

(No Model.)

W. M. FARR.  
SAND BAND.

No. 346,274.

Patented July 27, 1886.

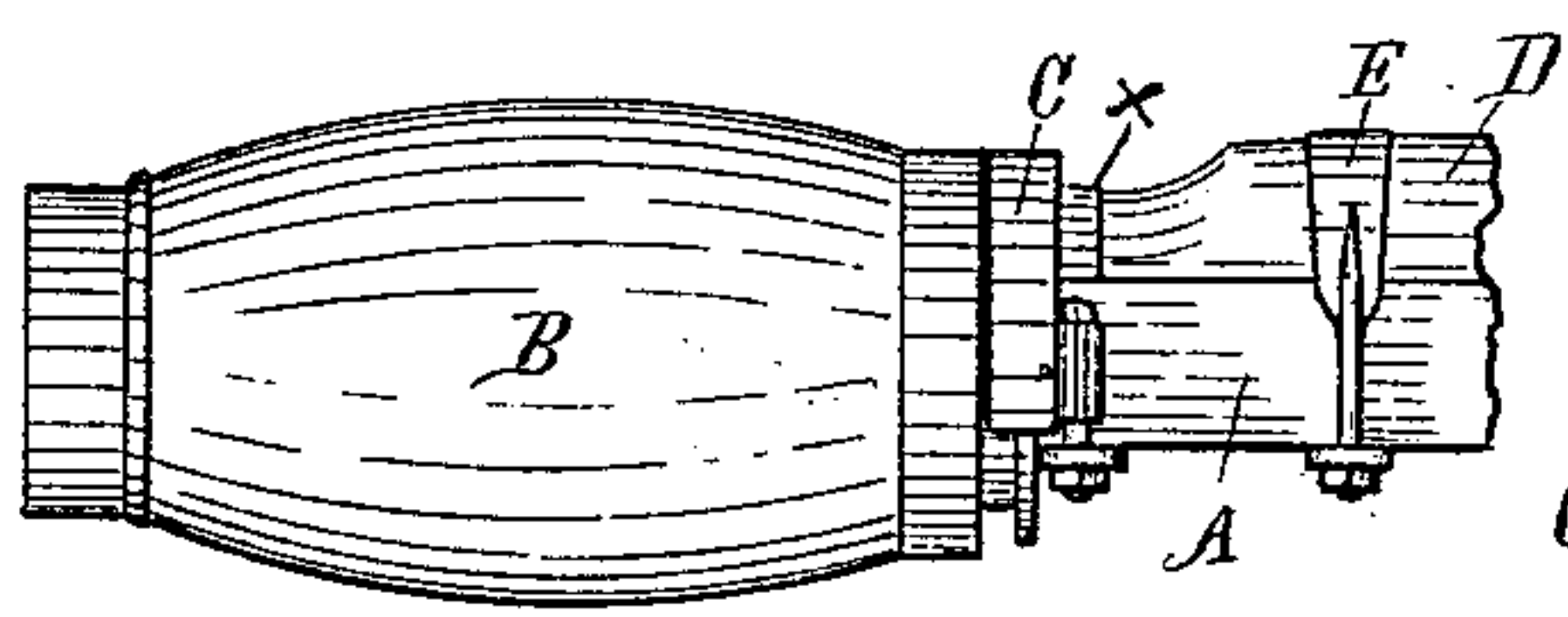


