

(No Model.)

T. L. BOZZALLA.

CENTRIFUGAL HYDRO WRINGER.

No. 261,827.

Patented Aug. 1, 1882.

Fig. 1.

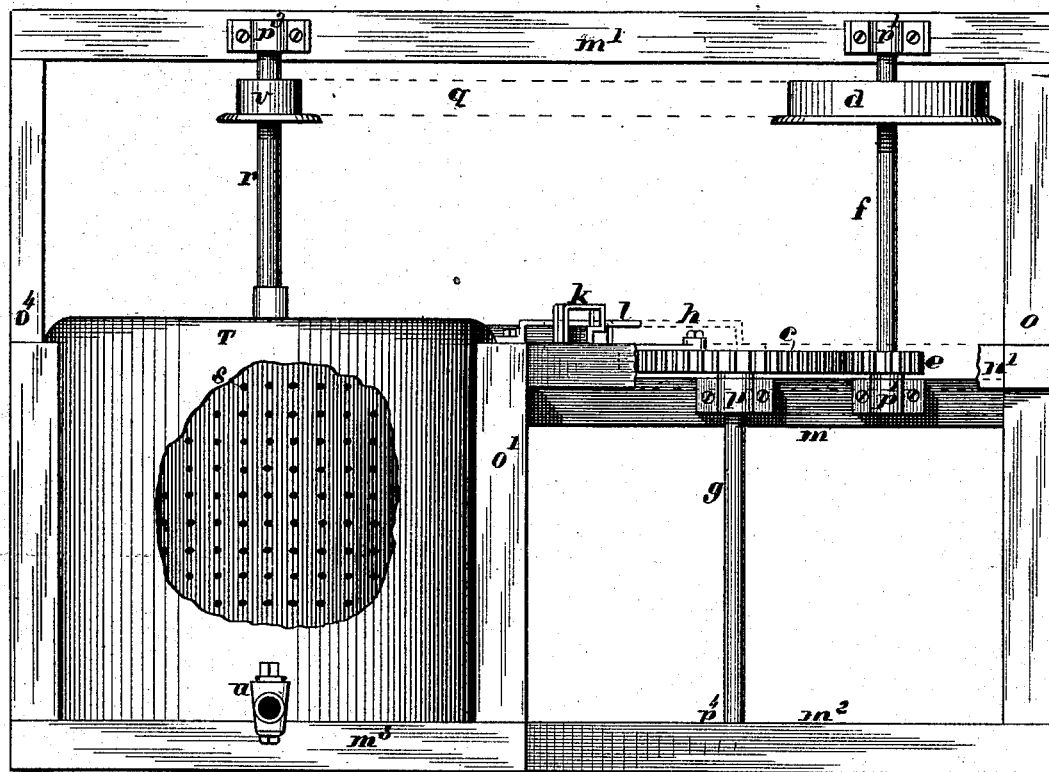
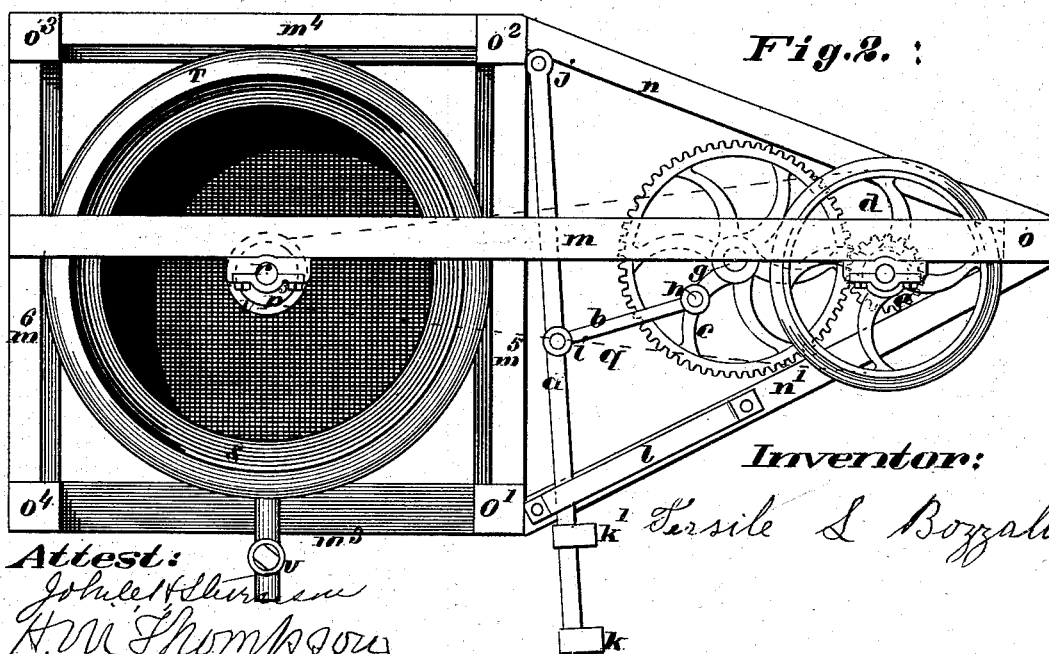


Fig. 2. :



Attest:

John H. Thompson
H. M. Thompson

Inventor:

Lersile L Bozzallo

UNITED STATES PATENT OFFICE.

