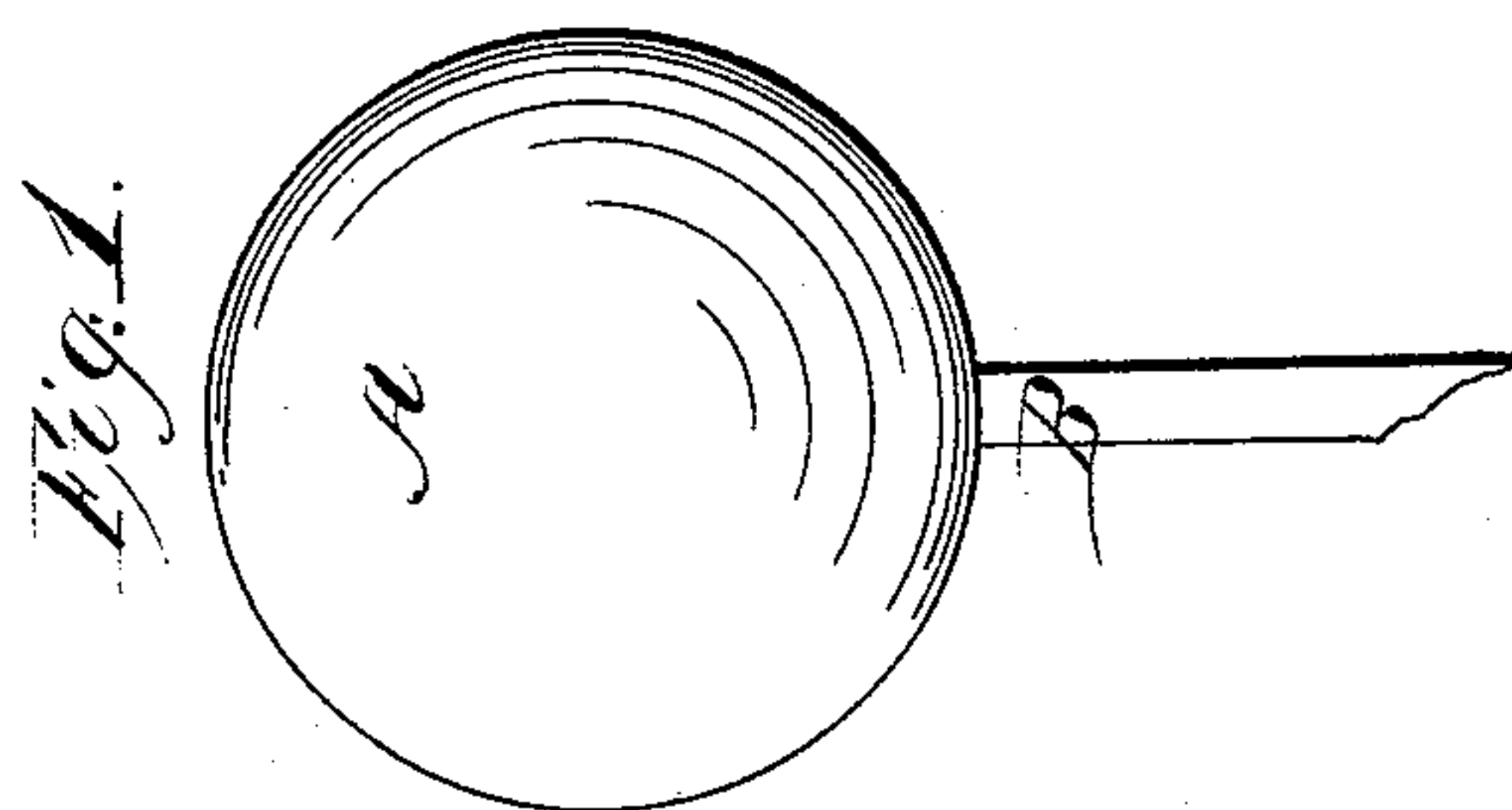
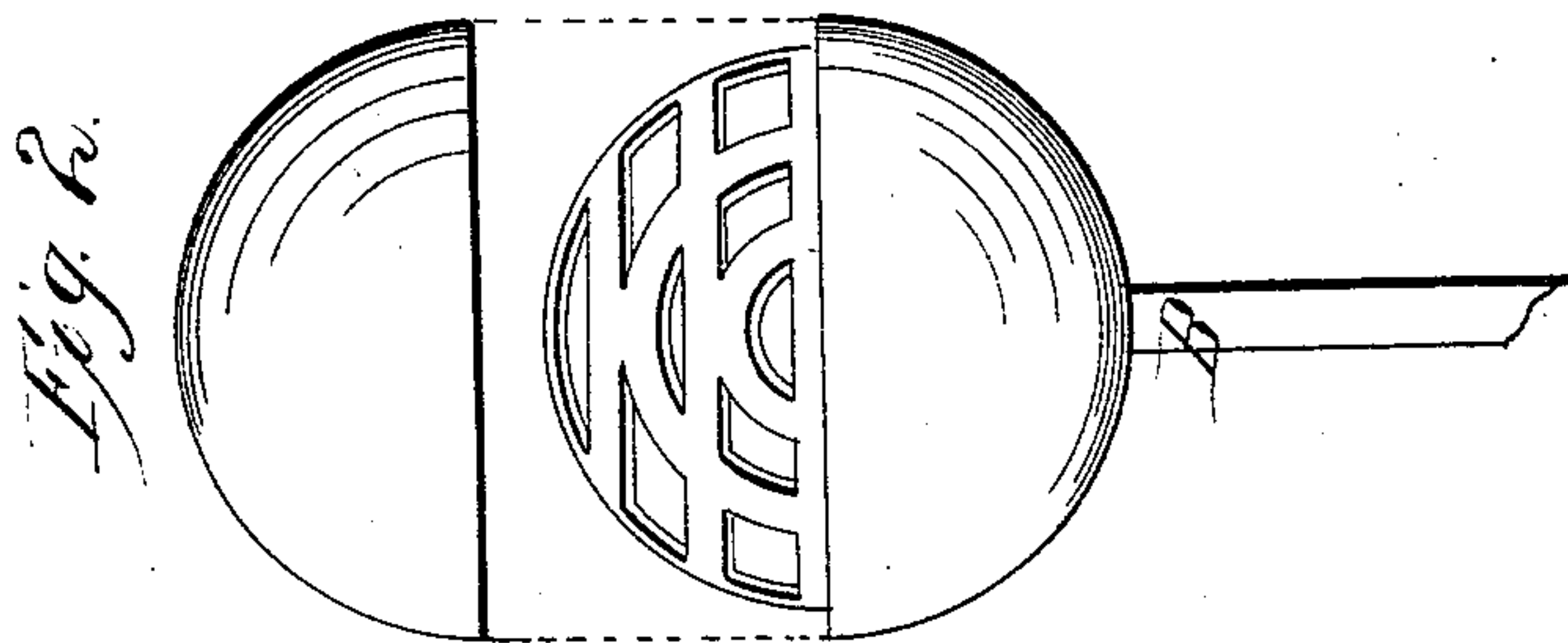