Fig. 1

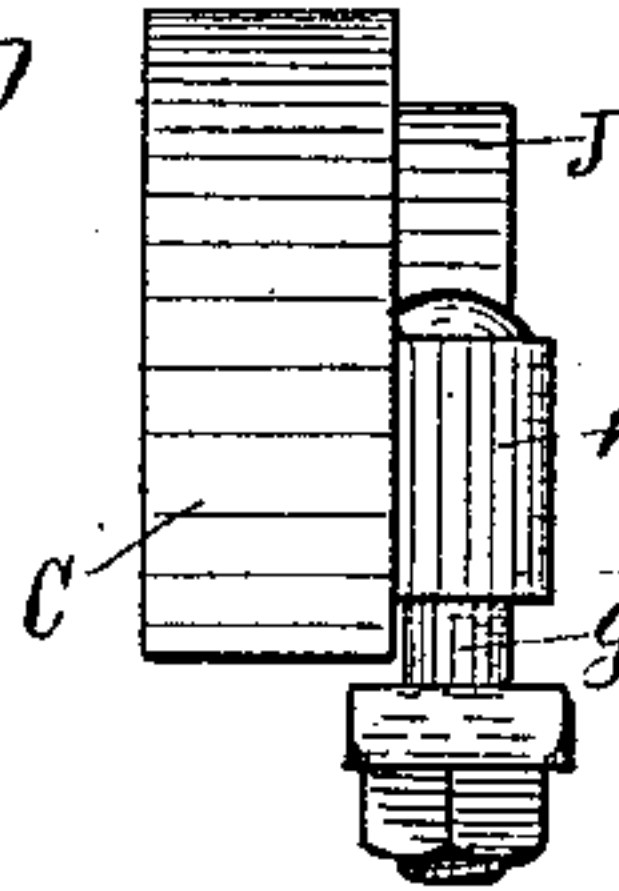


Fig. 2

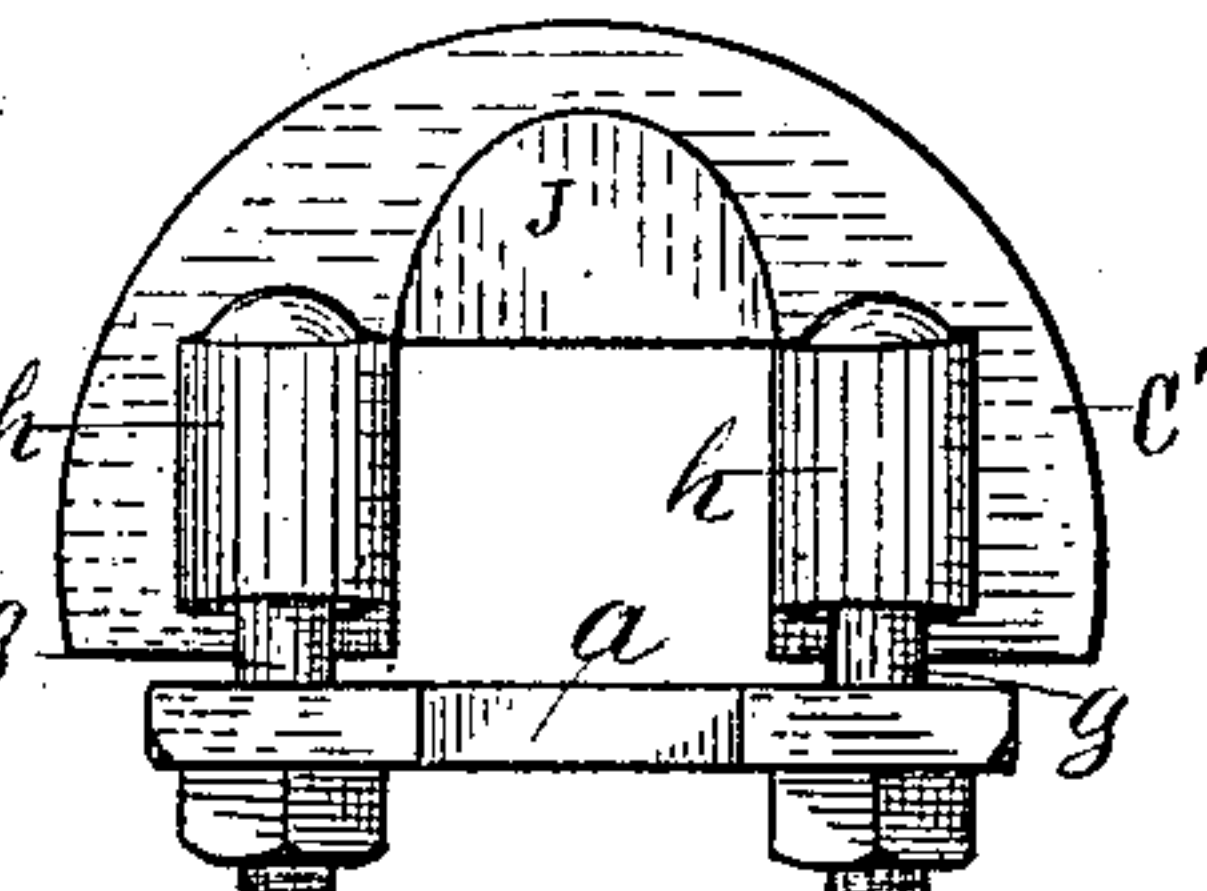


