G. G. DAVIS.

LOG RAFT.

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1,276,181. Patented Aug. 20, 1918.

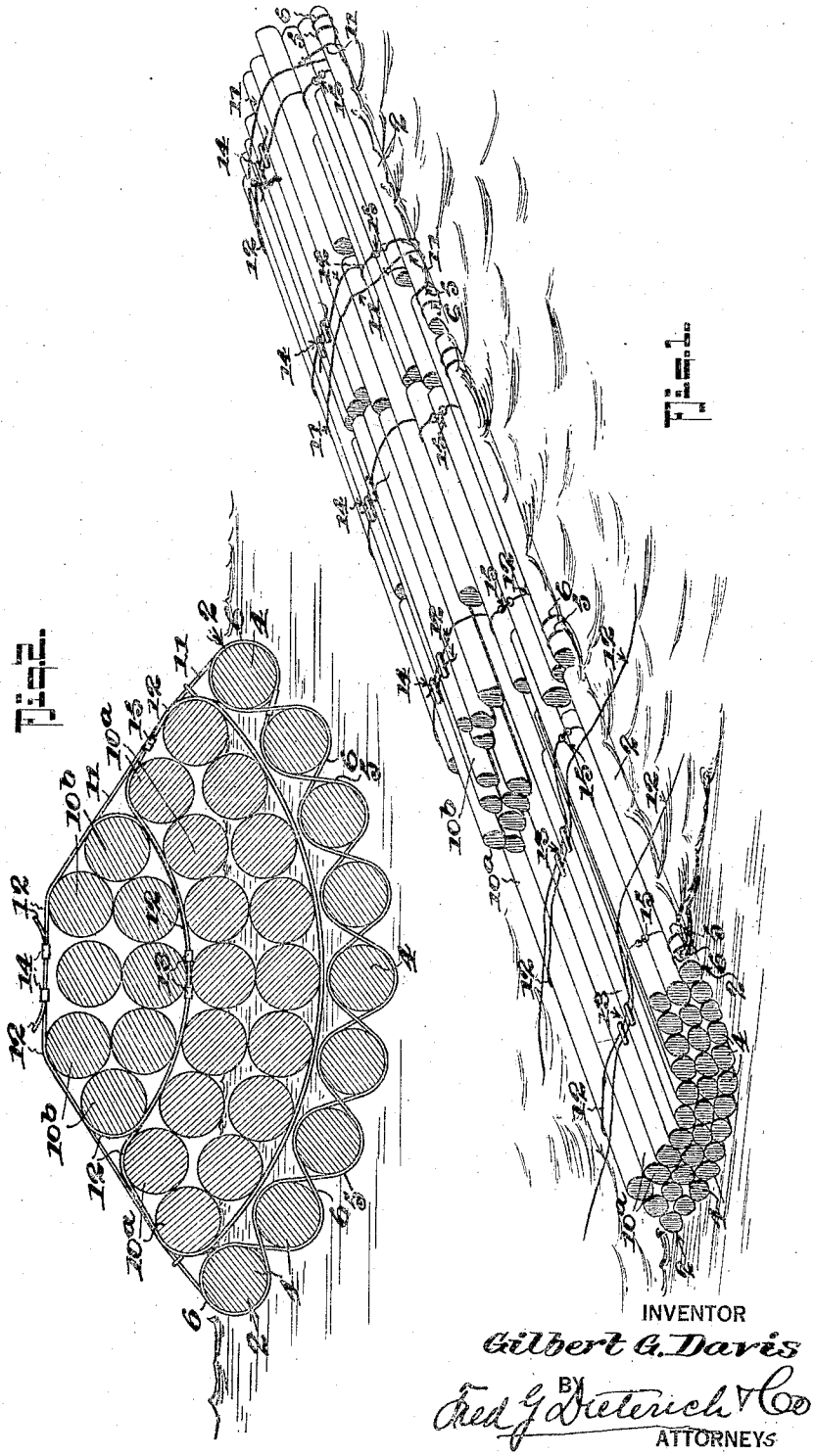


Fig. 1.

Fig. 2.

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LOG-RAFT.

1,276,181. Specification of Letters Patent. Patented Aug. 20, 1918.

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To all whom it may concern:

Be it known that I, GILBERT G. DAVIS, a citizen of the Dominion of Canada, residing at Vancouver, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Log-Rafts, of which the following is a specification.

