

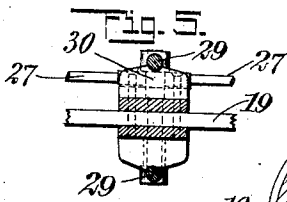
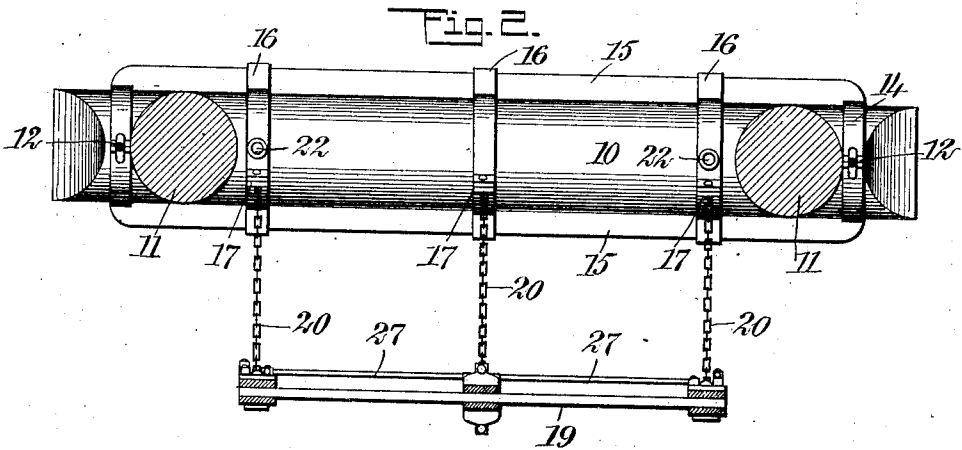
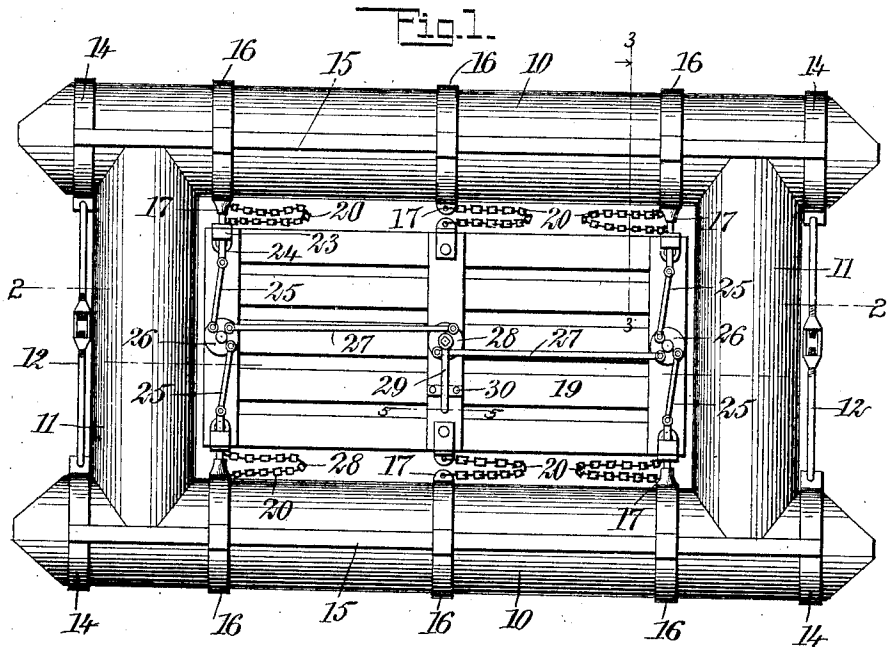
No. 833,000.

PATENTED OCT. 9, 1906.

P. C. PETRIE & H. L. DES ANGES.

LIFE RAFT.