Fig. 3

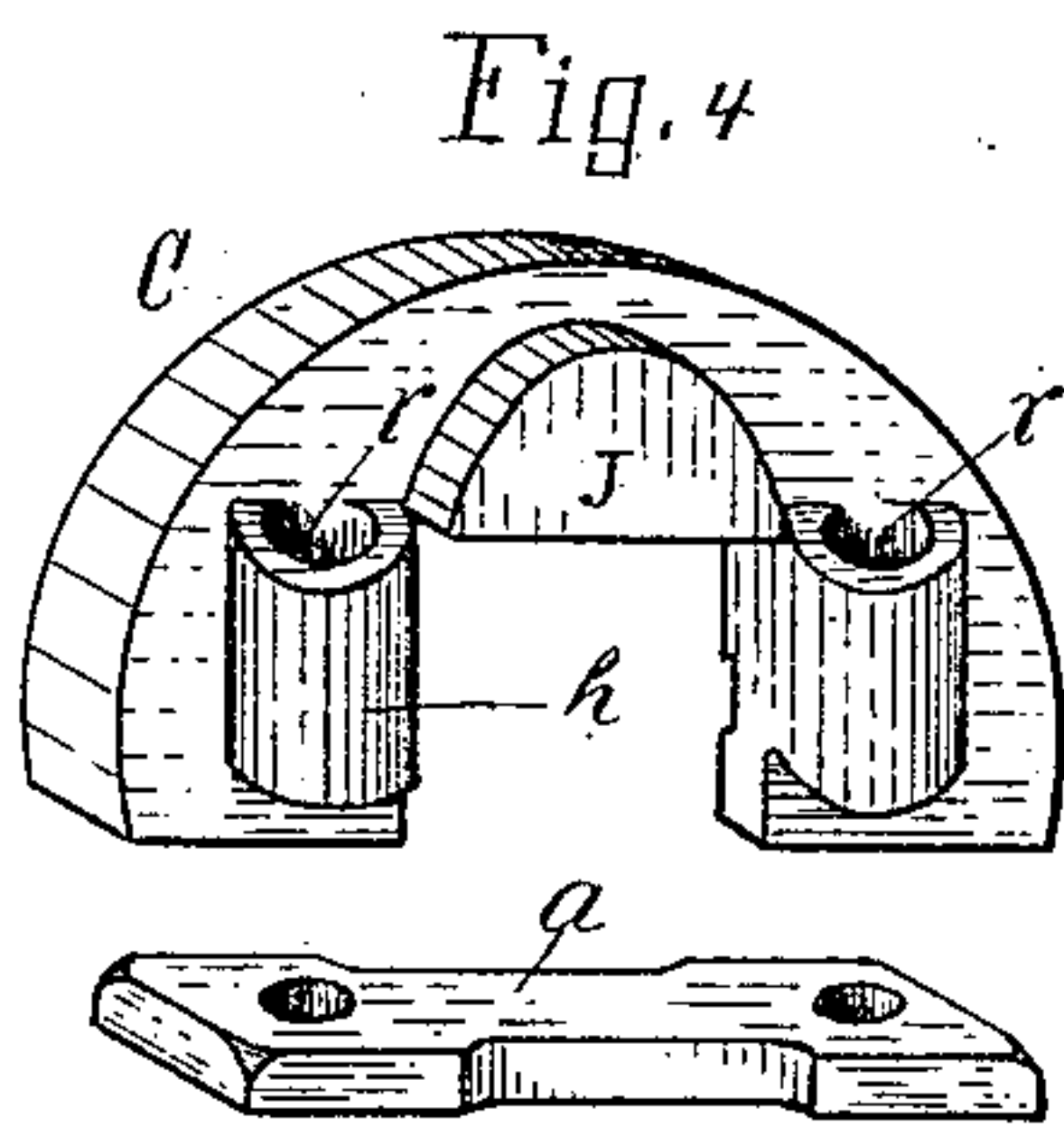


Fig. 4

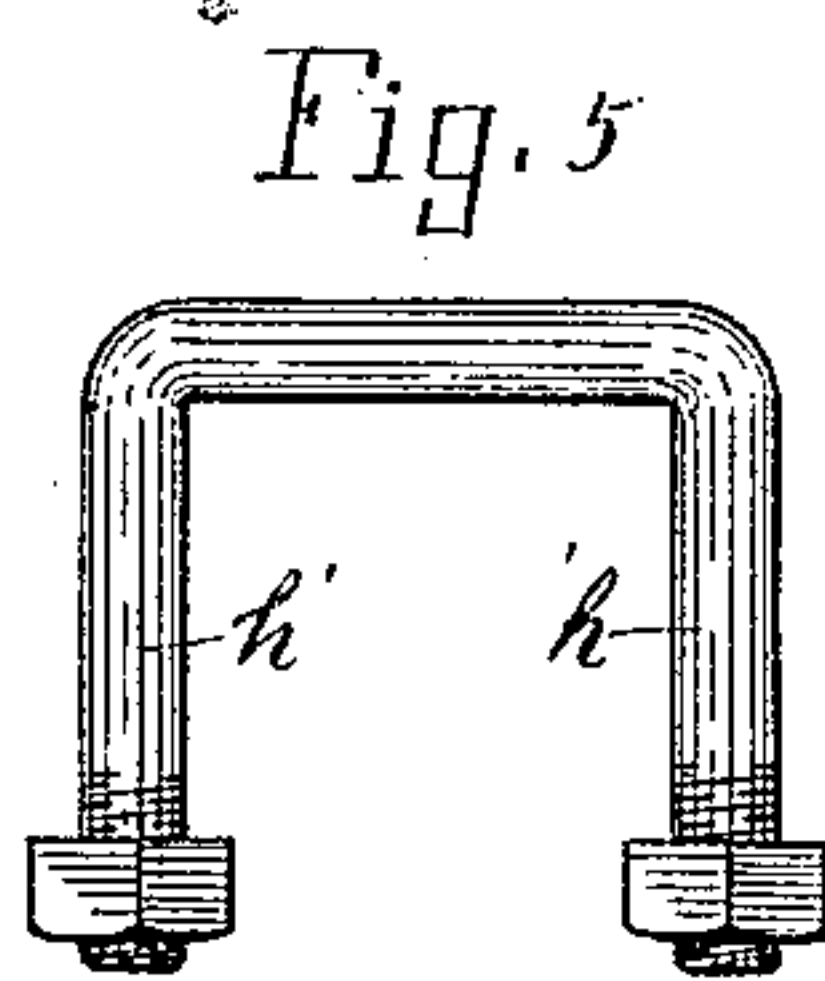


Fig. 5

