

(No Model.)

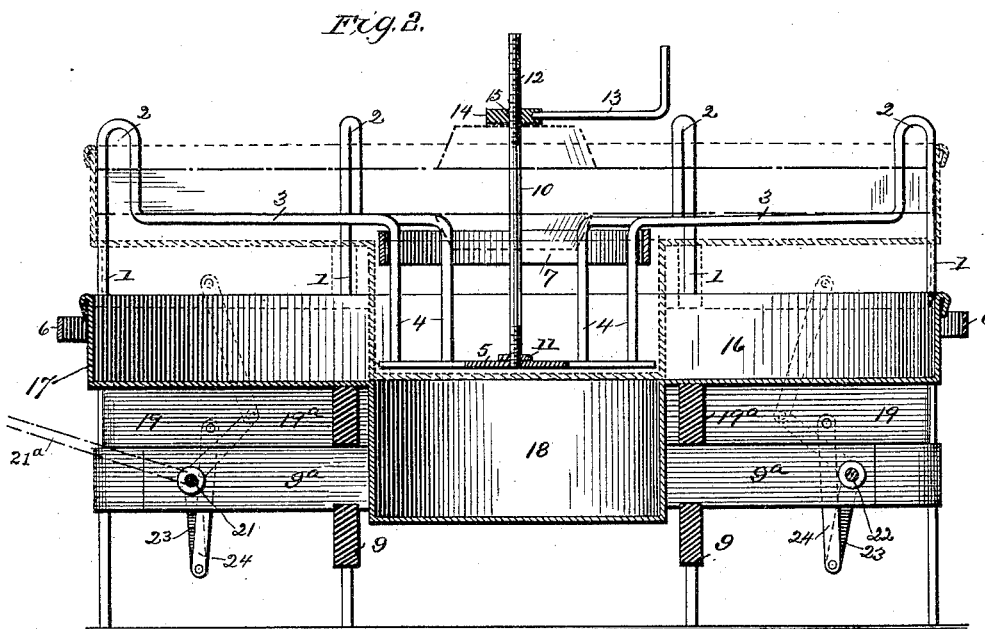
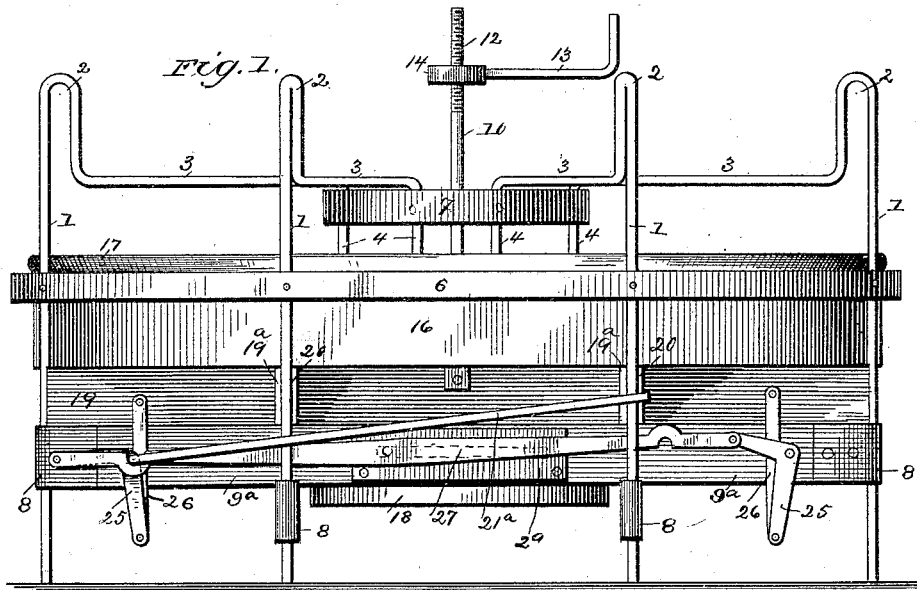
2 Sheets—Sheet 1.

J. L. ZESIGER.

MACHINE FOR DISHING WHEELS AND COOLING TIRES.

No. 417,897.

Patented Dec. 24, 1889.



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Fig. 3.

