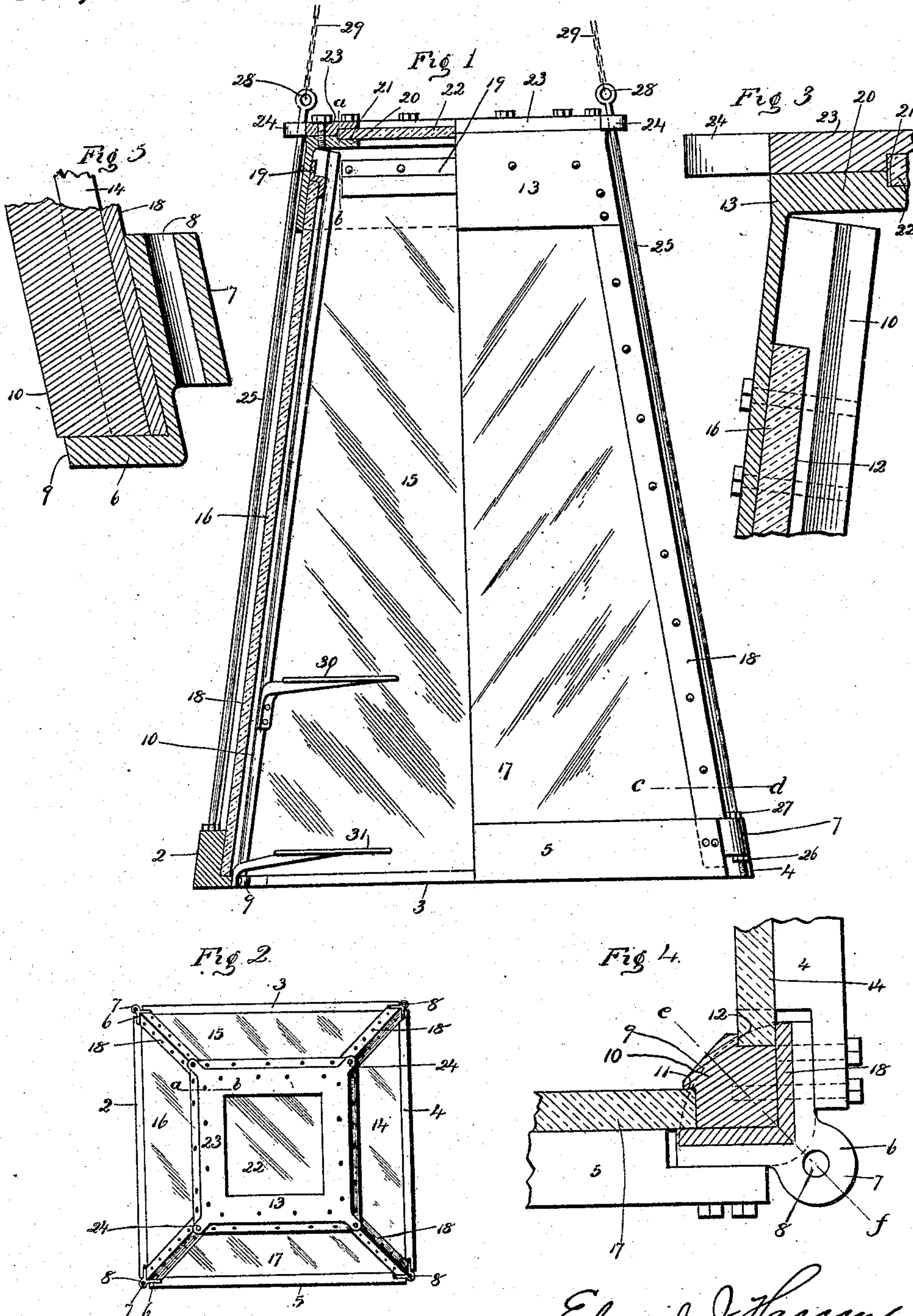


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DIVING BELL.  
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908,095.

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Witnesses  
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# UNITED STATES PATENT OFFICE.

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## DIVING-BELL.

No. 908,095.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed August 31, 1908. Serial No. 451,093.

