No. 815,631. PATENTED MAR. 20, 1906.

J. M. PEARSON.

BARGE.

APPLICATION FILED OCT. 19, 1904.

FIG. 1.

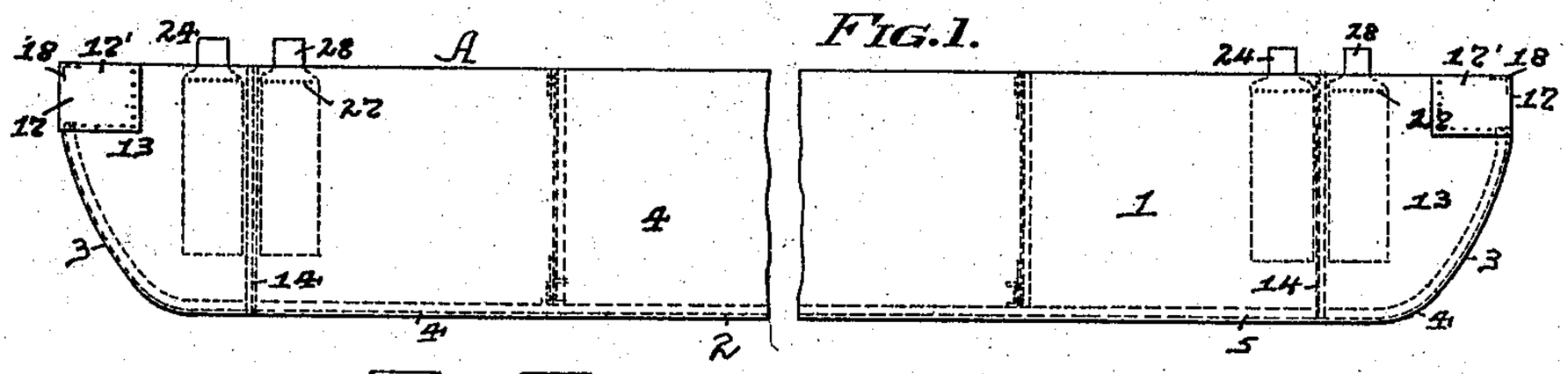


FIG. 2.