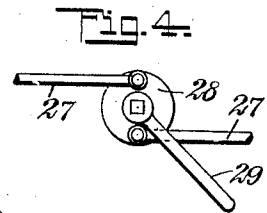
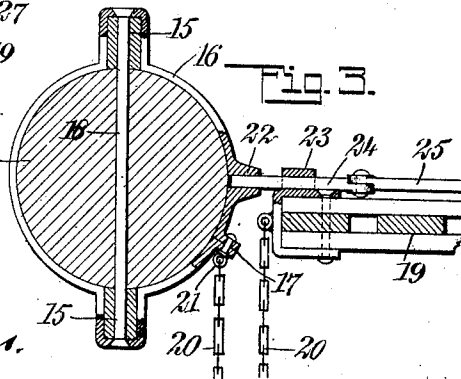
APPLICATION FILED FEB. 21, 1906.



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UNITED STATES PATENT OFFICE.

PETER CONRAD PETRIE AND HENRY LOUIS DES ANGES, OF NEW YORK, N. Y.

LIFE-RAFT.

No. 833,600.

Specification of Letters Patent.

Patented Oct. 9, 1906.

Application filed February 21, 1906. Serial No. 302,193.

To all whom it may concern:

Be it known that we, PETER CONRAD PETRIE and HENRY LOUIS DES ANGES, citizens of the United States, and residents of the city of New York, Long Island City, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Life-Raft, of which the following is a full, clear, and exact description.

Our present invention relates especially to life-rafts of that class or type in which side floats are connected rigidly together and spaced apart by suitable members, which may themselves be designed to furnish buoyant power to the raft, although our improvements are applicable to life-rafts of all constructions, as will fully appear hereinafter.

The object of the invention is to provide a life-raft with a suspended platform enabling the occupants of the raft to stand partly submerged, thus increasing the carrying capacity of the raft and yet to permit the platform, when desired, to be connected rigidly with the raft in the plane thereof, so that the raft may be utilized in the usual manner.

Our improvements enable the raft to be used ordinarily with the platform rigidly held in the plane of the raft, thus providing a raft of the usual type which may be handled as heretofore. Should, however, the raft become overloaded, the safety of the passengers can be assured by releasing the devices for holding the platform and allowing the same to drop below the surface of the water, so that the passengers standing on the platform thus dropped or suspended will be partly submerged and relieve the raft of the full load of the passengers.

Our invention involves various other features of major or minor importance, and all will be fully set forth hereinafter and particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, which illustrate as an example the preferred embodiment of our invention, in which drawings like characters of reference indicate like parts in the several views, and in which—

Figure 1 is a plan view of the raft, showing the platform fastened rigidly in the plane thereof. Fig. 2 is a sectional view on the line 2 2 of Fig. 1, showing the platform suspended. Fig. 3 is a cross-section on the line 3 3 of Fig. 1. Fig. 4 is a detail view of the device

for operating the bolts which hold the platform, and Fig. 5 is a detail section on the line 5 5 of Fig. 1.

As here illustrated, the raft comprises side floats 10 and end floats 11, which latter floats space the side floats apart, the structure being held rigidly together by tie-rods 12, engaged with bands 14, which encircle the side floats. The floats 10 and 11 are constructed of solid logs of buoyant material, such as the wood *Palo de balsa*. A raft of this type forms the subject of the copending application of Peter C. Petrie, filed June 2, 1905, Serial No. 263,370.

The side floats 10 are provided at their top and bottom with cleats or battens 15 of relatively hard wood, which extend longitudinally along the floats. Encircling the side floats and embracing the cleats 15 are metallic bands 16, which are split and provided with ears 17, (see Fig. 3,) by means of which the bands are drawn up tightly in place. Extending through the bands and cleats and across through the floats 10 are tie-rods 18, which assist in holding the cleats and bands in place.

19 indicates the platform, which is intended to fill the space between the side and end floats. This platform is provided with chains 20, attached to the sides of the platform and also attached to eyes 21, formed on or secured to the bands 16. As here shown, these eyes are connected to the rivets which pass through the ears 17. These chains serve to sustain the platform in a suspended position, (shown in Fig. 1,) and when the platform is raised to occupy a position in the plane of the raft the chains are slackened or doubled up, as shown in Fig. 1.