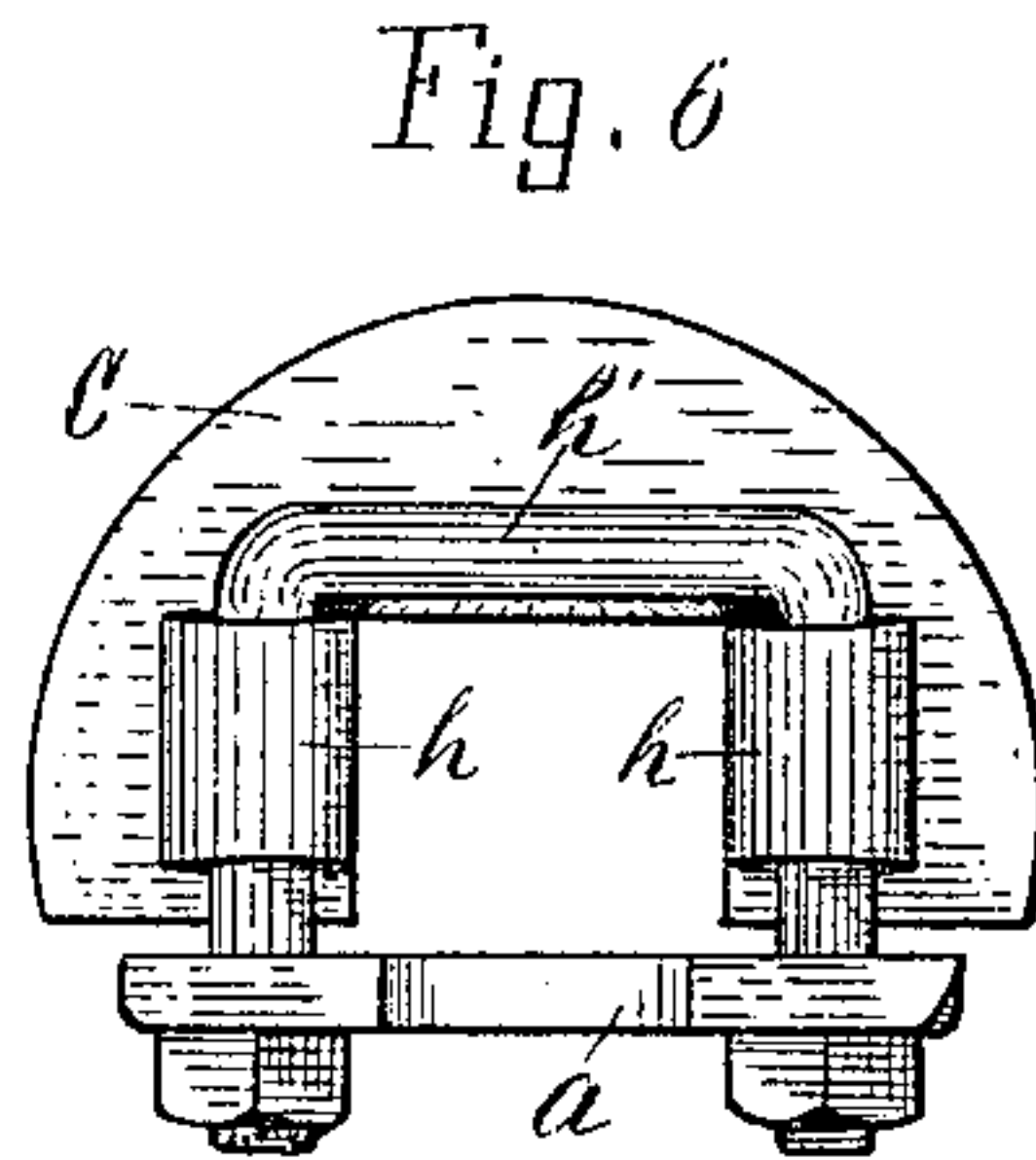


Fig. 6

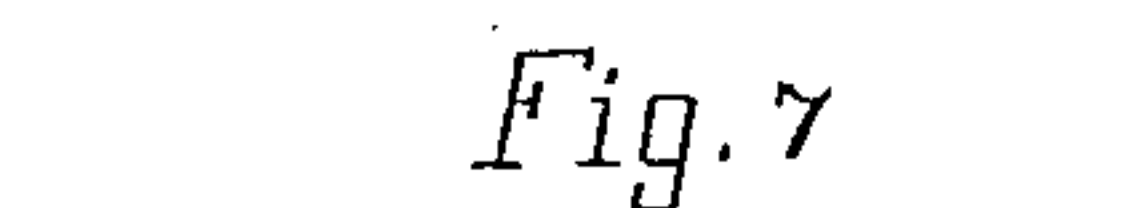


Fig. 7

