May 17, 1949. E. W. PREBLE 2,470,521

CURRENT CONVEYER

Filed Sept. 21, 1945 2 Sheets-Sheet 1

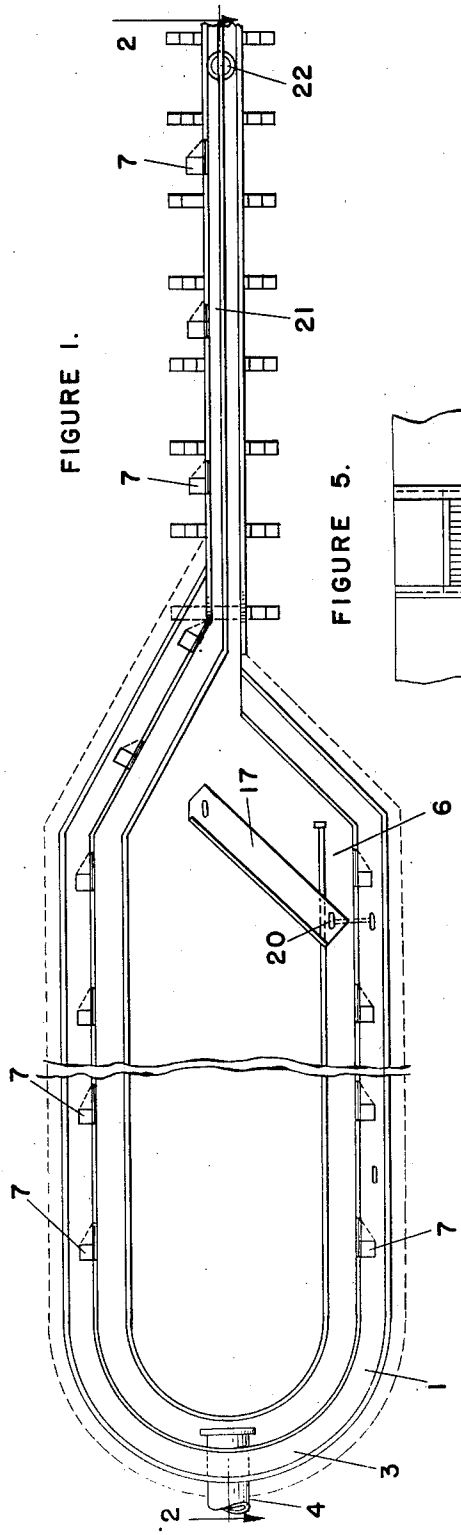


FIGURE 1.

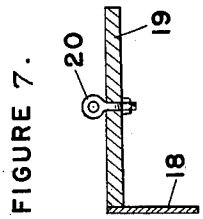


FIGURE 7.

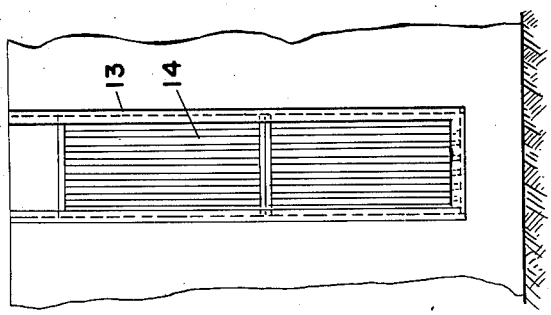


FIGURE 5.

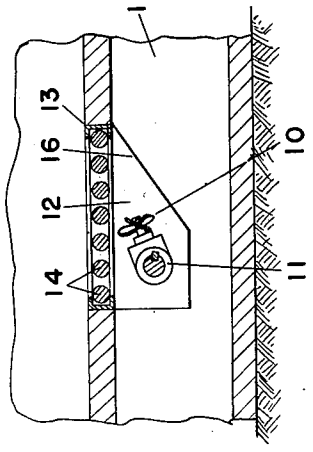


FIGURE 4.

