H. SAXEVIK.

LUMBER RAFTING APPARATUS.

APPLICATION FILED DEC. 12, 1916.

1,246,167.

Patented Nov. 13, 1917.

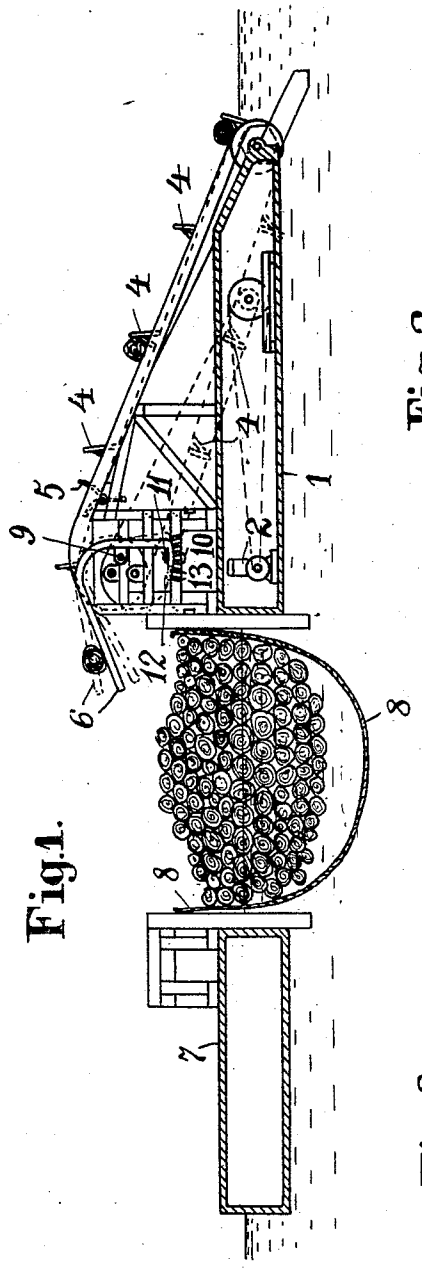


Fig. 1.

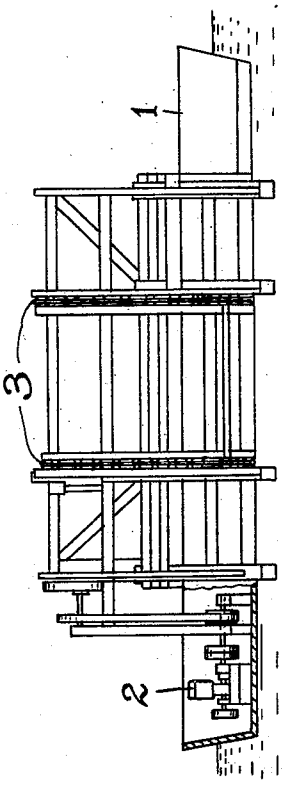


Fig. 2.

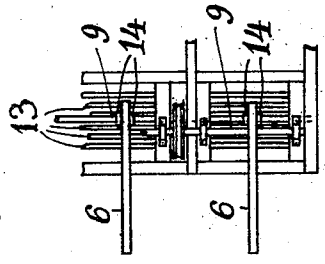


Fig. 3.

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UNITED STATES PATENT OFFICE.

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LUMBER-RAFTING APPARATUS.

1,246,167. Specification of Letters Patent. Patented Nov. 13, 1917.

Application filed December 12, 1916. Serial No. 136,559.

To all whom it may concern:

Be it known that I, HARALD SAXEVIK, a subject of the King of Norway, residing at Hommelvik, near Trondhjem, Norway, have invented certain new and useful Improvements in Lumber-Rafting Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to apparatus for assembling lumber into rafts (rafting apparatus) which are used for making rafts for the floating or towing of the lumber to be transported.

My apparatus differs from other apparatus of similar kind essentially therein that it is wholly mounted on board of a pontoon, boat or other floating craft, so as to be easily movable and that it lifts the lumber or trunks one by one out of the water, carries them across the pontoon and drops them into a channel specially prepared for the rafting operation.

A preferred form of my apparatus is shown in the accompanying drawings in which:

Figure 1 is a side view, with parts in section, of my improved apparatus.

Fig. 2 is an end view, with parts in section.

Fig. 3 is a detail plan view of the guide arms.

As will be seen from the drawings the whole of the machinery is mounted in a pontoon 1 or other floating craft the motor 2 with its driving gear being placed on the bottom and wholly built in thereby making it possible to have the apparatus towed even in rough weather.

The machine is provided with an elevator chain arrangement, the endless conveyer chains 3 being driven from the motor 2 by aid of a chain or belt transmission. The elevator chains 3 carry conveyer arms 4 which lift the trunks one by one out of the water and carry them in a horizontal position sidewise across the pontoon, and past a counter wheel 5. As will be seen, the elevator chains 3 move across a depressed portion of the pontoon, the latter having on both sides higher parts serving as a walk for the machinist and as a support for the bearings of the chain wheels of the lower end of the elevator chains 3.

The elevator chain arms 4 transfer the trunks to the guide arms 6, along which they slide down into the rafting channel. This channel is formed between the inner side of the pontoon 1 and another pontoon 7, a raft or the like. Flexible binding members 8 are partially submerged in the channel and are connected at their ends to the two pontoons as shown in Fig. 1. When a sufficient number of logs have been deposited in the channel, the ends of the ropes 8 are fastened together and the ropes tightened to form a circular or oval bundle adapted to be towed from between the pontoons.

As will be seen from the drawings the guide arms 6, which may be railway rails or the like, are adjustable vertically as well as horizontally. The vertical adjustment is effected by turning the arms about a shaft 9. The arms are kept in position by aid of bolts 10 and corresponding nuts 11, said bolts being put through holes bored in the lower ends 12 of the guide arms 6 and through the interstices between the parallel ribs 13. In the drawings there are arranged five such interstices, thereby enabling adjusting the guide arms 6 in five different positions (at five different angles), whereby the placing of the trunks in the rafts may be governed.

The horizontal adjustment of the arms 6, to regulate the distance between them for handling logs of different lengths, is effected by loosening the nuts 11, and also collars 14, the latter being adjustably mounted on the shaft 9 on each side of the arms, and then sliding said arms along the shaft until they are spaced apart the desired distance.

The complete apparatus being mounted on a pontoon or other floating craft, it may be used anywhere in rivers, seas and fjords, as it may easily be towed from one place to another.

I claim:

1. In a rafting apparatus having an endless carrier mounted on a pontoon adapted to transfer logs from one side thereof to the other side, and guide arms arranged to receive logs from the carrier, the novelty which comprises providing means to laterally adjust said arms.

2. In a rafting apparatus having an endless carrier mounted on a pontoon, adapted to transfer logs from one side thereof to

the other side, and guide arms arranged to receive logs from the carrier, the novelty which comprises providing means to laterally adjust said arms, and means to angularly adjust the latter.

3. A rafting apparatus comprising two pontoons arranged to form a log receiving channel between them, flexible log binding members supported by the pontoons in the channel, an endless carrier on one of the pontoons adapted to transfer logs from one side thereof to the other, a transverse shaft at one end of the carrier, guide members on the shaft movable longitudinally thereof and having downwardly inclined arms extending over the channel, and means to adjust the angular position of said guide members.

In testimony that I claim the foregoing as my invention, I have signed my name.

HARALD SAXEVIK.

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