TERSILE L. BOZZALLA, OF ST. LOUIS, MISSOURI.

CENTRIFUGAL HYDRO-WRINGER.

SPECIFICATION forming part of Letters Patent No. 261,827, dated August 1, 1882.

Application filed April 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, TERSILE L. BOZZALLA, a citizen of Torino, in the Province of Lombardy and Kingdom of Italy, in Europe, at present residing in the city of St. Louis and State of Missouri, have made a new and useful Improvement in Centrifugal Hydro-Wringers, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side elevation with a part of the frame broken away to show the driving-gears and parts, also a part of the casing broken away to show the interior of the hydro-wringer cylinder. Fig. 2 is a top view of the machine.

The same letters denote the same parts.

The present invention relates to the mechanism and the details immediately therewith connected for constructing and operating a centrifugal hydro-wringer by lever or other power.

Referring to the drawings, Fig. 1 represents the frame-work for holding and supporting a centrifugal cylinder and its casing, together with the several other parts of machinery which are attached for revolving the cylinder rapidly and working the same cheaper than has heretofore been done. The frame immediately around the outside of the casing T is made of the side timbers, m^3 m^4 m^5 m^6 , and their duplicates at its top and bottom, together with the posts o^1 o^2 o^3 o^4 at the corners, all of which are properly fastened together. A floor of plank is laid across the bottom timbers, m^3 , upon which the metallic casing T, with an open top and closed bottom, rests and is fastened.

S represents an open-topped and closed-bottom metallic cylinder, which is perforated with numerous small holes all around its sides. This is rigidly secured upon the shaft r , Fig. 1, by which it, with its contents, through force imparted to it through the other parts of the mechanism employed, is rapidly revolved in the inside of the casing T. Sufficient space is left between these two cylinders to permit the water thrown out through the perforations by the centrifugal force of the revolving cylinder to be discharged therein and flow out through

the cock u . The shaft r at its bottom rests in a step attached upon the bottom inside of casing T. At its top it rests in the box P^3 . It has a small pulley, v , (or a gear,) upon it, by which it is driven.

For the purpose of saving expense I have made improvements for driving this machinery by hand-power.

To accomplish my object, I annex to the frame-work already described the triangular frame shown in Fig. 2, made of the timbers m n o at the top, with their duplicates at the bottom, as shown by m'' , Fig. 1. The two posts o o^4 extend up sufficiently high to permit of the timber m' being attached to and held firmly by them. Attached to this frame-work are the box P and step P^4 , in which the shaft g revolves, having the large driving-gear C on its upper end rigidly attached. This driving-gear gears into the small gear e upon the lower end of the shaft f , which has a large flanged pulley, d , on it near its upper end. The flange may be dispensed with. This shaft stands in the step-box P' and revolves in the box P'' . The belt q passes around the large pulley d and around the small pulley v , connecting them for transmitting power and motion for revolving the perforated cylinder S. In order to impart power and motion to these working parts, the fulcrum connecting-rod b is attached loosely to the large gear-wheel through an eye upon the pin h in the arm of the large gear-wheel C at one of its ends and at its other end by a similar device to the lever a . The lever a is weighted upon the pin j , which is secured to the frame. Upon the long end of this lever are two sockets, open, k k' , to lengthen it by a movable extension-piece, if desired. In order to hold the lever in place while working it forward or back the guard-piece l , within which it moves, is used. Power applied to this lever causes the running parts to revolve and drives the perforated cylinder with great speed. By placing these driving parts vertically and changing my arrangements some the lever motion may be made vertical as well as horizontal, as shown.

I am aware of centrifugal cylinders being used for this purpose, and therefore do not claim that, broadly; but

What I consider as my improvement, and

desire to secure Letters Patent for, is as follows:

5 In a centrifugal hydro-wringer, the combination of the lever *a*, adapted to be lengthened or shortened by inserting or removing a bar in collars *k k'*, link *b*, secured to an arm of gear-wheel with brackets and guards and interme-

diately means of communicating motion, substantially as herein shown and described.

TERSILE L. BOZZALLA.

Witnesses:

JOHN C. H. STEVENSON,
H. M. THOMPSON.