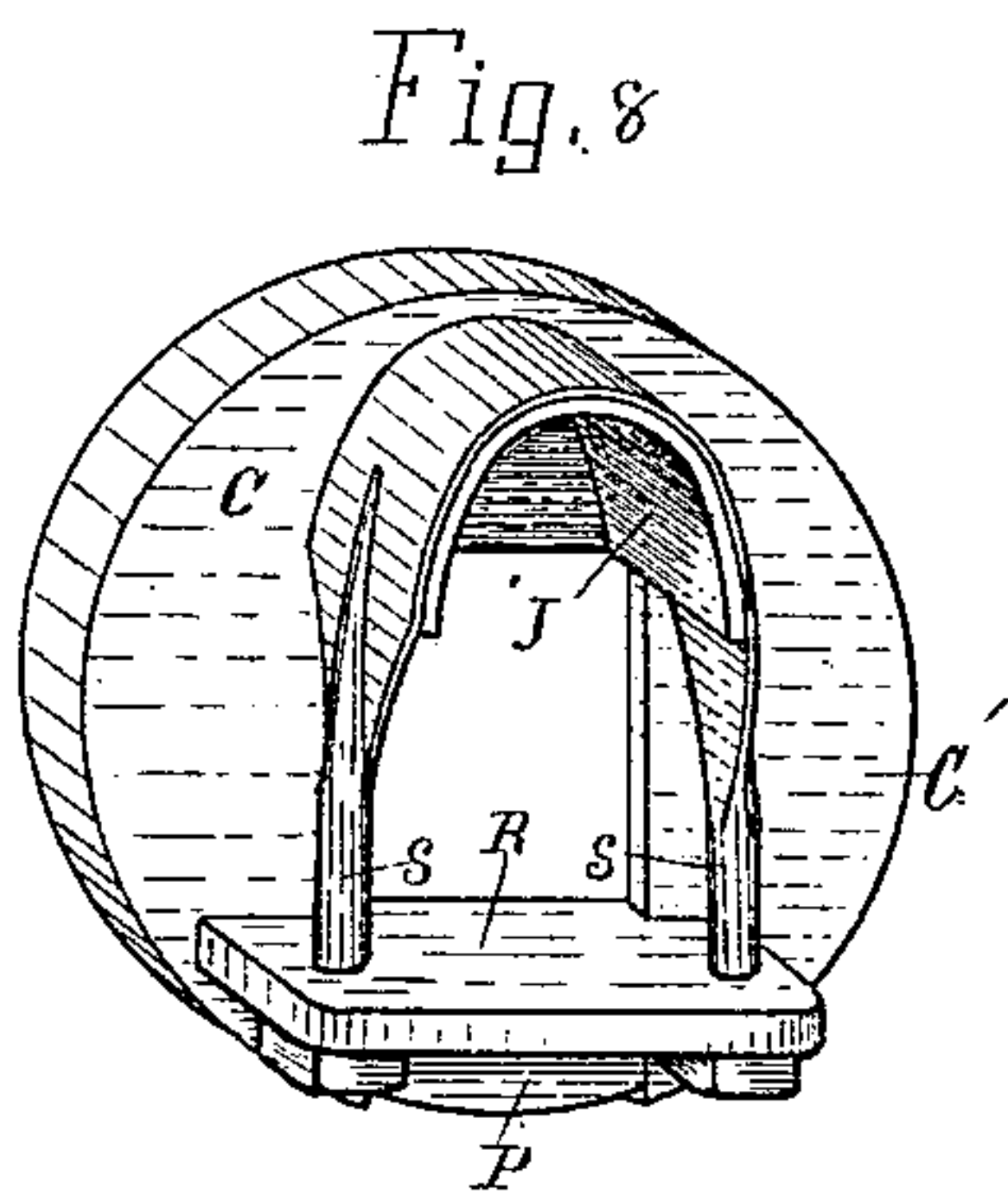


Fig. 8

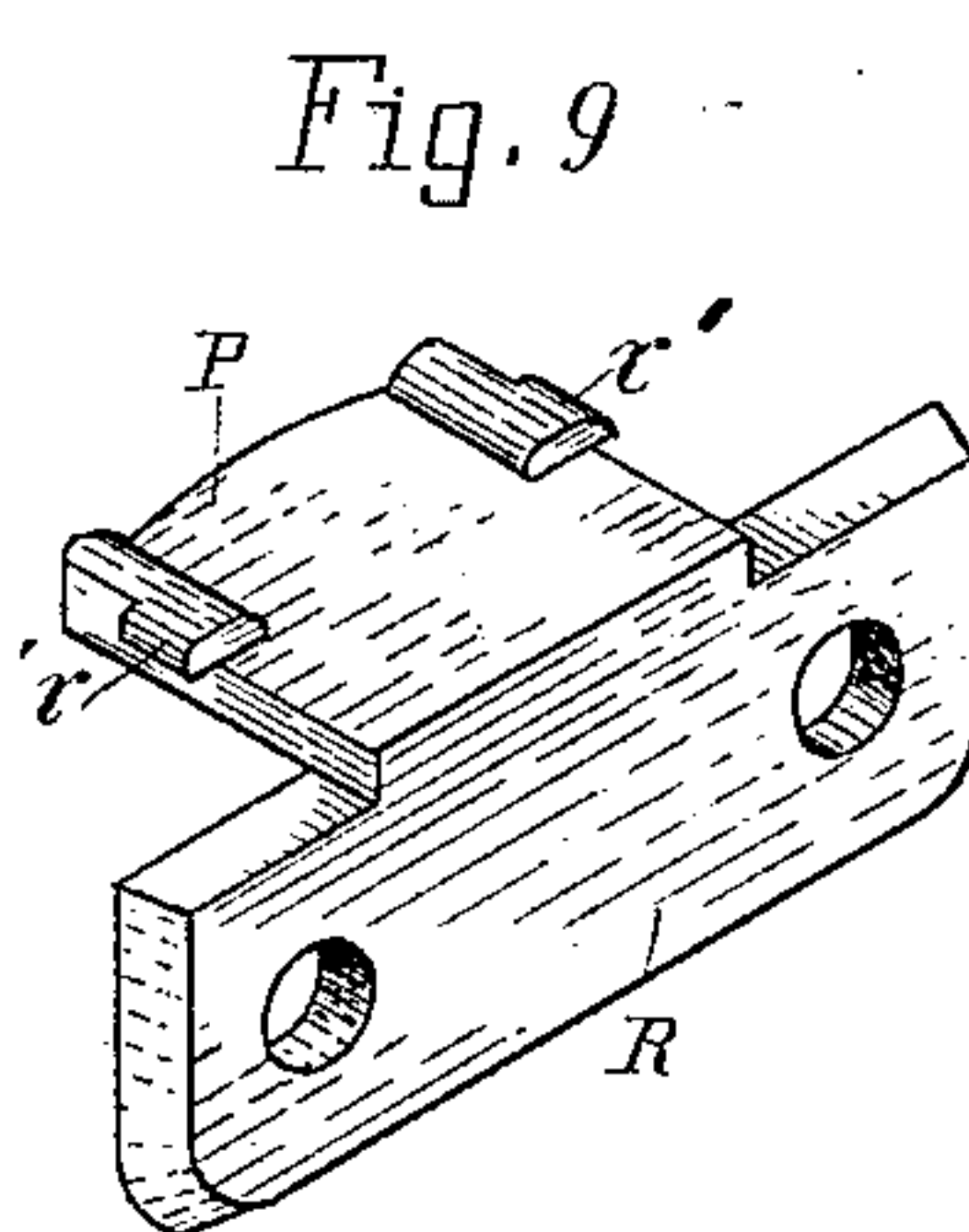


Fig. 9

