

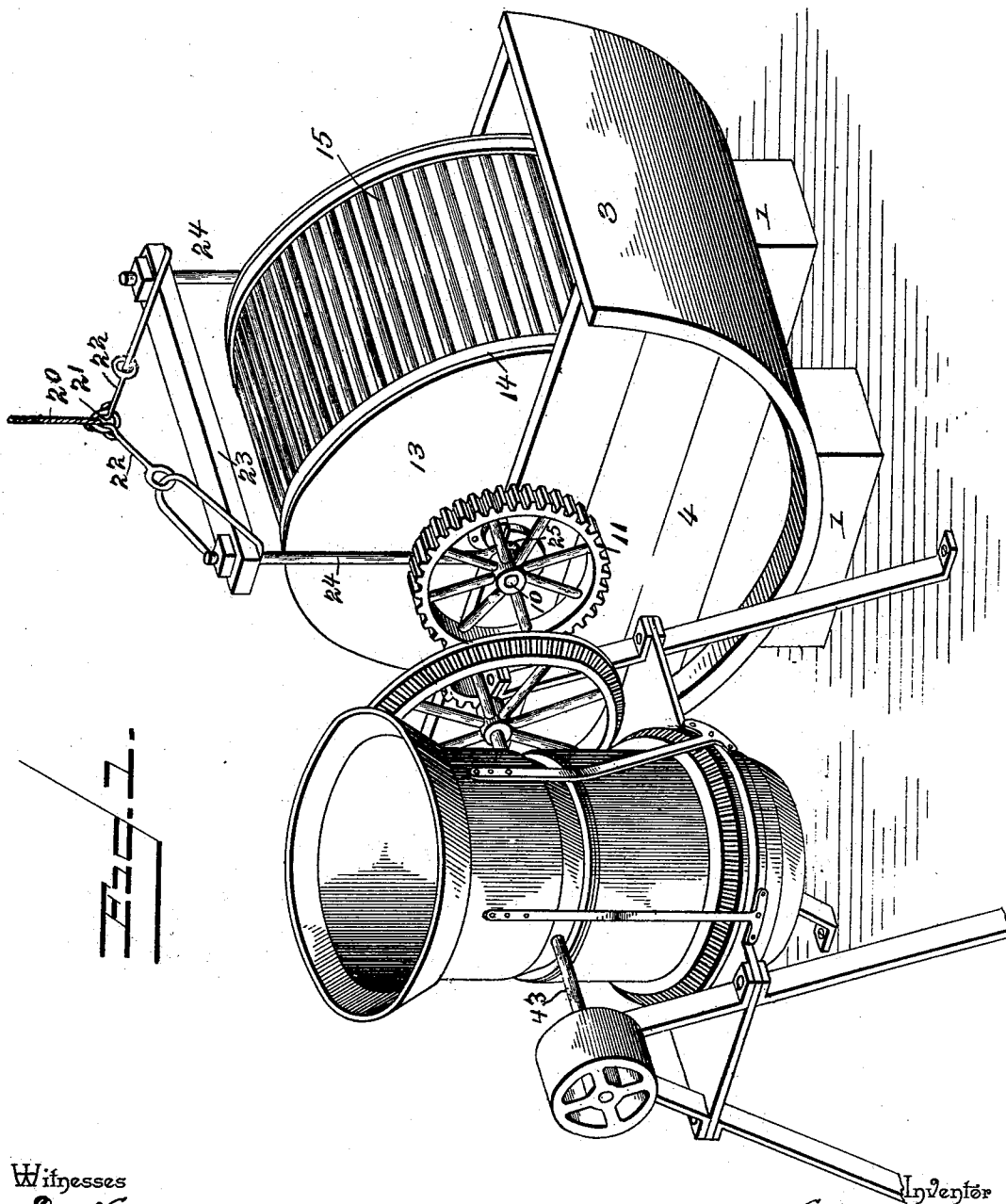
(No Model.)

2 Sheets—Sheet 1.

F. K. ZEHE.
MACHINE FOR WASHING VEGETABLES.

No. 508,197.

Patented Nov. 7, 1893.



