G. W. WALK.

MACHINE FOR CLEANING AND GREASING PANS.

APPLICATION FILED MAR. 25, 1909.

997,347. Patented July 11, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

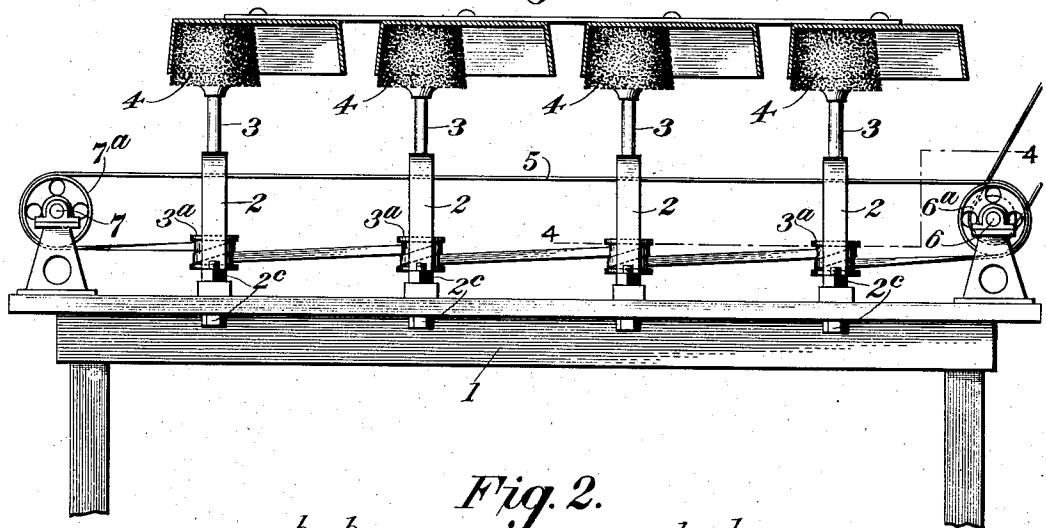
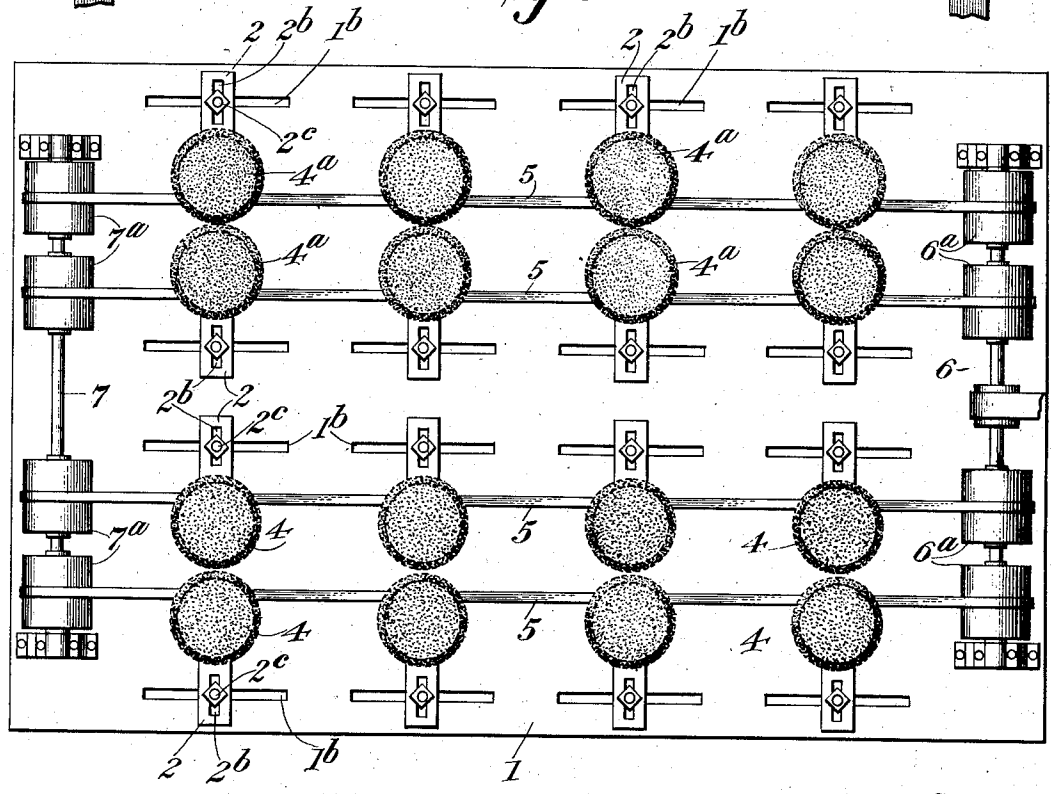