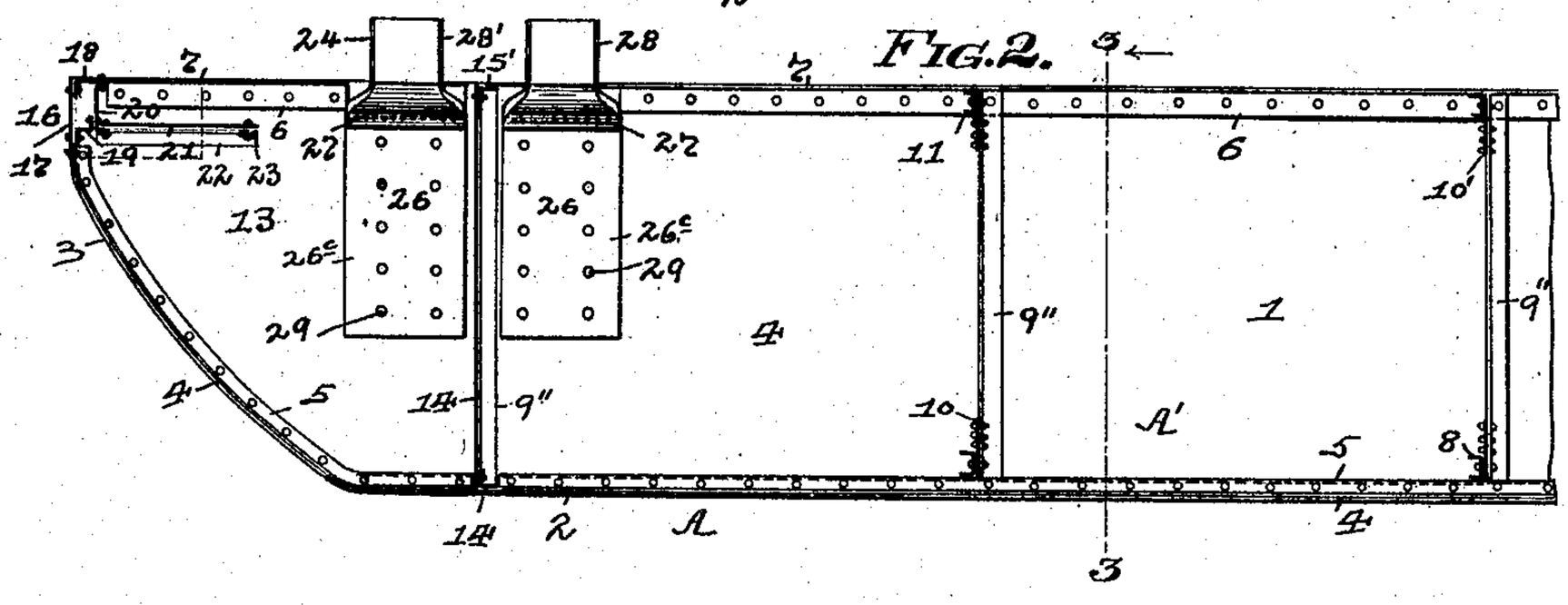


FIG. 3.

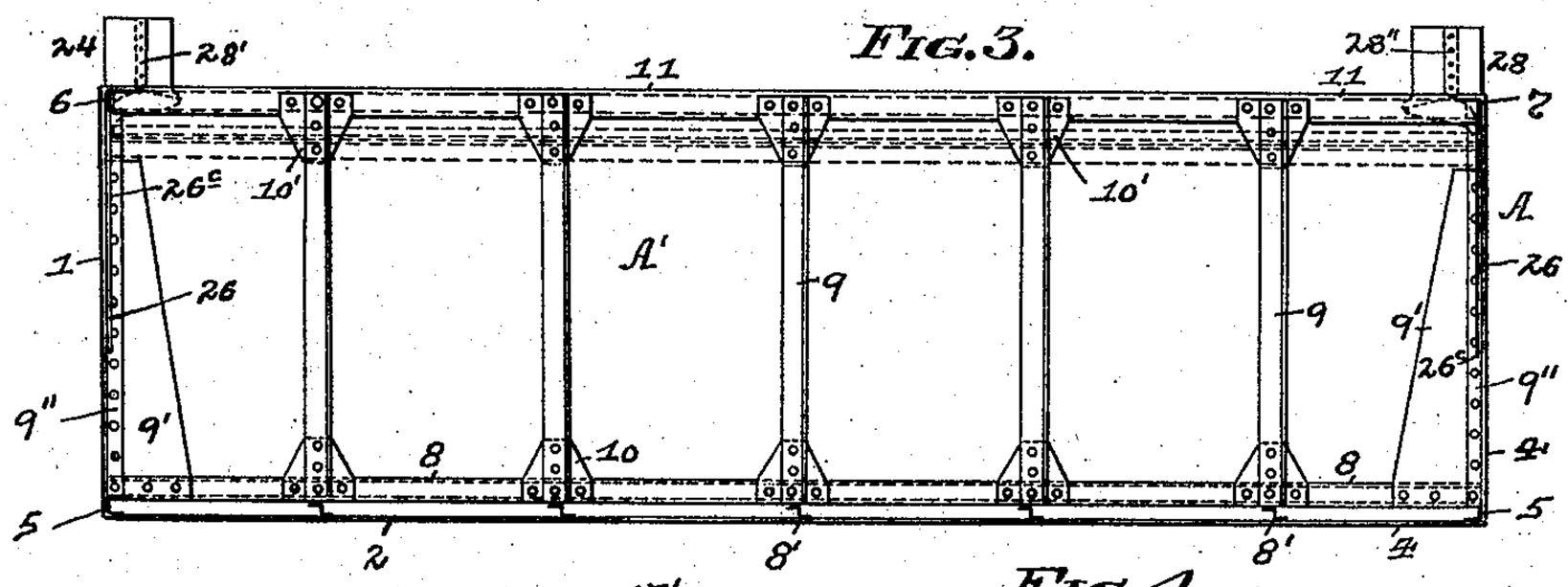


FIG. 5.