Witnesses

E. H. Stewart.

Fred K. Zehe

By *h v s* Attorneys,

M. S. Duval.

Cashow & Co.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

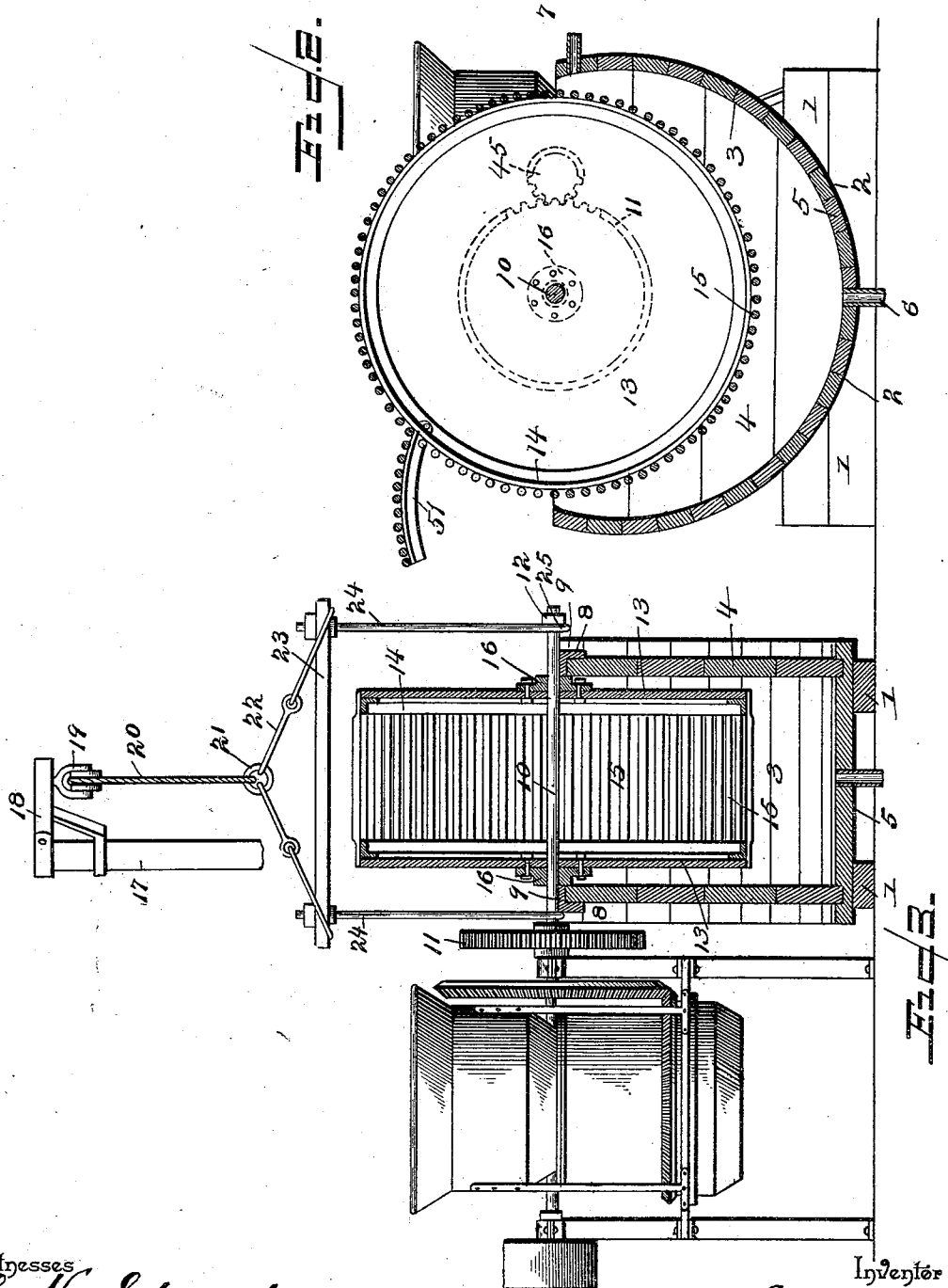
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Inventor

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C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

FRED K. ZEHE, OF ASHLAND, WISCONSIN.

MACHINE FOR WASHING VEGETABLES.

SPECIFICATION forming part of Letters Patent No. 508,197, dated November 7, 1893.

Application filed March 14, 1893. Serial No. 465,926. (No model.)

To all whom it may concern:

Be it known that I, FRED K. ZEHE, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Wisconsin, have invented a new and useful Machine for Washing and Cutting Roots and Vegetables, of which the following is a specification.

My invention relates to machines for washing vegetables and is especially adapted to be used in connection with a chopping mechanism which forms the subject-matter of a companion application, Serial No. 465,927, filed March 14, 1893; the objects in view being to provide a machine of this class especially adapted for use on farms and elsewhere wherein it is necessary to wash previous to cutting or comminuting vegetables, roots, &c., for the purpose of feeding the same to cattle.

With these objects in view and others hereinafter appearing, the invention consists in certain features of construction to be herein-after described and particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective view of a machine embodying my invention. Fig. 2 is a vertical transverse sectional view of the washer. Fig. 3 is a vertical view partly in section and at right angles to Fig. 2.

Like numerals of reference indicate like parts in all the figures of the drawings.