Fig. 2.



Inventor:

George W. Walk

Witnesses

H. E. Fowler

James B. Mansfield.

By Alexander & Dowell

Attorneys

G. W. WALK.

MACHINE FOR CLEANING AND GREASING PANS.

APPLICATION FILED MAR. 25, 1909.

997,347. Patented July 11, 1911.

2 SHEETS—SHEET 2.

Fig. 3.

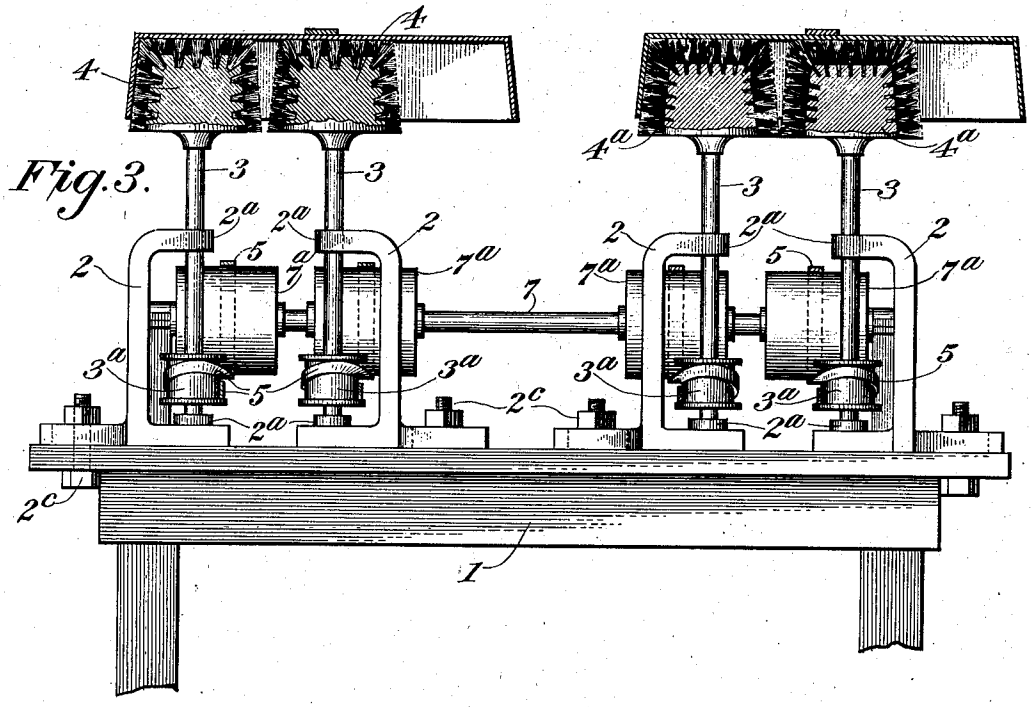


Fig. 4.