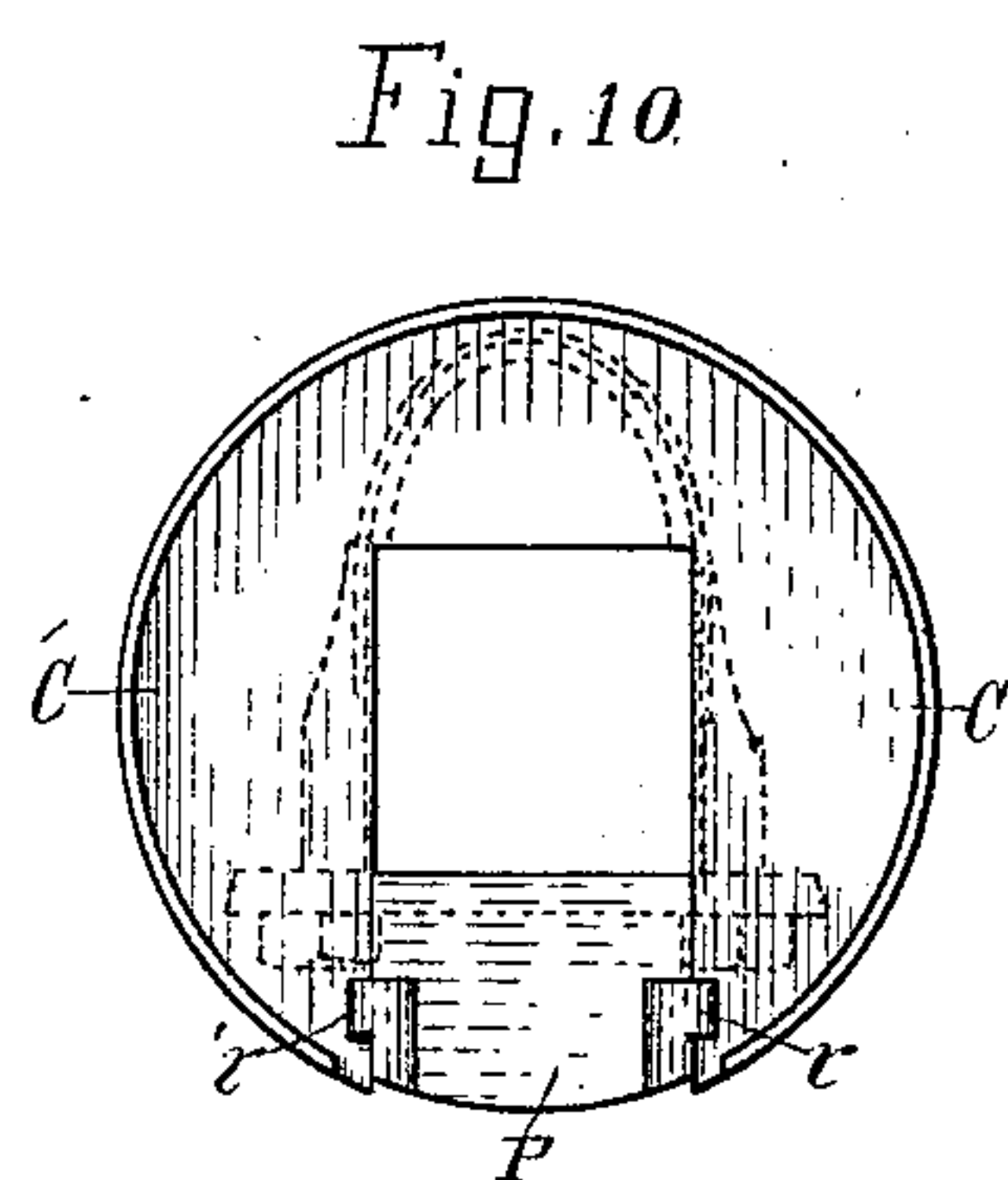


Fig. 10

Witnesses  
John C. Perkins  
Blair Read

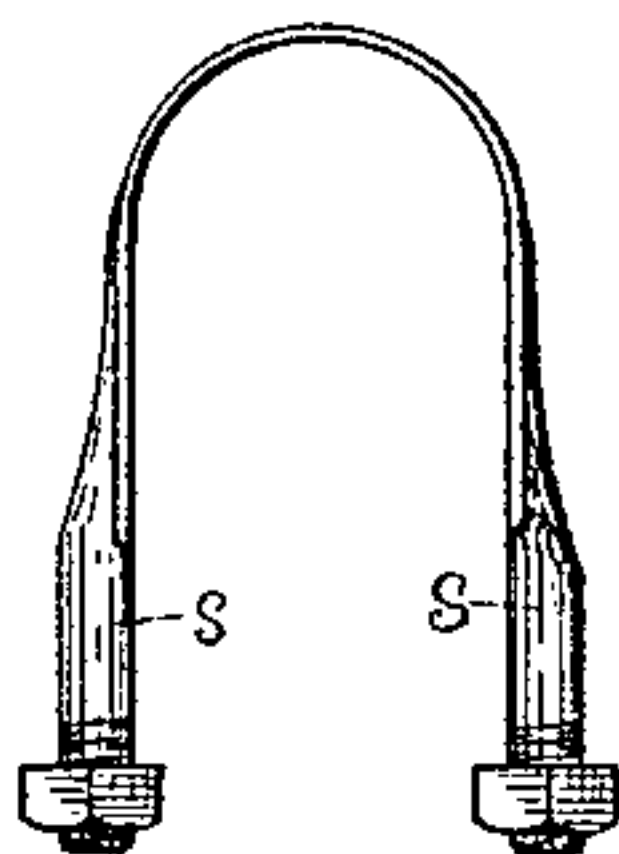


Fig. 11



Fig. 12

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# UNITED STATES PATENT OFFICE.