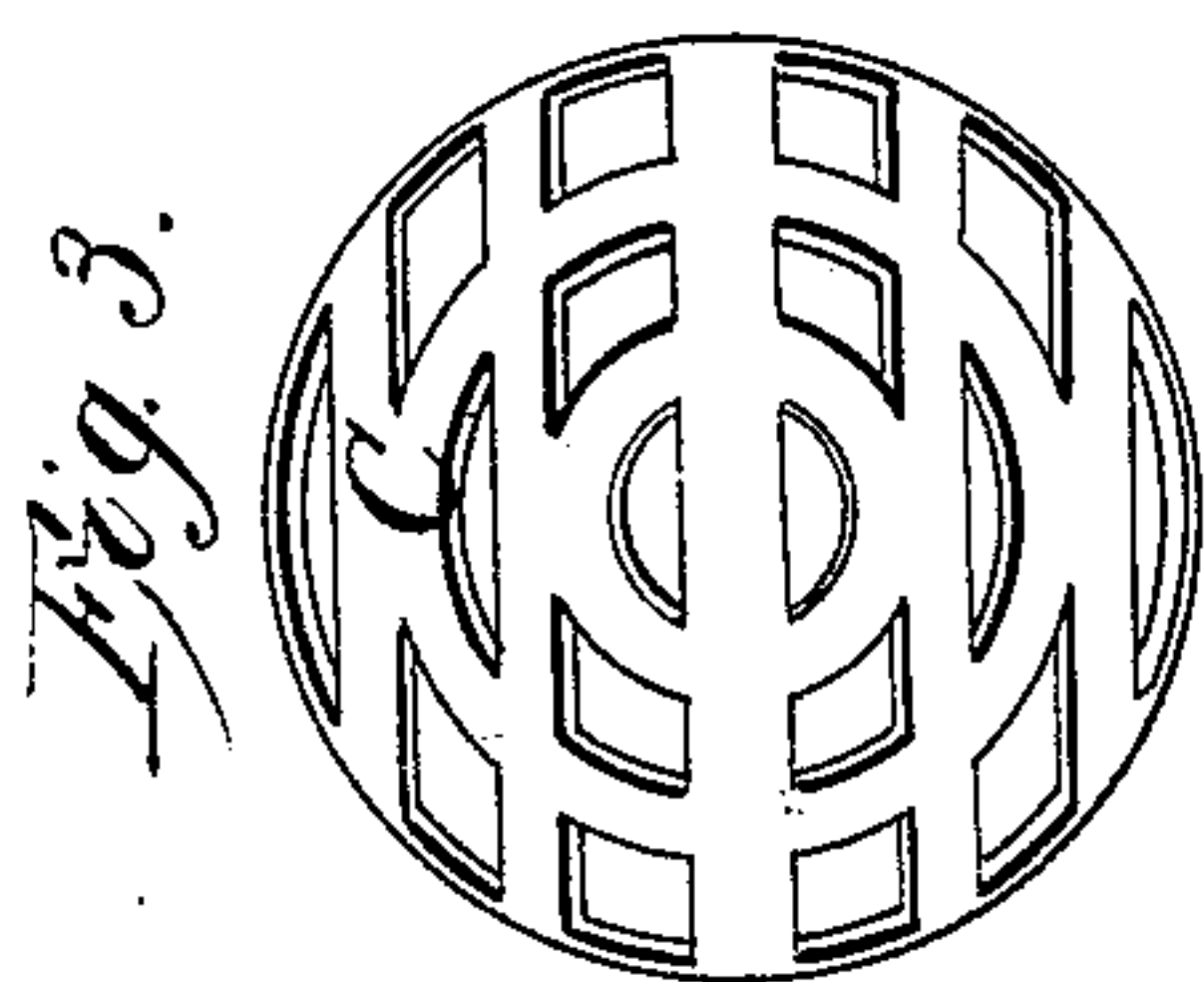


