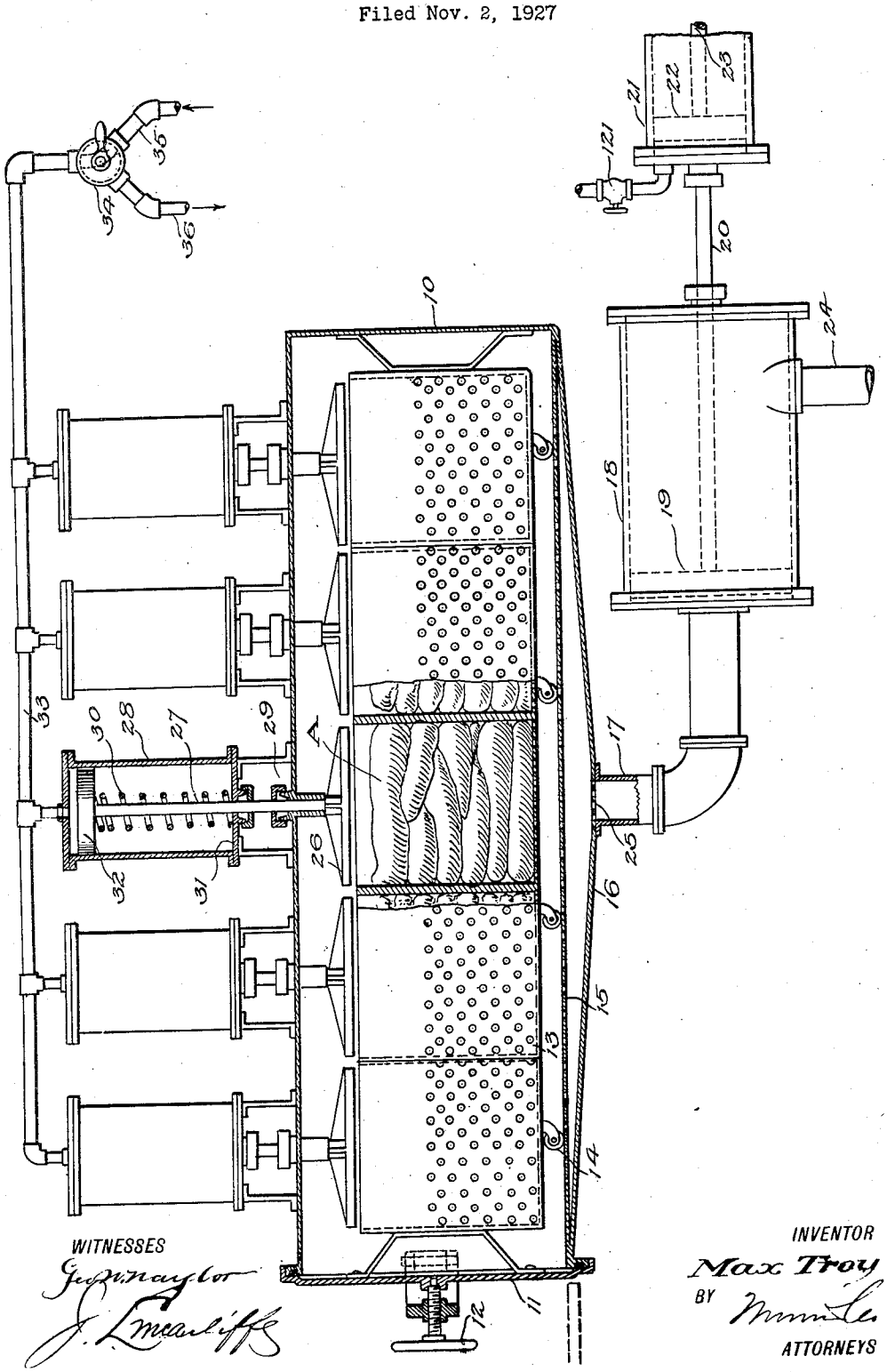
May 29, 1928. 1,671,913

M. TROY

EXTRACTOR FOR LAUNDRIES

Filed Nov. 2, 1927



WITNESSES

G. M. Naylor

J. L. Mealiffe

INVENTOR

Max Troy

BY Munn & Co.

ATTORNEYS

Patented May 29, 1928. 1,671,913

UNITED STATES PATENT OFFICE.

MAX TROY, OF BROOKLYN, NEW YORK.

EXTRACTOR FOR LAUNDRIES.

Application filed November 2, 1927. Serial No. 230,661.

My invention relates to what is termed an extractor for use in laundries in forcing the water out of washed clothes. Ordinarily, a centrifugal machine is employed in which the clothes become twisted and entangled, requiring the employment of special labor for straightening out the clothes and involving considerable loss in time and costs.

The general object of my invention is to provide a means to squeeze the water from the clothes without entangling the same and by simple and efficient means involving the minimum amount of labor and the minimum loss of time.

The nature of the invention, its distinguishing features and advantages will clearly appear as the description proceeds.

Reference is to be had to the accompanying drawing forming a part of this specification, showing a sectional side elevation of an extractor embodying my invention, it being understood that the drawing is merely illustrative of one example of the invention.

In carrying out my invention in accordance with the illustrated example a box 10 is provided, disposed horizontally, one end being open and adapted to be closed by a detachable head 11 which is held in place with any suitable clamp means, a known form of door clamping means being shown and indicated by the numeral 12.

