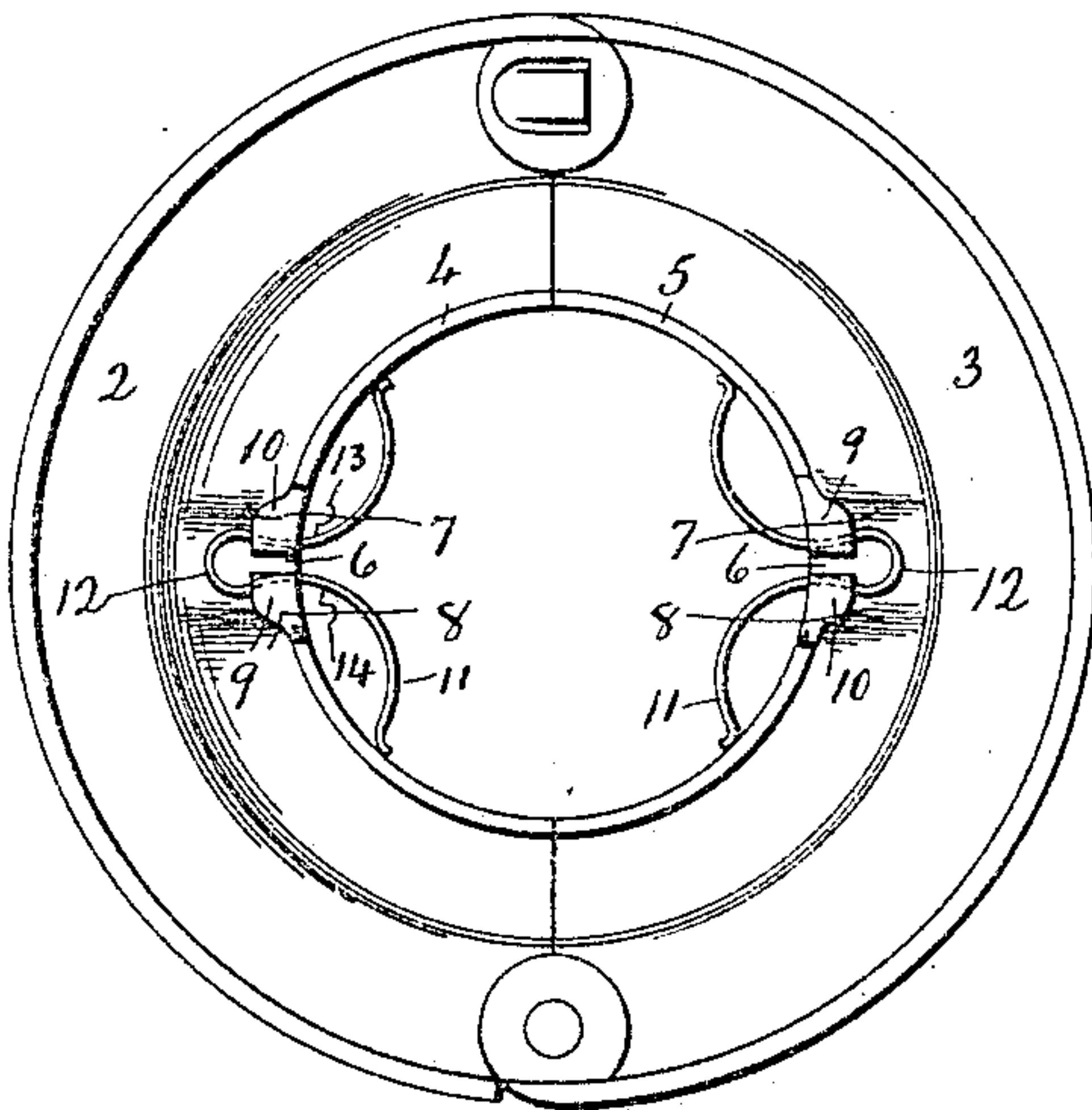


No. 787,077.