*To all whom it may concern:*

Be it known that I, EDWARD J. HASSAN, a citizen of the United States, residing at East Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Diving-Bells; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a side view partially in section of a diving bell constructed in accordance with my invention. Fig. 2 a top or plan view of the same. Fig. 3 a sectional view on line *a—b* of Fig. 2. Fig. 4 a sectional view on line *c—d* of Fig. 1. Fig. 5 a sectional view on line *e—f* of Fig. 4.

This invention relates to an improvement in diving bells, and while adapted for practical purposes, may also be used as an object of interest at summer resorts, the object of the invention being the construction of a diving bell with glass sides so that objects may be seen through the sides of the bell; and the invention consists in the construction hereinafter described and particularly recited in the claims.

In carrying out my invention I preferably form the bell square in cross section. The frame consists of four base pieces 2, 3, 4 and 5, these bases being heavy castings, or they may have heavy weights applied to them. The ends of the bases are recessed to receive brackets 6 which have outwardly projecting lugs 7 with perforations 8 for the purpose as will hereafter appear. The sides of the bracket are connected at the bottom by a plate 9. Rising from the base at each corner is a post 10 formed with shoulders 11 and 12. These posts are inclined and are connected at their upper end by a head 13.

The sides 14, 15, 16 and 17 of the bell are formed from thick plates of glass the inner edges of which rest against the shoulders 11 and 12 against which they are held by corner irons 18 which irons are bolted to the posts 10. The upper edges of the glass sides are secured to the head by angle strips 19 it being understood that packing is employed around the edges of the glass plates to make a water tight joint. The top of the head 13 is open and around the flange 20 is a shoulder 21 on which rests a glass top 22 which is

held in place by a top plate 23 being formed at their corners with perforated ears 24 through which long bolt rods 25 may extend the lower ends of the rods passing through the perforations 8 in the lugs 7 with which they are coupled by nuts 26 and 27. The upper ends of these rods 25 have eyes 28 to which chains or cables 29 may be attached by which the bell is suspended.

When used as a novelty the bell may be provided with seats 30 and foot rests 31.

A bell thus constructed with glass sides may be provided with a search light so that objects under the water may be readily observed such, for instance, as inspections of the hull of a vessel.

I claim:—

1. A diving bell comprising a base open at the bottom, inclined posts connected therewith the upper end of said posts connected with a head, and glass panels arranged between said posts and connected thereto with a water tight joint, substantially as described.

2. A diving bell comprising a weighted base, posts connected with the corners of the base, said posts inclined upward and connected at their upper ends by a head, said posts formed with shoulders, glass panels bearing against said shoulders, a corner iron clamped to said posts and holding said glass panels in position, and means connected with the bell for raising and lowering the same, substantially as described.

3. A diving bell comprising a base having four sides, the sections of the base connected at their ends by a bracket, posts connected with said ends and resting on said brackets, said posts formed with shoulders said posts also inclined upward and connected at their upper ends by a head, glass panels between said posts, corner irons secured to said posts and clamping the edges of the glass panels to the posts, angle strips secured to the inner face of the head and clamping the upper edges of the panels thereto, said head formed with a central opening, a glass top closing said opening, a top plate secured to the head and clamping the glass top in place, and means connected with the bell for raising and lowering the same, substantially as described.

4. A diving bell comprising a base formed in four parts the ends of the parts connected by corner brackets, said brackets formed with outwardly projecting perforated lugs,



posts connected with said base members and  
extending upward therefrom in an inclined  
position, a head connecting the upper ends of  
the said posts, glass panels between said  
5 posts and firmly connected thereto, an open-  
ing in the top of said head, a glass top to close  
said opening, a top plate secured to said head  
and clamping the glass top in position, said  
plate formed with outwardly projecting eyes,  
10 stay rods extending through said eyes and  
engaging with the lugs of the said brackets,

and means with said rods for raising and low-  
ering the bell, substantially as described.

5. A diving bell open at the bottom and  
provided with glass sides. 15

In testimony whereof, I have signed this  
specification in the presence of two subscrib-  
ing witnesses.

EDWARD J. HASSAN.

Witnesses:

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CATHERINE DU BOIS.