Aug. 9, 1927. 1,638,324

M. J. DAVIS

LOG RAFT

Filed Dec. 22, 1925

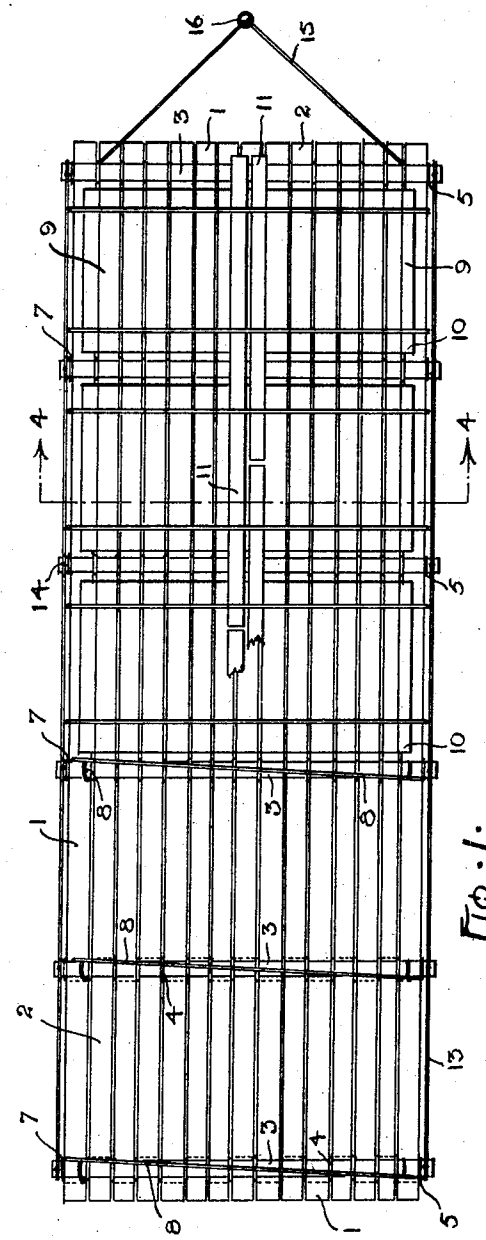


Fig. 1.



Fig. 2.

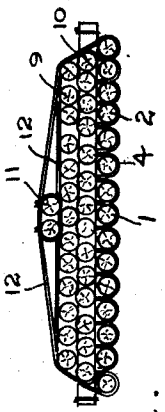


Fig. 4.

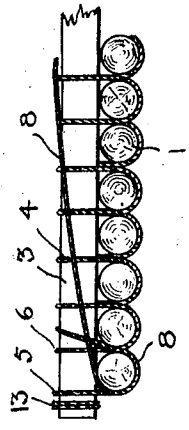


Fig. 3.

INVENTOR
MATTHEW J. DAVIS
Fetherstonhaugh & Co
ATTORNEYS

Patented Aug. 9, 1927. 1,638,324

UNITED STATES PATENT OFFICE.

MATTHEW J. DAVIS, OF PORTLAND, OREGON.

LOG RAFT.

Application filed December 22, 1925. Serial No. 77,110.

My invention relates to improvements in log rafts the objects of which are to provide means whereby logs may be bound together to form a structure which is substantially rigid and yet of such inherent flexibility as will enable it to be towed through heavy seas without loss or damage, and also to provide means whereby a load of logs or bolts may be carried by the raft floor without deflecting it so that the raft may be towed through shallow waters without fear of grounding.

The invention consists essentially of a raft floor composed of longitudinally disposed logs laid side by side which are laced to cross logs or swifters laid transversely thereupon, and a load of logs laid between or over the swifters, as will be more fully described in the following specification, in which:—

Fig. 1 is a plan of the invention part showing the raft floor and part the raft with its superimposed load.

Fig. 2 is a side elevation of the raft as shown in Figure 1.

Fig. 3 is an enlarged view showing the lacing of the raft floor to the swifters.

Fig. 4 is a sectional view taken on the line 4—4 of Figure 1.

In the drawings like characters of reference indicate corresponding parts in each figure.

The numeral 1 indicates a plurality of rows of longitudinally disposed logs laid side by side and preferably of varying lengths so as to break end joints and let the ends of one log in one row overlap the ends of the corresponding logs in the adjoining rows, these tows of logs comprise the raft floor 2. The numeral 3 indicates a plurality of logs or swifters somewhat greater in length than the width of the raft floor 2, which are laid transversely thereof and at different intervals of its length. Each of the floor logs 1 is bound to the swifters 3 by lines 4 starting adjacent one end of each swifter as at 5, as shown in detail in Figure 3, passing down and under the first log 1, then up and over the swifter as at 6, then down and under the second floor log and in a like manner until all the floor logs are individually bound to each swifter. The outer end of the lines 4 are then bound adjacent the opposite ends of the swifters as at 7. This binding means is usually found to be sufficient to prevent any loosening of the raft floor, but where rough seas are liable to be encountered in towing the raft to destination, I provide a binding line 8, see Figure 3, which is secured adjacent one end of each swifter 3, is passed down and under the outer log 1 of the floor and is then carried in a long spiral over the swifter and passed around the corresponding outside log and fastened back upon the swifter in a like manner at the opposite side of the raft. Onto the raft floor thus formed and bound, a superimposed load of logs or bolts 9 is laid up in tiers, the lower logs of the load being of such lengths as will lie in between the swifters 3 as at 10. When a sufficient number of tiers has been laid to reach a height greater than the thickness of the swifters, one or more rows of logs 11 or even tiers of rows of logs, may be laid longitudinally of the raft and extending from end to end. The load of logs or bolts 9 and the logs 11 are bound to the raft floor 2 by lines 12 which are passed over the logs 9, down and around the outer side logs of the floor then up and over the logs 11, about which they may be wound as shown in Figure 4, and the outer ends to be fastened together in any suitable manner.

The numeral 13 indicates a pair of lines which are bound about to the outer ends of the swifters 3 at the rear end of the raft and extend from swifter to swifter to the front of the raft, the lines being fastened by any suitable means to each swifter as at 14.

The numeral 15 indicates a towing bridle which is attached to opposite ends of the foremost swifter and terminates in a ring 16 to which the tow line from the tug is adapted to be attached.

What I claim as my invention is:

1. A log raft comprising a plurality of rows of longitudinally disposed logs, swifters disposed transversely thereon, means for securing the longitudinally disposed logs to the swifters, and lines connecting the swifters together.

2. In a log raft comprising a plurality of rows of longitudinally disposed logs forming a raft floor having swifters disposed transversely thereon, said longitudinally disposed logs being secured to the swifters, and lines secured to one end of the swifter passing around and under the outer log of one side of the raft, thence extending along the swifter, and around and under the

outer log of the other side of the raft, and being fastened to the opposite ends of the swifters.

3. In a log raft comprising a plurality of rows of longitudinally disposed logs forming a raft floor having swifters disposed transversely thereon, said longitudinally disposed logs being secured to the swifters and longitudinally extending lines on opposite sides of the raft connecting the swifters together.

4. In a log raft comprising a plurality of rows of longitudinally disposed logs forming a raft floor having swifters disposed transversely thereon, said longitudinally disposed logs being secured to the swifters, superimposed loads of longitudinally disposed logs or bolts carried between the swifters and longitudinally disposed logs extending from load to load and over the swifters, and means for binding the loads and the longitudinally disposed logs to the raft floor.

Dated at Vancouver, B. C., this 4th day of December, 1925.

MATTHEW J. DAVIS.