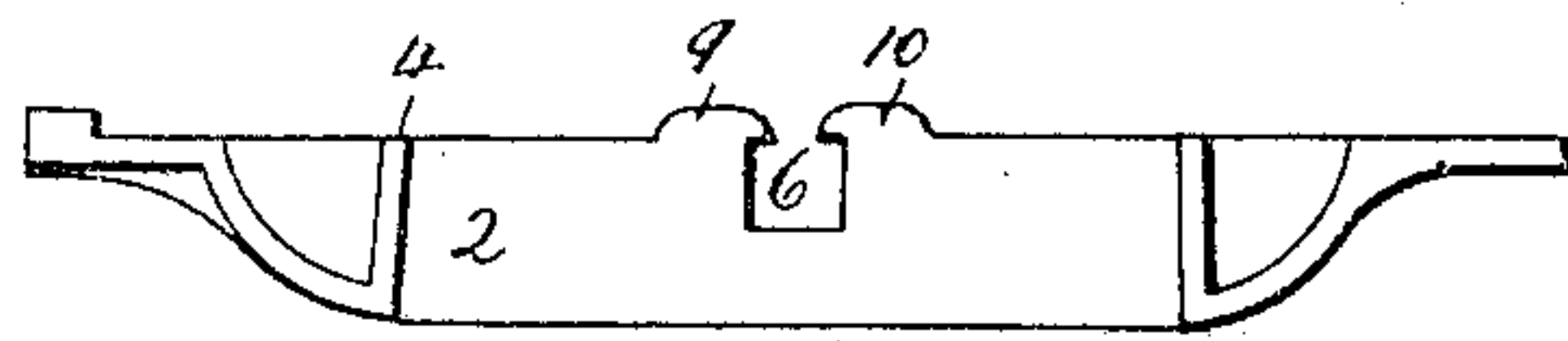
PATENTED APR. 11, 1905.

J. W. CARLETON.  
FLOOR AND CEILING PLATE.  
APPLICATION FILED MAR. 24, 1904.

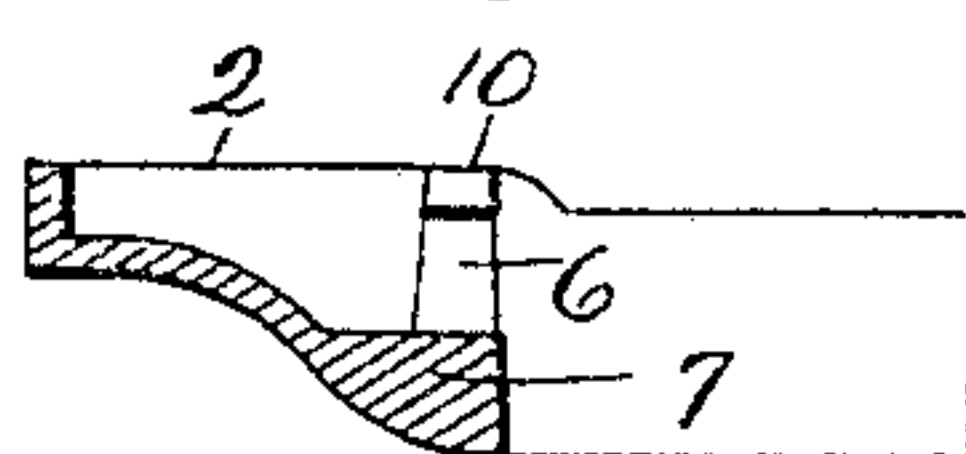
*Fig. 1*



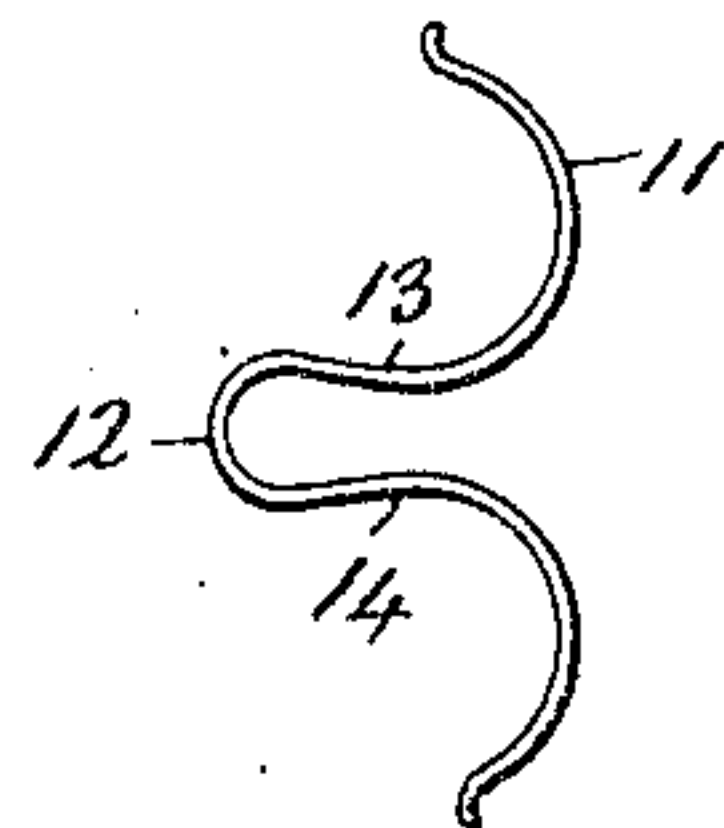
*Fig. 2*



*Fig. 3*



*Fig. 4*



Witnesses.  
J. H. Shumway  
Charles L. Weed.