This invention relates to an improved method of securing together the top load of logs on a log raft of that class set forth in Letters Patent of the United States of America No. 1,142,239 granted to me on the 8th of June 1915.

In the patent above referred to the bottom logs, which form the floor of the raft, are flexibly connected side by side together with wire ropes which pass over and under the alternate logs from side to side, and the top load is secured to this floor or bottom layer by a series of wire ropes which pass across from side to side of the raft over the load and are made fast to the side logs of the floor.

While this manner of securing the load is quite satisfactory for all ordinary requirements, if the raft is exposed to exceptionally rough weather, these load securing ropes being both short and direct between their points of attachment to the side logs are liable to give way under the strain of flexure of the raft. It is to supplement the load securing ropes by binding the load logs together independently of the floor logs that the invention, which is the subject of this application has been devised.

The improvement is fully set forth in the following specification, reference being made to the drawings by which it is accompanied, in which:

Figure 1 is a perspective view of the raft as floating, showing it in three sections, the near section being without the top load, and

Fig. 2 is a more or less diagrammatic cross section showing the bonding ropes.

In these drawings 4 represents the floor logs of the raft which are flexibly connected together and to the side logs 2 by wire ropes 5 and 6 interwoven at intervals apart around the logs. The load of logs 10^a 10^b is bound to the floor by wire ropes 11 which at intervals apart are made fast at each side to the side logs 2 and are carried directly across over the load. The construction so far described is as set forth in my previous patent before referred to.

Supplementing this load securing means a series of wire ropes 12 are, while the raft is being built, laid across the floor logs 4 and a portion 10^a of the load of logs is deposited thereon. This amount depends on the sizes of the logs and raft but as commonly used in Pacific coast waters two tiers of logs are deposited on the floor. The ends of the wire ropes 12 are then carried over the load 10^a from each side and are made fast together by clamps at 13 where they pass alongside one another. Thereafter a further load 10^b is deposited on the top of 10^a and the ends of the wire ropes 12 are carried in the same manner over this second section and as before are clamped together at 14 where they pass.

To facilitate breaking up of the raft when required each wire rope 12 is made in two lengths connected together by a shackle and pin 15 through spliced eyes formed on the end of each rope, the connection being placed where it is accessible, that is, where the rope passes up the side of the load 10^a. When it is desired to break up the raft the floor ties 5 and 6 and the load binding ties 11 being released, the supplementary load ties 12 are also released not only at 14 but at 15 by withdrawal of the pin of the shackle to release the portion 10^a of the load when the logs are free to float apart.

The supplementary binding ropes 12 passing as they do back and forth under and over and through the load logs will bind the load effectively together, so that even if one of the ropes 12, which binds the load to the floor logs does break, the load will be held together.

The ropes 12 are simple to apply while building up the raft and present no difficulty in releasing when it is required to break the raft up.

Having now particularly described my invention, I hereby declare that what I claim as new and desire to be protected in by Letters Patent, is:

1. In a log raft, a floor layer of logs flexibly connected together side by side, to which floor layer the load of logs is bound as a whole, and means independent of the binding means of the load to the floor layer for binding the load of logs together in connected groups.

2. In a log raft, a floor layer of logs flexibly connected together side by side, to which floor layer the load of logs is bound as a whole, means independent of the binding

means of the load to the floor layer for binding the load of logs together in connected groups, and means for detaching the binding means of each group of logs.

3. In a log raft, a floor layer of logs flexibly connected together side by side, to which floor layer the load of logs is bound as a whole, means independent of the binding means of the load to the floor layer for binding the load of logs together in connected groups, said means comprising a series of wire ropes laid across the floor layer at intervals apart throughout the length of the raft on which ropes a group of logs is laid, the ropes passing across this group from opposite sides and clamped together at the crossing, a further group of logs superimposed on the first named group and the ropes again passed across from opposite sides and secured together.

4. In a log raft, a floor layer of logs flexibly connected together side by side, to which floor layer the load of logs is bound as a whole, means independent of the binding means of the load to the floor layer for binding the load of logs together in connected groups, said means comprising a series of wire ropes laid across the floor layer at intervals apart throughout the length of the raft on which ropes a group of logs is laid the ropes passing across this group from opposite sides and clamped together at the cross, a further group of logs superposed on the first named group and the ropes again passed across from opposite sides and secured together, and means for releasing the body binding ropes of each separate group.

In testimony whereof I affix my signature.

GILBERT G. DAVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."