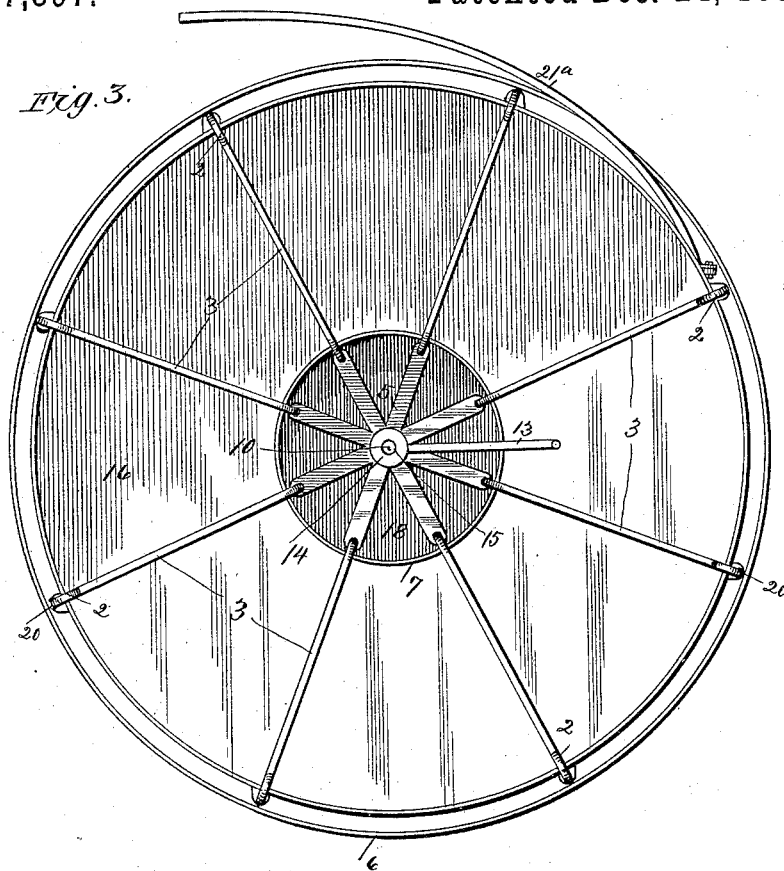


Fig. 4.

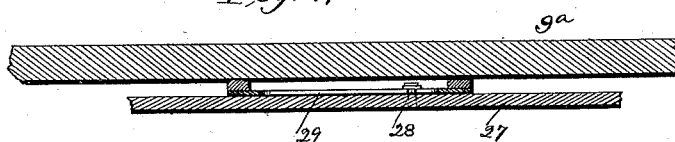
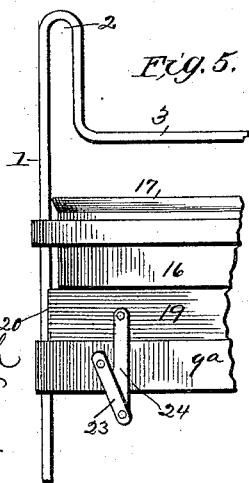


Fig. 5.



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JOHN LOUIS ZESIGER, OF SWITZER, OHIO.

MACHINE FOR DISHING WHEELS AND COOLING TIRES.

SPECIFICATION forming part of Letters Patent No. 417,897, dated December 24, 1889.

Application filed June 29, 1889. Serial No. 316,112. (No model.)

To all whom it may concern:

Be it known that I, JOHN LOUIS ZESIGER, of Switzer, in the county of Monroe and State of Ohio, have invented a new and useful Improvement in Machines for Dishing Wheels and Cooling Tires, of which the following is a specification.

My invention consists in a new and improved machine for dishing wheels and cooling tires, which will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a side view. Fig. 2 is a central vertical sectional view. Fig. 3 is a top plan view of the same. Figs. 4 and 5 are detail views, hereinafter referred to.

The same numerals of reference indicate corresponding parts in all the figures.