John W. Carleton,  
Inventor.  
By atty. Seymour Tarr

# UNITED STATES PATENT OFFICE.

JOHN W. CARLETON, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO  
ALBERT R. WELLS, OF SOUTHLINGTON, CONNECTICUT.

## FLOOR AND CEILING PLATE.

SPECIFICATION forming part of Letters Patent No. 787,077, dated April 11, 1905.

Application filed March 24, 1904. Serial No. 199,702.

*To all whom it may concern:*

Be it known that I, JOHN W. CARLETON, of New Britain, in the county of Hartford and State of Connecticut, have invented a new and  
5 useful Improvement in Floor and Ceiling Plates; and I do hereby declare the following, when taken in connection with the accompanying drawings and the figures of reference marked thereon, to be a full, clear, and exact  
10 description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, an inside plan view of a floor and ceiling plate constructed in accordance with  
15 my invention; Fig. 2, an inside edge view of one of the plate members; Fig. 3, a sectional view through one of the notches; Fig. 4, a plan view of one of the springs detached.

This invention relates to an improvement in  
20 floor and ceiling plates for steam-pipes, and particularly to that class which are made in two parts adapted to be coupled together and provided with springs which bear against the pipe, so as to assist in holding the plates in  
25 position, and is an improvement upon the invention shown and described in United States Patent No. 613,461, granted November 1, 1898, upon an application filed by Arthur H. Muus.

The device shown and described in that pat-  
30 ent comprises plates having flanges with angular orifices through which the central portion or shank of a spring is inserted; but as the spring is inserted through this orifice it follows that it could be readily removed there-  
35 from.

The object of this invention is to so construct the flanges that springs may be readily engaged therewith and not liable to be accidentally detached therefrom; and the invention consists  
40 in the construction as hereinafter described, and particularly recited in the claim.

In carrying out my invention I employ two semicircular plates 2 3, which may be coupled together in any desired manner. As herein  
45 shown, they are hinged together at one end and adapted to be engaged at opposite ends. These plates are formed at their inner edges with semicircular flanges 4 5, which when placed together form a ring somewhat larger  
50 in diameter than the diameter of the pipe around which the plate is to be placed. In

each of these flanges an angular notch 6 is formed opening through the upper edge of the flange, the sides of the notches being thickened to form wide walls 7 8, while the  
55 edges of the flanges on each side of the notches are built up and extend over the notches, forming lugs 9 10. The springs 11 are doubled at their centers, forming a head 12 and shanks 13 and 14, and this spring is engaged with the  
60 plates by compressing the shanks 13 14 toward each other, so that they may be passed between the lugs 9 10 into the notch 6, the head 12 resting beyond the outer edges of the walls  
65 7 8, while the shanks when released will pass under the lugs 9 10, the ends of the spring extending on opposite sides of the notch and bearing against the inner wall of the flange. By thus providing the flanges with the lugs  
70 9 10 the spring cannot be removed until the shanks 13 14 are drawn together sufficiently to permit them to pass between the said lugs, as the central portion is greater in diameter  
75 than the width of the notch. The natural pressure of the spring against the pipe, however, tends to force the shanks apart, and hence hold the spring in close engagement with the flanges.

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

A two-part floor and ceiling plate comprising body portions each of which is provided with a flange, each flange being formed with a notch opening through its edge and with in-  
85 tegral lugs on its edge at each side of the notch extending partially across said notch, combined with a spring having a bowed central portion and shanks, said central portion being of greater diameter than the width of said  
90 notches, and the shanks adapted to be pressed together so that they may be passed between the ends of the said lugs to bearings in said notches, substantially as described.

In testimony whereof I have signed this  
95 specification in the presence of two subscribing witnesses.

JOHN W. CARLETON.

Witnesses:

JOHN H. KIRKHAM,  
JAMES E. COOPER.