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CURRENT CONVEYER

Filed Sept. 21, 1945 2 Sheets-Sheet 2

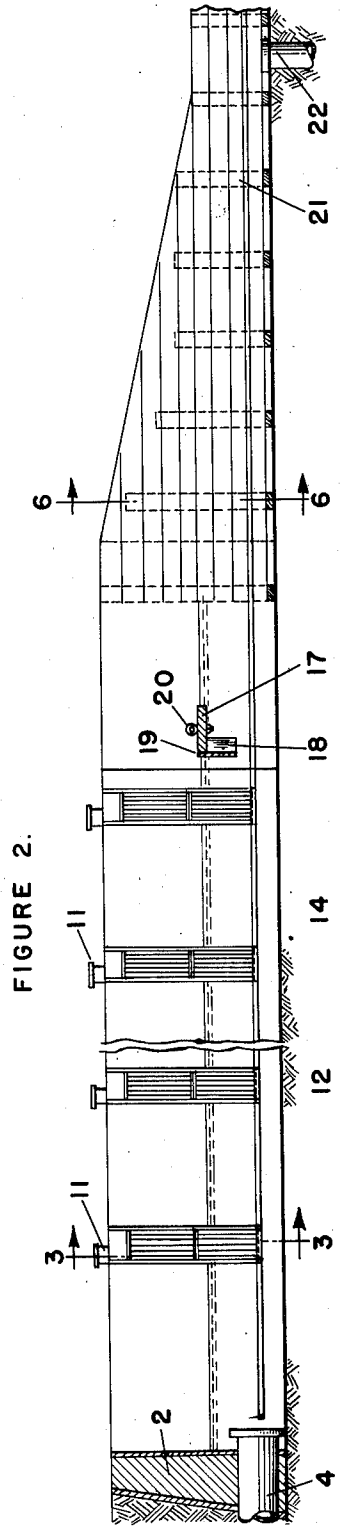


FIGURE 2.

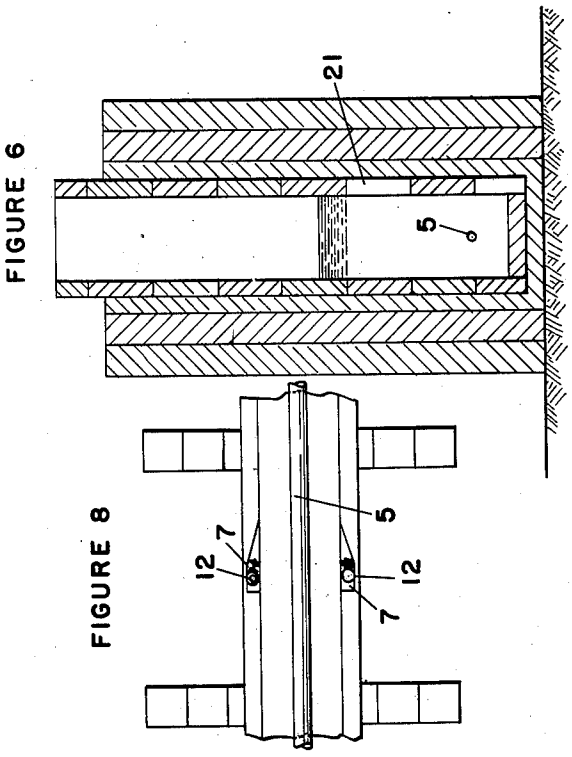


FIGURE 6

FIGURE 8

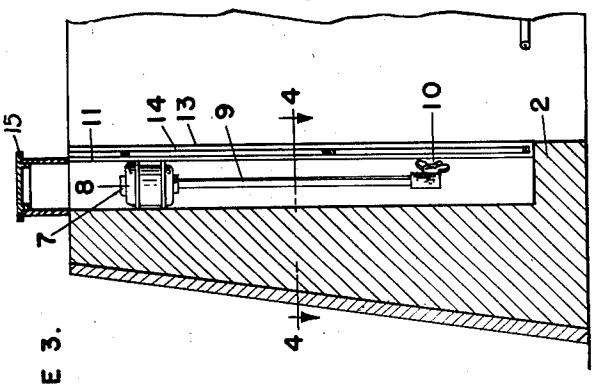


FIGURE 3.