Upon a suitable base 1, which is provided with a curved recess 2 in its upper side forming a seat, there is mounted the tub 3. The tub 3 comprises opposite sides 4 of substantially semicircular shape whose edges are connected by a curved bottom 5 which sits within the recess or seat 2 and is provided at its lowest point with a drip or discharge-pipe 6 and near its upper edge with a supply-pipe 7. The opposite edges of the sides 4 are further provided with half-bearings 8 in each of which a metal bearing-box 9 is located. Seated removably in the metal bearing-box 9 is a transverse shaft 10, which shaft is provided at one end beyond its bearing with a spur-gear wheel 11 made fast upon the shaft and adapted to rotate therewith, and at its opposite end beyond its opposite bearing with a collar 12, which assumes the same relative position to the shaft as does the gear-wheel 11.

The washing-cylinder may be of any de-

sired construction, but I have herein illustrated one which I deem best adapted for the purpose in view. The same consists in detail as follows: Opposite sheet-metal heads or disks 13 have their peripheries at their inner sides secured to metal rings 14, the same being L-shaped in cross-section, and to these metal rings 14 are connected the ends of an annular series of transverse bars 15 spaced apart as shown so that the cylinder-basket is produced. Through the center of the heads 13 passes the shaft 10, and the said heads are perforated for the passage of the shaft and are reinforced at these points by metal bearing-plates 16 secured upon the exteriors of said heads.

In rear of the tub a crane support 17 is located, the same rising from the ground or any suitable support, and to the upper end of the crane support there is loosely connected and adapted to swing thereon a crane-arm 18, the outer end of which is provided with the usual block and tackle or fall 19 governed by the rope 20. The fall 19 at its lower end connects with a ring 21, in which are engaged the inner converging ends of a pair of loose bail-links 22, whose outer ends engage over the extremities of a transverse yoke-bar 23 through which are passed suspension-rods 24, the said rods being nutted above and below the bar 23 and terminating at their lower ends in hooks 25 of such shape as adapts them to engage the shaft 10 between the bearings and the collar 12 and gear 11. Thus it will be seen that through the medium of the hoisting device thus described the entire cylinder-basket may be elevated from its bearings and from the tub and swung to one side, or, on the other hand may be returned to a point above the tub and readily lowered into position as shown.

Any suitable cutting or comminuting mechanism may be employed in connection with the washer, and I have described one especially adapted for this joint use. A brief description of said cutting or comminuting mechanism is as follows: At one side of the machine described there is located any form of cutting or crushing-machine, in each of which is secured a cutting-blade 35. A hopper 39 is mounted to revolve upon the plate 30, said hopper being cylindrical and being

operated in any suitable manner, as, for instance, in the manner illustrated.

In operation the roots or vegetables to be washed and cut are passed through a hinged door 51 with which the cylinder-basket is provided, and water having been let into the tub, the machine is started, said machine being operated through the medium of any suitable motor suitably belted or otherwise connected with the shaft 43. The cylinder-basket being rapidly revolved it will be seen that vegetables or roots will be tumbled or agitated as they are carried swiftly through the body of water, all dirt being knocked therefrom, and passing from the cylinder-basket to the bottom of the tub. When sufficiently washed the hoist is operated so as to raise the cylinder-basket together with its contents from within the tub and sufficiently high to clear the same, when the crane-arm is swung to one side so as to bring the cylinder-basket above the cutter, and said cylinder-basket being revolved until its door is above said cutter, the door is opened and the contents permitted to drop into the cutter which is being operated in the manner described and through the medium of which the vegetables or roots are comminuted or sliced, falling from the cutter through the spout into any waiting receptacle.

I do not limit my invention to the precise details of construction herein shown and described, but hold that I may vary the same to any extent within the knowledge of the skilled mechanic and yet be within the scope of my invention.

Having described my invention, what I claim is—

1. The combination with a water-tub having the open bearings, the shaft removably mounted in the bearings and extending beyond the same, the cylinder basket mounted upon the shaft, the crane adjacent to the tub, and the inverted U-shaped yoke terminating in hooks for engaging the shaft, substantially as specified.

2. The combination with a tub having bearings, a shaft journaled therein, a revoluble cylinder-basket carried by the shaft and means for operating the same, of a crane, links extending from the crane, a yoke-beam supported by the links, and rods depending from the beam and terminating in hooks for engaging the shaft, substantially as specified.

3. The combination with the crane, and the yoke, of the tub having bearings, the transverse shaft journaled therein and means for transmitting motion thereto, the opposite sheet metal heads having central bearing-castings mounted on the shaft, the rings formed of angle-iron secured to the heads, and the series of transverse bars connecting the rings and heads, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRED K. ZEHE.

Witnesses:

A. B. NOBLE,
GEORGE H. KLOECKNER.