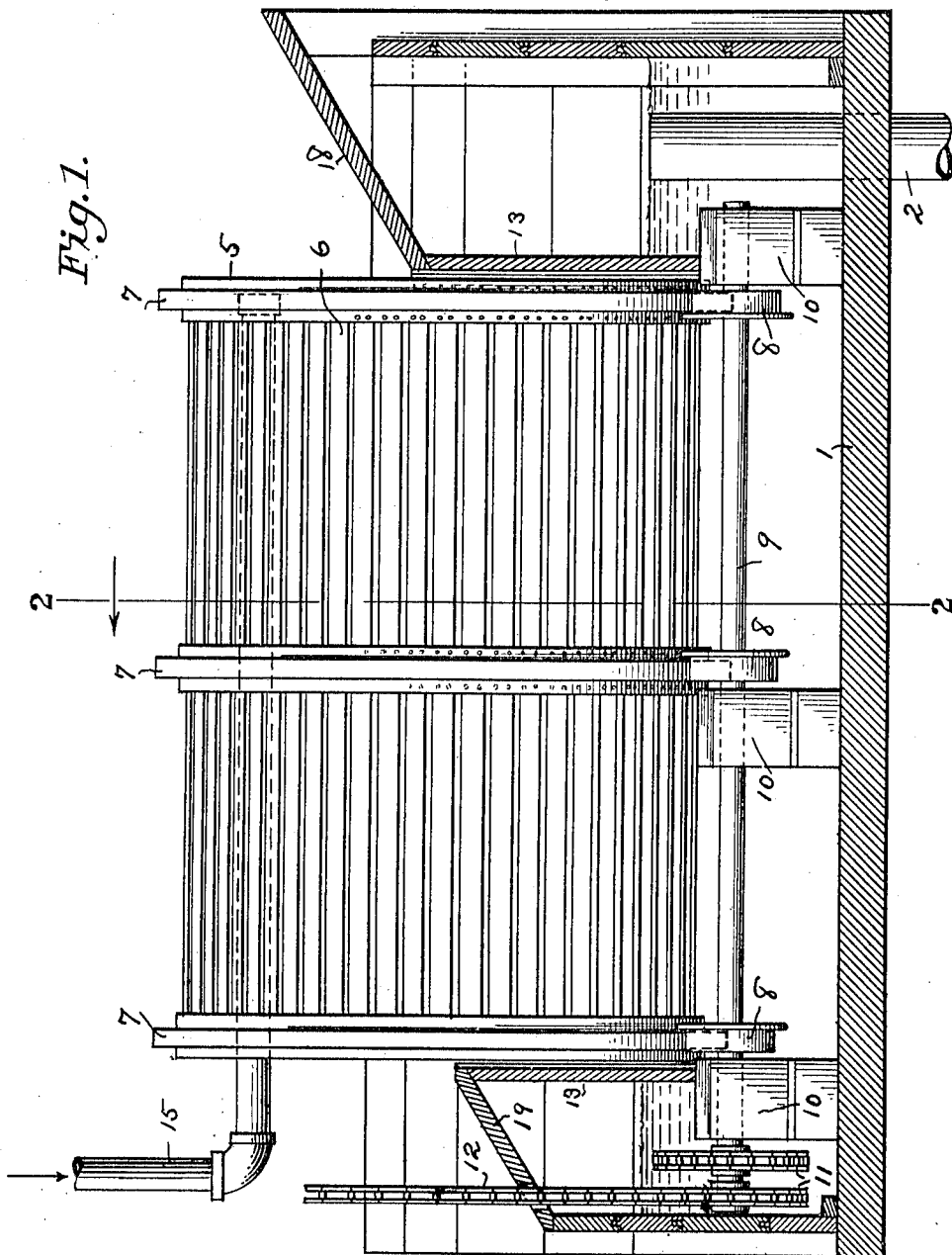


J. L. PHILLIPS,
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APPLICATION FILED SEPT. 9, 1918.

1,309,543.

Patented July 8, 1919.