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Patented May 17, 1949 2,470,521

UNITED STATES PATENT OFFICE

2,470,521

CURRENT CONVEYER

Everett W. Preble, Anson, Maine

Application September 21, 1945, Serial No. 617,869

1 Claim. (Cl. 302—14)

1

My present invention, in its broad aspect, has reference to improvements in induced current conveyors for pulp mills, and more particularly, it is my purpose to provide a novel pond construction for water to be heated in winter by steam, or the like, to receive logs and remove the frost and loosen the bark, thereby effecting a great saving in time and labor in the wood room, and to provide means whereby propellers graduating in size will induce a current to float the logs toward the boom and conveyor for transmission to the pulp mill. My present invention provides for a wood, concrete or other pond with side ducts in which propellers are located for inducing the current to move the pulp, logs, and the like, along the sides of the pond to the smaller propellers in turn, and then to the conveyor for floating to the mill. My invention is simple, sturdy, durable and practical, and has no parts likely to get out of order or become clogged or the like.

Other and equally important objects and advantages of my invention will be apparent from the following description and drawings, and it is pointed out that changes in form, size, shape, materials, and construction and arrangement of parts are within the purview of my broad inventive concept, and the scope of the appended claim.

In the drawings, wherein I have illustrated a preferred form of my invention:

Figure 1 is a top plan view;

Figure 2 is a longitudinal section on the line 2—2 of Figure 1;

Figure 3 is a section on the line 3—3 of Figure 2 and shows one of the propellers;

Figure 4 is a section on the line 4—4 of Figure 3 and shows a propeller and the vents in the walls of the pond;

Figure 5 is an elevation of a vent;

Figure 6 is a section on the line 6—6 of Figure 2 and shows the conveyor;

Figure 7 is a section through the boom and anchoring eye, and

Figure 8 is a view of the smaller propeller arrangement to float the logs in the conveyor.

In the drawings, wherein like characters of references are used to designate like or similar parts throughout the several views:

The numeral 1 designates an artificially constructed wood pond, which may have concrete walls 2 and is preferably elongated and has a

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curved back end 3 through which extends an inlet pipe 4. A steam heating pipe 5 is provided to heat the water to any desired temperature. Along the walls is channel 6. A plurality of propeller assemblies 7, including motors 8, shafts 9, and propellers 10 are provided in casings 11, set in recesses 12 in the walls and having vents 13 with gratings 14—see Figures 4 and 5. These casings have tops 15. The propellers are set at an angle, as shown in Figure 4, and the wall next to the created current is angled, as at 16. A boom 17 having a top 18 and shield 19 has an eye 20 to chain the same to the wall and prevents jams in log water conveyor 21, which has a continuation of the channel 6 to the mill—not shown. A water outlet pipe 22 is provided in the conveyor. The size of the propellers is graduated from large to small from the front end of the pond to the back. In operation the logs are heated and defrosted and the bark is loosened and the current from the larger to the smaller propellers urges the logs down the pond in and through the conveyor to the mill.

From the foregoing it is believed that the operation and advantages of my invention will be apparent, but it is again emphasized that interpretation of the scope of my invention should only be conclusive when made in the light of the subjoined claim.

I claim:

A log conveyer comprising an elongated pool having a wall with a plurality of spaced recesses, a casing mounted in each of the recesses and having a vent, a grating covering the vent, a propeller assembly mounted in the casing, and a conveyer passage extending from the pool, said propeller assemblies and the forward walls of the recesses being inclined toward the passage.

EVERETT W. PREBLE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,697,774	MacLafferty	Jan. 1, 1929
1,932,250	Paulson	Oct. 24, 1933
1,992,891	Schmidt	Feb. 26, 1935
2,083,445	Hellborg et al.	June 8, 1937