grooves 13 corresponding to the rails 1. There are also grooves 14 to avoid presenting a smooth surface which would cause passing horses to slip. Supporting the crossing plate 9 is the deadener block 15

composed of compressed paper or equivalent compact and non-yielding material which will prevent the ringing noise of the impact when the passing wheel drops into a groove 13 and strikes the opposite side. The deadener 15 and the crossing plate 9 are made true and forced tight into space 7 by the base plate 16 which is firmly secured by bolts 17 to flanges 18 formed on segments 2.

While the drawings represent a right angle crossing it will be evident that by making needed modifications, by changing the angles of crossings, that any crossing or frog can be improved and deadened without departing from the spirit of my invention.

An additional advantage of this invention is the easy replacement of the crossing plate, when from the constant hammering of the wheels in crossing the crossing points become worn.

I claim—

1. In a railway crossing, a crossing plate and a deadener of compact non-yielding and non-metallic material immovably secured thereunder to minimize the sound created by the wheels in impact with the opposite side of the flange groove.

2. In a railway crossing a crossing plate connecting oppositely disposed rails, and a non-metallic and non-elastic support for the crossing plate unyieldingly secured and whereby the impact upon the plate is deadened.

3. In a railway crossing or frog, an interposed grooved plate connection between rail ends and forming the actual crossing, and a support therefor of fibrous material immovably secured and adapted to minimize the noise produced by car wheels in crossing.

4. In a crossing or frog, a structure embracing rail ends, a connection between the rail ends and forming a crossing, and a non-resonant and non-yielding support therefor adapted to deaden the plate.

5. In a crossing or frog, a structure adapted to railroad use at points where tracks cross, a central removable member therefor adapted to form the actual crossing, and an immobile support therefor of non-metallic and non-reverberative material, unyieldingly secured and adapted to deaden the central removable member.

6. In a railroad crossing, rail ends joined in manner to form a central receptacle, said receptacle preferably having a circular wall

and an open bottom and top, with an inward taper at its top opening; a crossing plate adapted to fit within said taper and provided with grooves for the passage of wheel  
5 flanges; a compact and unyielding block of sound deadening non-metallic material in the receptacle, under the crossing plate; and a base plate entering and closing the lower opening of the receptacle, and means for its

securing and thereby the rigid securing of 10 the deadening block and the crossing plate.

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

JOHN E. REYBURN.

Witnesses:

PRICE I. PATTON,  
R. C. WRIGHT.