H. Mc Gann,

Steam-Boiler Indicator.

N^o 84,502.

Patented Dec. 1, 1868.



Witnesses:

J. H. Burridge

Frank G. Alden

Inventor:

H. Mc Gann



HENRY MCGANN, OF CLEVELAND, OHIO.

Letters Patent No. 84,502, dated December 1, 1868.

IMPROVEMENT IN FLOATS FOR BOILERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY MCGANN, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Floats for Steam-Boilers; and I do declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an outside view of the float.

Figure 2, a view of the float with a section of the shell detached.

Figure 3, a view of the frame.

Like letters of reference refer to like parts in the different views.

The nature of this invention relates to a float for steam-boilers, constructed with an internal globular frame, whereby the shell of the float is prevented from collapsing in consequence of the pressure of steam exerted upon it.

The float referred to consists of an external thin metallic shell, A, fig. 1, to which is attached a rod, B, whereby it is connected to the axial point of vibration. Within said shell is closely fitted a globular metallic frame-work, C, fig. 3, whereby the outer shell is braced and thereby prevented from being forced in or collapsed by the pressure of the steam to which it is subjected, and which, as ordinarily made, is very liable to become crushed in consequence of the thinness of the metal of which it is made. To obviate this difficulty

the float has sometimes been constructed of much thicker plate, so as to enable it to resist the strain upon it. This additional thickness of the shell has so increased the weight of the float that, practically, it has been of little or no value for the loss of buoyancy, which it is highly important that the shell should possess.

By the use of the light globular frame C, closely fitted to the inside, as shown in fig. 2, the shell of the float can be made of very thin plate, and thereby retain all the buoyancy essential to its practical value, and at the same time possess a strength of structure that will enable it to resist the great pressure of steam that may be exerted upon it.

This frame is easily made by casting it in suitable moulds, provided with a core, whereby the openings or bars of the frame are formed; hence the expense of a float thus constructed will be but little more than the ordinary one, and less expensive than those made of thick metal, more buoyant and durable.

What I claim as my invention, and desire to secure by Letters Patent, is—

The globular frame C, in combination with the shell A, substantially as herein specified.

H. MCGANN.

Witnesses:

W. H. BURRIDGE,
FRANK S. ALDEN.