2 SHEETS—SHEET 1.



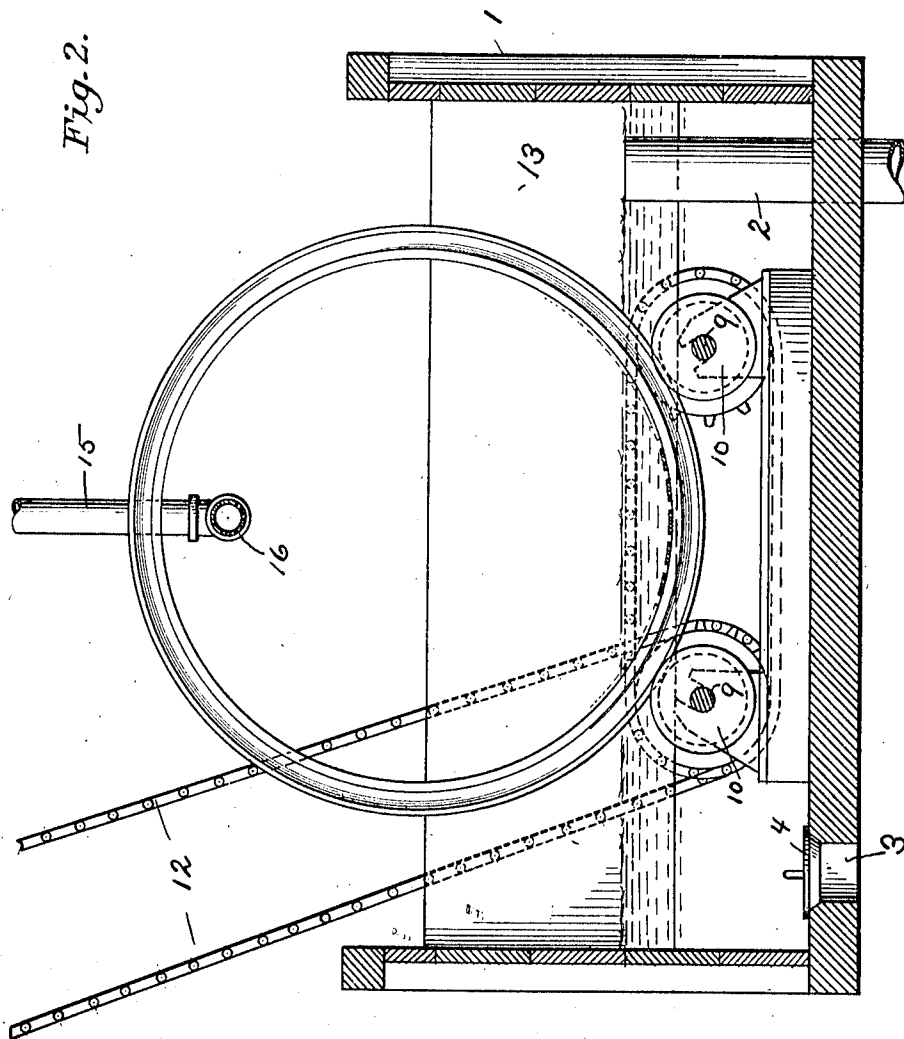
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UNITED STATES PATENT OFFICE.

JAMES LEWIS PHILLIPS, OF GREAT BEND, NEW YORK.

MACHINE FOR WASHING PULP-WOOD.

1,309,543.

Specification of Letters Patent.

Patented July 8, 1919.

Application filed September 9, 1918. Serial No. 253,280.

To all whom it may concern:

Be it known that I, JAMES L. PHILLIPS, a citizen of the United States, residing at Great Bend, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Machines for Washing Pulp-Wood; and 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 the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in apparatus for washing wood used for paper making, for the purpose of removing saw-dust, slime, river dirt, and other foreign matter which may accumulate in and upon the surface of the wood in its passage from the forest to the mill.

It is frequently found that saw-dust will cling to the end of the sticks after being sawed and which will tend to cause a considerable bailing in the paper screens and numerous breaks in the machine. By the elimination of this refuse and foreign matter, strength may be added to the paper to be made from the pulp wood.

The invention consists of a simple and efficient device of this character having various details of construction, combination and arrangement of parts which will be hereinafter fully described, shown in the accompanying drawings and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings which, with the numerals of reference marked thereon, form a part of this application and in which:

Figure 1 is a side elevation partly in section, showing a wood washing device constructed in accordance with my invention, and Fig. 2 is a vertical transverse section taken on line 2—2 of Fig. 1.

1 designates a tank of any suitable size and is provided with an overflow pipe 2, adapted to regulate the height of the water within the tank, and 3 is an exit opening regulated by a valve or closure 4. A cylindrical drum 5, made preferably of iron, has its circumferential wall formed of flat strips 6 with spaces intervening between the same

through which water is adapted to flow freely, and 7 designates circular tracks about the drum, adapted to rest upon the flanged friction driving wheels 8 which are keyed to the shafts 9 journaled in suitable bearings 10. Sprocket wheels 11 are fixed to said shafts and about which wheels sprocket chains 12 pass, affording means for driving the shafts from any suitable source of power not shown.

Vertical partitions 13 form partial closures for the ends of the drum, said partitions being of sufficient height to permit the sticks to be rolled in one end of the drum and out of the other. A pipe 15 passes into the upper portion of the drum provided with apertures and through which pipe and apertures water is adapted to be sprayed upon the sticks of wood within the drum. The sticks of wood are placed upon the platform 18 and are allowed to roll down into the interior of the drum. The drum is given a rotary movement, causing the sticks to roll against one another and against the inner surface of the circumferential wall of the drum, and during this operation water is sprayed from the pipe 15, thus thoroughly cleansing the sticks of any foreign matter which may have accumulated thereon. After the sticks have been thoroughly cleansed, they are thrown out and rolled upon the inclined platform 19.

By the provision of an apparatus embodying the features of my invention, it will be noted that the wood may be rapidly and thoroughly cleansed at a minimum of power, and a machine afforded without gears to watch, shafts to lubricate, etc., all of the parts of the apparatus working under water.

What I claim to be new is:

1. An apparatus for washing pulp wood, consisting of a tank adapted to contain water, rotatable shafts, wheels fixed to the shafts within said tank, a rotatable drum with open work in the circumference thereof, circular tracks about the drum and resting upon said wheels, the end walls of the tank forming closures for portions of the ends of the drum, inclined platforms at the upper ends of said closures.

2. An apparatus for washing pulp wood, consisting of a tank, shafts journaled in suitable bearings, wheels fixed to the shafts, a

rotatable drum having open ends and comprising a circumferential wall of strips spaced apart, circular tracks about the drum and resting upon said wheels, a pipe extending
5 through the upper portion of the drum, the said pipe having perforations within the drum through which water may be sprayed.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JAMES LEWIS PHILLIPS.

Witnesses:

WILLIAM K. PECK,
JOHN J. McLEAN.

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