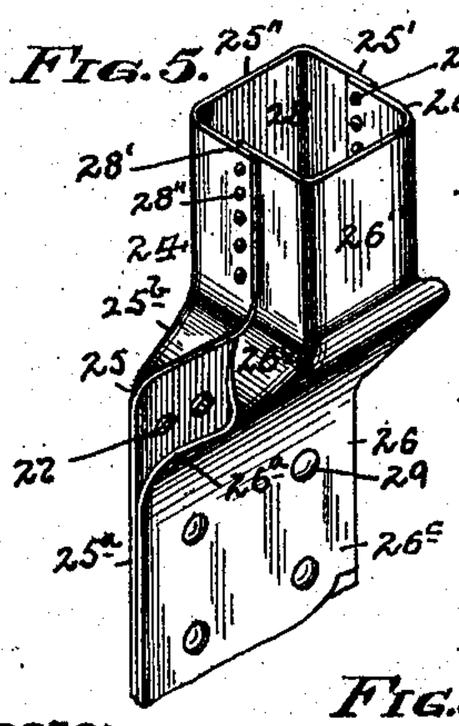


FIG. 4.

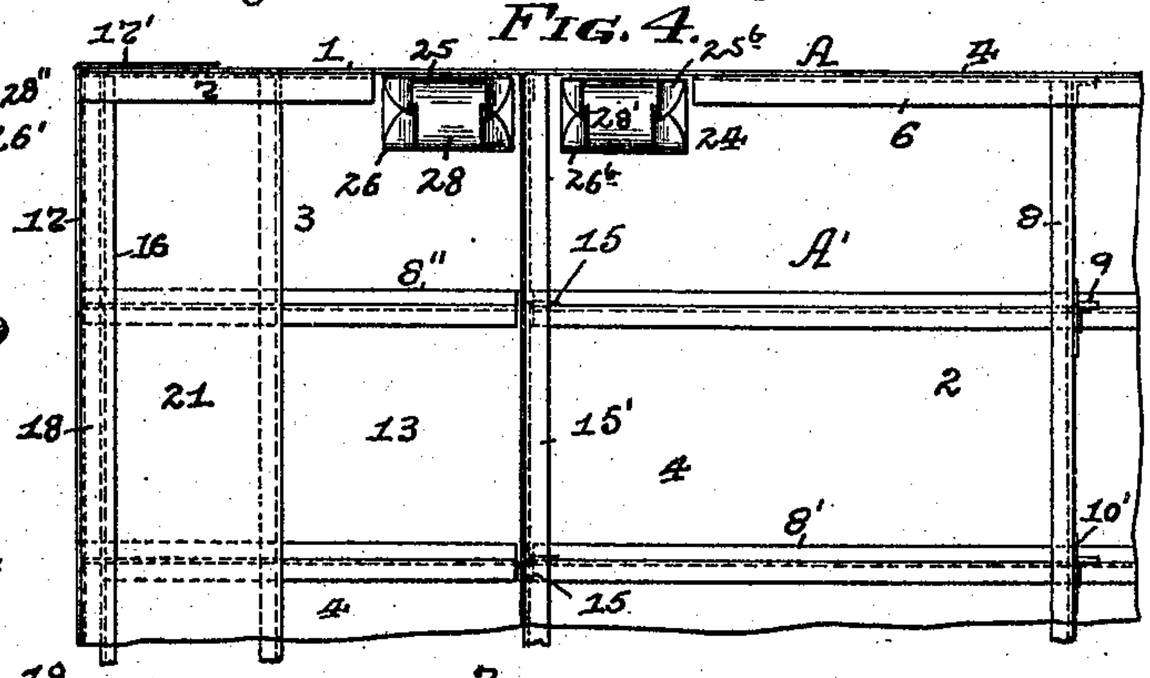
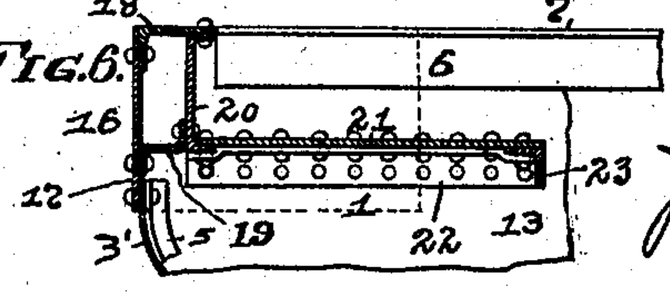


FIG. 6.