WILLIS M. FARR, OF DOWAGIAC, MICHIGAN.

## SAND-BAND.

SPECIFICATION forming part of Letters Patent No. 346,274, dated July 27, 1886.

Application filed March 8, 1886. Serial No. 191,425. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIS M. FARR, a citizen of the United States, residing at Dowagiac, in the county of Cass, State of Michigan, have  
5 invented certain new and useful Improvements in Sand-Bands, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to improvements in devices for protecting vehicle-spindles from sand, dirt, and other foreign matter, and preventing such from working into the space between the box in the hub and the spindle; and it consists in the novel construction  
10 and arrangement of a metallic shell which covers the inner end of a hub or attachments which the same may have, and is known as "sand-bands," all as will be hereinafter fully explained, and particularly pointed out in the  
15 appended claims.

The annexed drawings, to which reference is made, fully illustrate my invention, in which Figure 1 represents a side view of a hub and axle, showing my device applied thereto.  
25 Fig. 2 is a side view of the device. Fig. 3 is a rear view of the same. Fig. 4 is a perspective view. Fig. 5 is a side view of the bent holding-bolt. Fig. 6 is a rear view. Fig. 7 is a perspective view of the plate *a*. Fig. 8 is  
30 a perspective view. Fig. 9 is a perspective view of the plate *R*. Fig. 10 is a front view of Fig. 8, and Figs. 11 and 12 are detail views.

Referring by letter to the accompanying drawings, *A* designates the vehicle-axle; *B*,  
35 the hub; *D*, the wooden bed thereon, secured to the axle by the clip *E*; and *C* represents the sand-band cap, which is bolted to the axle, the inner edge of which resting against or near to the rear end of said hub.

*C'* is a metal plate or wall, upon which is provided a projecting rim, *C*, which may be constructed at any desired curvature, angle,  
40 or width to correspond with the shape of the hub or parts thereof or attachments thereto which it may cover; but in practice I prefer to make the rim *C* at right angles, or nearly so, to the plate or wall *C'*. Upon the plate or wall *C'* are lugs *h h*, having vertical perforations *r r*,  
45 adapted to receive bolts *g g*, or in lieu thereof the bolts *h' h'* or clips *s s*, or other suitable form of fastening, for the purpose of securing the attachment to the axle. The single bolt *g*,  
50 when used, is prevented from turning, when

the nut is applied, by the flat cut-away portion of the head thereof lying against the plate *C'*. 55

In application the end of the wooden bed *D* may be constructed to conform to the extremity of the bearing *J* against its face, as shown in Fig. 1 at *x*; or it may be elongated a suitable distance to be covered by the bearing  
60 *J*, as in Fig. 8, and when in contact with the face of the bearing, Fig. 4, the flat lower face thereof rests upon the axle, and, if fitted to the bearing, as in Fig. 8, and bolted by a clip, Fig. 11, to the axle, would secure both the cap  
65 and bed firmly to said axle.

In Fig. 9, *R* is the body of a clip-yoke, provided with a plate, *P*, having at its lower portion lugs *r' r'* cast therewith, and the same is designed to assist in securing the cap to the  
70 axle, in connecting with the bolts and nuts, and also to close the opening in the plate *C'* under the axle, thus providing a continuous circle of the plate *C'*, and the lugs *r' r'* hold the cap in a vertical position, thus preventing lateral motion when clipped to the axle, and also any  
75 vertical, forward, or backward movement of said cap.

It will be seen that I provide a strong and adjustable sand-band cap which is easily applied to the axle and readily removed therefrom, and can be readily applied to all classes of vehicles and wheeled implements for protecting the spindle from sand, dirt, &c., and it prevents the surplus lubricant that works off  
80 the spindle from spreading over the hub, axle, and other parts of the vehicle or implement.

What I claim is—

1. The cap having the bearing on its rear face and provided with the central opening, in combination with the annular clip-plate constructed with the lugs *r'*, adapted to engage the wall of said opening, and the fastening therefor, as and for the purpose set forth. 90

2. The combination, in a sand-band provided on its rear face with a semicircular bearing, of the adjustable angular plate provided with the lugs *r' r'*, adapted to close the opening below the axle, as and for the purpose set forth. 95

In testimony whereof I affix my signature in presence of two witnesses. 100

WILLIS M. FARR.

Witnesses:

CARL GERDING,  
HENRY MICHAEL.