Referring to the several parts by their designating-numerals, the wheels to be dished and on which the tire is to be cooled is supported on an open metal frame consisting of a series of rods, four, six, or eight in number, according to the degree of strength required and the cost of the machine. The vertical outer parts 1 of these frame-rods rest at their lower ends upon the ground, and are curved over and down in an open loop at 2, then extending in horizontally for a distance, forming arms 3, as shown, and have their inner ends 4 bent down vertically and secured at their extremities in the ends of the arms of a horizontal spider-plate 5. A metal band 6 is secured around the outer vertical parts 1, each part 1 being bolted to it to brace and strengthen the frame, and a small metal re-enforcing band 7 surrounds the inner ends 4 near their upper ends, and they are bolted to it, to brace and strengthen that part of the frame. The lower ends of the legs 1 are secured by metal bands 8 to the ends of cross-bars 9 9^a of a lower frame, which strengthens and braces that part of the machine. In the center of the spider-plate 5 is screwed the threaded lower end of a screw-rod 10, which is removably held in position by a nut 11, the upper end of this rod 10 being threaded at 12.

13 indicates a lever having at its inner end a nut 14, which is formed with a central threaded aperture 15.

16 indicates the tank having the upwardly-extending outer edge flange 17, and having at

its center the sunken well 18 of such size as to receive the hub-receptacle 4 5 of the metal frame when the tank is raised. The tank is secured on a movable frame composed of the cross-pieces 19 19^a, the ends of which are recessed longitudinally at 20 to fit and slide on the parts 1 of the rod-frame, as shown.

In the ends of the cross-bars 9^a are journaled horizontal shafts 21 22, the rod 21 being extended and curved at one end to form a handle 21^a, as shown. One end of the shaft 21 and the corresponding end of shaft 22 have a crank-arm 23 23, these arms being pivoted at their free ends to links 24 24, which are pivoted at their upper ends to a cross-bar 19 of the frame on which the tank is supported. On the other ends of the shafts 21 and 22 are centrally secured crank-levers 25 25, one end of each lever 25 being pivotally connected by a link 26 with a cross-bar 19, while the other ends of the crank-levers are pivoted to the ends of a link 27, as shown, this link having a side guide-stud 28, which fits and slides in a slotted guide-plate 29, secured to the outer side of one of the cross-bars 9^a.

In operation, the tank being lowered, the wheel to be dished is placed on the rod-frame, resting on the arms 3, with the hub fitting in the hub-receptacle 4, the screw-rod 10 passing up through the hub-opening. The nut 14 of the lever 13 is then placed in position on the threaded upper part of the rod 10, and it will be seen that by turning the lever the wheel can be given any desired "dish" by a steady and regular application of power through the screw-lever and its cam. When the tire has been adjusted and the wheel dished sufficiently, the tank 16 being full of cool water, the lever or handle 21^a is raised, and through the connections before described raises the tank. The outer edge flange 17 of the tank fits up in the open loops 2 of the rod-frame, causing the water to cover the entire tire, thus insuring a regular and instant application of water to the entire tire and fellies.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood. It will be seen that my new and improved machine for dishing wheels and cooling tires is simple and strong in construction and rapid

and exceedingly effective in its operation. The screw-rod 10 can be removed in a moment when not required, and the lever 13 and rod 10, besides serving to dish the wheel, also serve
5 to hold it in position on the supporting-frame while it is being immersed in the rising tank.

The open metal frame gives room to operate with the tongs with which the tire is handled, giving room to reach, seize over the felly
10 and tire, and to pry down the tire over the wheel, and the water-tank, sinking down about six inches below the open frame on which the wheel rests, will also give room to work the tongs and to strike with a hammer, as is often
15 necessary, to set the tire close to the felly.

The curved handle 21^a, lying close in around the frame when the tank is down, does not project at all nor interfere with a person's moving quickly around the frame, which is a great
20 convenience, as the work has to be done rapidly while the tire is hot.

The immediate and complete cooling of the tire when the tank is raised prevents the burning of the felly, effecting a great saving of
25 the wheel.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the supporting-frame formed of the bent rods, of the lower
30 frame 9 9^a, the tank having the central well, and the frame 19 19^a, upon which it is secured, the transverse shafts, one of which is formed with the operating-handle and having upon them the crank-arms and crank-levers, the
35 pivoted links, and the link, substantially as set forth.

2. The combination of the supporting-frame consisting of the rods bent to form the upright outer ends 1, the open loops 2, the horizontal arms 3, and downwardly-bent inner
40 ends 4, the spider-plate, the screw-rod, and the nut 14, having the lever-handle, and the tank having the outer edge flange and the central well and adapted to be raised and lowered,
45 substantially as set forth.

JOHN LOUIS ZESIGER.

Witnesses:

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