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UNITED STATES PATENT OFFICE.

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BARGE.

No. 815,631. Specification of Letters Patent. Patented March 20, 1906.

Application filed October 19, 1904. Serial No. 229,082.

To all whom it may concern:

Be it known that I, JOHN M. PEARSON, a resident of Bellevue, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Barges; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to timber-heads for barges and other like vessels, and has special reference to such timber-heads being formed from metal.

The object of my invention is to form a checking-post or timber-head entirely of sheet metal which will be strong and durable in its construction, will be easily and quickly formed, and will be cheap and easy to manufacture.

My invention consists, generally stated, in the novel arrangement, construction, and combination of parts, as hereinafter more specifically set forth and described, and particularly pointed out in the claims.

To enable others skilled in the art to which my invention appertains to construct and use my improved timber-head, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a side elevation of a barge, showing my improved timber-head applied thereto. Fig. 2 is a longitudinal section of one end of the barge. Fig. 3 is a cross-section of the same on the line 3 3, Fig. 2. Fig. 4 is a top plan view of a portion of one end. Fig. 5 is a perspective view of one of the timber-heads removed from the barge. Fig. 6 is an enlarged cross-section of the head-log and connecting parts.

Like symbols of reference herein indicate like parts in each of the figures of the drawings.

My invention is illustrated in connection with a metallic vessel or barge, in which A represents such vessel or barge, which has its sides 1, bottom 2, and curved ends 3 formed of metal sheets or plates 4, and such plates are connected or riveted together in any suitable manner to prevent leakage. The sides 1 are connected to the bottom 2 and curved ends 3 by means of the angle-bars 5, which extend along the interior A′ of the barge and are riveted to said sides, bottom, and ends, while angle-bars 6 extend along the interior face of said sides 1 and are secured at the top of and to said sides by riveting to form the gunwales 7. Extending along and riveted to the interior face of the bottom 2 and ends 3 are a series of **Z**-bars 8′ 8″, and a series of channel-bars 8 extend across these bars 8′ and are riveted thereto, while such bars 8 can be riveted to said **Z**-bars 8′ and are riveted at their ends to the supporting angle-bars 9″, which extend up along and are riveted to the interior face of the sides 1. These angle-bars 9″ are also riveted to the angle-bars 6, and riveted to these bars 9″ and channel-bars 8 are the side gusset-plates 9′, while supporting angle-bars 9 are riveted at their lower ends to gusset-plates 10, and such plates 10 are riveted to said channel-bars 8. The supporting-bars 9 extend up from said bars 8 in a vertical line and are riveted at their upper ends to gusset-plates 10′, which are riveted to and depend from a series of supporting channel-bars 11, extending across the interior A′ of said barge and at the top of the same, while such channel-bars 11 are riveted at their ends to the angle-bars 6 and to the side-supporting angle-bars 9″.

At each end of the barge A is the chamber 13, which is water-tight and is formed between the bulkhead division-wall 14, extending across the interior A′ of the barge and the curved end 3, such division-wall passing between the **Z**-bars 8′ and 8″ and being formed on plates which are connected or riveted together in any suitable manner. This division plate or wall 14 is riveted at its lower end to an angle-bar 14′, extending across and riveted to the bottom 2 of said barge, and is riveted at its side edges to one of the angle-bars 9″, while angle-bars 15 are riveted to the one side face of said division-wall 14 to brace the same, and an angle-bar 15′ extends across and is riveted to the top of said wall 14 to support and further brace the same. Extending across each end 3 of the barge A and at the top of the same within the chamber 13 is a head-log 16, which is hollow and is formed of an outer plate 17, which extends across each end and is bent around the sides 2 to form the corner-bands 17′, so as to be riveted to the curved end portion or plate 3′, to said sides 2, and to an angle-bar 18, extend-

ing across the upper end. A Z-bar 19 is riveted to this plate 17 at its lower end, and to this bar 19 is riveted a channel-bar 20, which extends across said end and is also riveted at each end of the angle-bar 18, while a platform 21, formed of plates connected together and riveted at each end to angle-bars 22, which in turn are riveted to the sides 1 of said barge. This platform 21 is used as a walk for the operators, while acting also as a stiffener, and it is riveted at one side to an angle-bar 23, which is riveted to said bars 22, and such bars are also riveted to the channel-bars 20 and act with said channel-bars 20 and angle-bars 22 to support said platform.