The box 10 is adapted to receive foraminous clothes baskets 13, the foraminations being in the bottom and sides for the ready escape of the water from the clothes A. The basket is advantageously made with a plurality of compartments for keeping the wash of different families separated. The basket is provided with wheels or casters 14 to run into and from the box on a horizontal perforated false bottom 15. Below the false bottom 15 is a hopper shaped bottom 16 from which an outlet pipe 17 leads to a suitable means for collecting the water or withdrawing the same. The preferred form of the invention includes a means to positively withdraw the water from the box 10 for which purpose use is made of a cylinder 18 in communication at one end with the outlet pipe 17. In the cylinder 18 a piston 19 operates, the plunger rod 20 of which extends through a plunger 22 in a cylinder 21, 23 indicating the rod of plunger 22. A pipe 121 for steam or compressed air leads into a cylinder 21 in front of the plunger 22 so that fluid pressure will move said plunger 22 in said cylinder and thereby move the rod 20 and plunger 19 to cause suction within the cylinder 18 in front of plunger 19 and for drawing the water from box 10 through pipe 17. An outlet pipe 24 leads from the bottom of cylinder 18. The numeral 25 indicates a perforated area in the bottom 16 at the outlet pipe 17.

To force the water from the clothes in the compartment or compartments of the baskets 13 I provide a pressure head or heads 26, there being shown five pressure heads in the illustrated example to correspond with the five compartments of the basket 13. Each pressure head 26 is on the lower end of a piston rod 27 operating in a cylinder 28 and through a stuffing box 29 on the box 10. A spring 30 is coiled about the rod 27 within the cylinder 28 and exerts pressure at the lower end against the lower cylinder head 31 and exerts its pressure at the upper end against the piston 32 in cylinder 28. A fluid pressure pipe 33 connects with the cylinder or cylinders 28. Said pressure pipe has a two-way valve 34 for the inlet of fluid under pressure through a branch 35.

The admission of the fluid under pressure against the piston 32 will force said piston downwardly and will cause the pressure head 26 to move downwardly into the basket 13, thereby squeezing the water out of the clothes. Upon relief of the pressure through branch 34 and valve 36, the spring 30 will raise the piston 32 and the pressure head 26.

The described extractor greatly reduces the handling of the clothes and leaves the clothes in better condition. The water is fully extracted particularly with the use of the plunger 19 operating in cylinder 18 to positively withdraw the water from the box 10 and at the same time it exerts a suction action on the clothes to extract the water in addition to the pressing action.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the exact details herein illustrated, since, manifestly, the same can be considerably varied without departure from the spirit of the invention as defined in the appended claims.

I claim:

1. An apparatus for extracting water from washed clothes, comprising a box, an open top clothes basket to hold the washed clothes

to be treated, said basket to be run into or out of said box longitudinally thereof to carry the clothes into and out of the box, a closure for said box, said basket being formed to permit the escape of water therefrom, and means operating in said box transversely thereto to squeeze the water from the clothes in the basket, together with means to exert a suction action in said box and withdraw water therefrom.

2. An apparatus for extracting water from washed clothes, comprising a box, a clothes basket to hold the washed clothes to be treated, said basket to be run into or out of said box longitudinally thereof to carry the clothes into and out of the box, said basket being formed to permit the escape of water therefrom, and means operating in said box transversely thereto, to squeeze the water from the clothes in the basket, together with means to exert a suction action in said box and withdraw water therefrom.

3. An apparatus for extracting water from washed clothes, comprising a box, a clothes basket to hold the washed clothes to be treated, said basket to be run into and out of the said box longitudinally thereof to carry the clothes into or out of the box, said basket being formed to permit the escape of water therefrom, and means operating in said box transversely thereto to squeeze the water from the clothes in the basket; together with means to produce suction in the box and withdraw water therefrom.

4. An apparatus for extracting water from washed clothes, including a box, a foraminous basket to hold washed clothes and to be run into or out of said box, longitudinally thereof to carry the washed clothes into and out of the box, said basket having vertical partitions dividing the basket into compartments, a pressure head operating in said box, and means to operate said pressure head to enter the basket when the latter is in the box for squeezing the water from the clothes in said basket, together with means to exert a suction action in said box and withdraw water therefrom.

5. A device for extracting water from washed clothes and comprising a box having a perforated false bottom, a clothes basket to be run into or out of the box on said false bottom longitudinally thereof to carry the clothes into and out of the box, an outlet from the box below said false bottom, a reciprocating pressure head operating transversely in said box, said basket being adapted to be disposed beneath said head, and means external of said box to actuate said pressure head to squeeze the water from the clothes in said basket, together with means to exert a suction action in said box and withdraw water therefrom.

6. A device for extracting water from washed clothes and comprising a box having a perforated false bottom, a clothes basket to be run into or out of the box on said false bottom longitudinally thereof to carry the clothes into and out of the box, an outlet from the box below said false bottom, a reciprocating pressure head operating transversely in said box, said basket being adapted to be disposed beneath said head, and means external of said box to actuate said pressure head to squeeze the water from the clothes in said basket; together with a cylinder connected with said outlet, a piston operating in said cylinder to create a suction in said outlet and said box, and means to actuate said piston.

7. A device for extracting water from washed clothes, including a box, a clothes basket to be run into or out of said box longitudinally thereof to carry the clothes into and out of the box, a pressure head within the box to move transversely to the path of movement of the basket into or from the box, said basket adapted to be disposed beneath said pressure head and the latter being adapted to enter the basket for squeezing the water from the clothes therein, a plunger rod on which said pressure head is carried, a cylinder into which said rod extends, a piston on said rod in said cylinder, and means to exert pressure on said piston, together with means to exert a suction action in said box and withdraw water therefrom.

Signed at Brooklyn, N. Y., in the county of Kings and State of New York, this 21st day of October, A. D. 1927.

MAX TROY.