The end bands 16 of each side float 10 are formed with socket-pieces 22, which are preferably integral with the bands. The platform 19 is provided adjacent to each corner with a box 23, and in these boxes bolts 24 slide transversely of the platform in and out of engagement with the socket-pieces 22, as shown best in Fig. 3. The bolts have links 25 articulated thereto, and said links at each end of the platform are in turn joined to a rocker or wrist plate 26. The wrist-plates 26 are also joined to links 27, and these links extend inward to the middle of the raft and are joined to a third rocker-plate 28, mounted to turn on the platform 19. The spindle

of the rocker-plate 28 projects above and below the platform, and at each end it is provided with a handle 29, facilitating the operation of the rocker-plate 28. Said handles 5 29 coact with the chocks 30, which are fastened to the respective sides of the platform, and hold the handles yieldingly in the position shown in Fig. 1, in which the bolts 24 are in active position. The two handles 29, 10 arranged one at each side of the platform, permit operation of the bolts 24 from either side of the raft and avoid rendering the invention inoperative should the raft be overturned in launching or otherwise. When the 15 bolts 24 are engaged in the socket-pieces 22, as is shown in Figs. 1 and 3, the platform will be rigidly fastened within the raft at the plane thereof, and it is intended that this should be the normal position of the platform, the raft being launched with the platform so adjusted. In case, however, of violent weather or of the raft becoming overloaded one or the other of the handles, according to the position of the raft, may be 20 operated to release the bolts 24, and the platform will then drop to the suspended position (shown in Fig. 2) and enable the passengers to be partly submerged, which not only increases the stability, but also the floating 30 or buoyant power of the raft.

Having thus described the preferred form of our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A raft having a platform, means for suspending the platform below the plane of the raft, and means for removably holding the platform within or approximately within the plane of the raft.

2. A raft having a platform, means for suspending the same below the plane of the raft, and means for rigidly fastening the platform within or approximately within the plane of the raft.

3. A raft having a rigid body structure, a rigid platform, means for fastening the same approximately within the plane of the body structure of the raft, and means for suspending the platform below the plane of the raft upon the release of the said fastening means.

4. A raft having a body formed of side floats, and means connecting the side floats and spacing them apart, a platform adapted

to fit between the side floats, means for fastening the platform between the side floats approximately within the plane of the body of the raft, and means for suspending the platform below the body of the raft upon releasing said fastening means. 55

5. A raft having a body with side floats, and means for spacing them apart, bands encircling the side floats, a platform adapted to fit between the side floats, chains for suspending the platform from the body of the raft, and bolts mounted on the platform and adapted to engage parts of the bands removably to fasten the platform removably between the side floats. 60 65

6. A raft having a main or body portion, a platform adapted to fit within the same, means for suspending the platform below the body of the raft, and devices operative from either side of the platform for removably fastening the platform within the body of the raft and approximately in the plane thereof. 70

7. A life-raft having a body with side floats and means for spacing them apart, bands encircling the side floats, said bands having sockets therein, a platform adapted to fit between the side floats, chains connecting the platform with the bands, for the purpose specified, and bolts mounted on the platform and adapted removably to engage the sockets of the bands to secure the platform between the side floats of the raft. 75 80

8. A life-raft having a body with side floats and means for spacing them apart, bands encircling the side floats, said bands having sockets therein, a platform adapted to fit between the side floats, chains connecting the platform with the bands, for the purpose specified, bolts mounted on the platform and adapted removably to engage the sockets of the bands to secure the platform between the side floats of the raft, and means for operating said bolts from either side of the platform. 85 90 95

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

PETER CONRAD PETRIE.
HENRY LOUIS DES ANGES.

Witnesses:

HARRY CHARLES MEYER,
HERBERT JOS. MILLER.