On each side of the division-walls 14 for forming the chambers 13 are my improved checking-posts or timber-heads 24, which are hollow, and each timber-head is formed from two flat sheets or pieces of sheet metal, such as is shown at 25 26 in Fig. 5. The outer or section plate 25 for the timber-head 24 is pressed by any suitable means to form the flanged portion 25′, which extends inwardly from the body portion 25″ thereof and connects with the flat portion 25^a of said body portion by the angular portions 25^b. The inner plate or section 26 for such timber-head 13 is also pressed by any suitable means to form the flanged portions 26′, which extend inwardly from the body portion 26″ thereof and connect with angular portions 26^b on said body portion, while curved portions 26^a connect the angular portions 26^b with the flat portion 26^c of said body portion. The timber-heads 24 are connected to the sides 1 of the barge A by first securing the outer section 25 thereto by means of the rivets 27, passing through the flat portion 25^a and sides 1, and a number of such rivets are placed through these parts and at the top of the same below the angular portions 25^b on said section in order to securely hold said section and timber-head in position on account of the greatest strain being at such point. After this is accomplished the inner section 26 is placed in position against and within the section 25 by its flanged portions 26′, fitting within and lapping against the flanged portions 25′ on the section 25 to form the hollow upper end 28, as at 28′, so that rivets 28″ can pass through both the flanged portions 25′ and 26′ at such lapped joint 28, while rivets 29 are passed through the flat portions 25^a and 26^c on said sections 25 and 26, respectively, and through said sides 1 in order to secure the two sections together and to hold and secure the same in forming the timber-head to the sides of the barge.

It will thus be seen that my improved timber-head is cheap and simple in its construction and application and does not require its being formed of special shapes or plates. The parts can be made of thin and light material in order to render the same easy to bend and form to shape and when in position they will not be liable to become displaced.

It will further be obvious that my improved timber-head may be applied to what are known as "coal-boats," as well as other vessels, and for other uses and purposes, while various modifications in the construction and design of the various parts of the timber-head may be resorted to without departing from the spirit of my invention or sacrificing any of its advantages.

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

1. A timber-head for barges and other like vessels formed from sheet metal and bent to shape to form an upper rectangular section and a lower flat securing-section.

2. A timber-head for barges and other like vessels formed of two sections or sheets of metal and flanges on said sections to form a hollow upper rectangular section and said sections having a lower flat securing portion.

3. A timber-head for barges and other like vessels formed from two sections or sheets of metal and flanges on said sections adapted to overlap each other to form a hollow upper rectangular section and said sections having a lower flat securing portion.

4. A timber-head for barges and other like vessels formed from two sections or sheets of metal, and having flanges on said sections adapted to overlap and be riveted to each other to form a hollow upper rectangular section and said sections having a lower flat securing portion.

5. A timber-head for barges and other like vessels formed from two sections or sheets of metal and having flanges on said sections to form a hollow upper rectangular section, and said sections having a lower flat securing portion for being secured to each other and to the sides of said barge.

6. A timber-head for barges and other like vessels formed from two sections of sheet metal and having flanges on said sections adapted to overlap and be riveted to each other to form a hollow rectangular section, and said sections having a lower flat securing portion for being secured to each other and to the sides of said barge

7. A timber-head for barges and other like vessels formed from two sections or sheets of metal and having flanges on said sections adapted to overlap each other to form a hollow upper rectangular section, and said sections having a lower flat securing portion for being secured to each other and to the sides of said barge.

In testimony whereof I, the said JOHN M. PEARSON, have hereunto set my hand.

JOHN M. PEARSON.

Witnesses:
J. N. COOKE,
ROBERT H. AXTHELM.