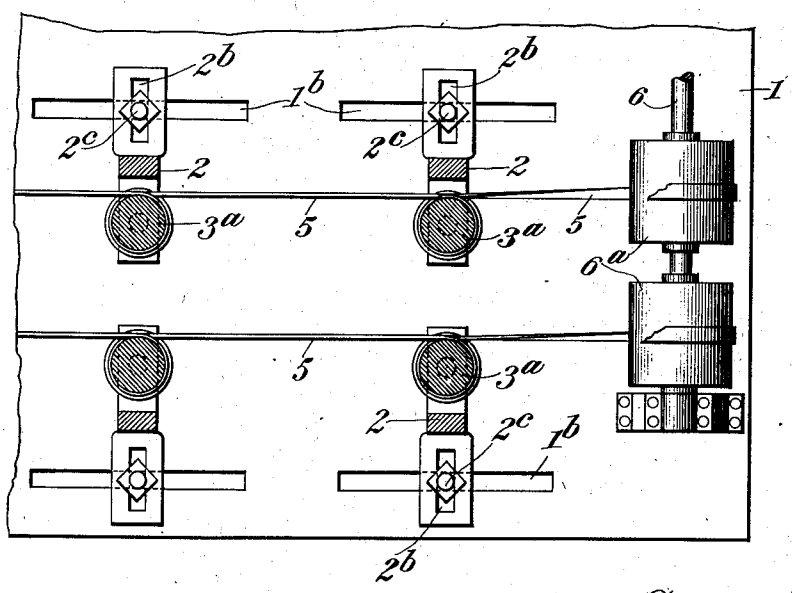
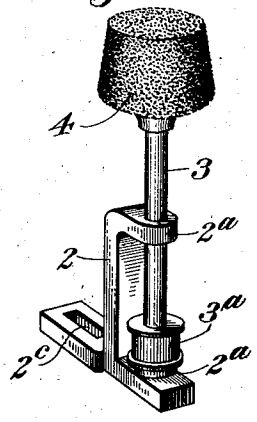


Fig. 5.



Witnesses

H. E. Fowler

James P. Mansfield.

Inventor:

George W. Walk.

By Alexander Powell

Attorneys

UNITED STATES PATENT OFFICE.

GEORGE W. WALK, OF PITTSBURG, PENNSYLVANIA.

MACHINE FOR CLEANING AND GREASING PANS.

997,347. Specification of Letters Patent. Patented July 11, 1911.

Application filed March 25, 1909. Serial No. 485,700.

To all whom it may concern:

Be it known that I, GEORGE W. WALK, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Cleaning and Greasing Pans; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is a novel machine for cleaning and greasing pans, being especially designed for use in bakeries where a large number of pans are used.

The machine in brief comprises a number of pairs of rotary brushes which are preferably arranged on a vertically disposed axis so that the pans can be held upside down thereover and cleaned or greased with facility; all the brushes in a row may be driven by a common belt; the brush standards are adjustable so that the brushes in each pair can be set at any desired distance apart so as to enable the brushes to operate most advantageously upon the pans; the distance apart of the brushes being variable according to the diameters of the pans to be cleaned.

Preferably the machine contains two series of pairs of brushes, one series being used for cleaning the pans and the other series for greasing the pans; the cleaning and greasing devices being substantially alike except that longer bristles are used on the greasing brushes. The brushes are not intended to entirely fill the pans; a number of pairs of such brushes are preferably arranged in each machine, and the pairs are adjustable to or from each other so that a number of pans may be simultaneously cleaned. It is customary in many bakeries to have a number of pans connected by straps so that they can be handled as units; and by my machine such sets of pans can be cleaned simultaneously, as one pan, and may be greased in a similar manner.

I will now describe the invention in detail as embodied in the machine illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the complete machine. Fig. 2 is a plan view. Fig. 3 is an enlarged end view thereof, with near drive shaft and pulleys removed. Fig. 4 is an enlarged detail horizontal sectional view on line 4—4, of Fig. 1. Fig. 5 is a detail perspective view of one of the brushes and its supporting brackets.

1 represents a base or table upon which the operative parts are mounted; upon this table are adjustably mounted a number of brackets 2, each of which is provided with bearings 2^a for preferably vertically disposed brush spindles 3 upon which are mounted brushes 4. Each bracket 2 is adjustably secured to table 1 by means of a bolt and nuts 2^c transfixing a slot 2^b in the base of the bracket and a slot 1^b in the top of the table. The brackets 2 are arranged in pairs, so as to have brushes 4 in pairs; the pairs of brackets are preferably disposed transversely of the table as shown, and the brackets in each pair can be readily adjusted to or from each other by reason of the slots 2^b, and can be adjusted longitudinally of the table by reason of the slots 1^b; the construction being such that the brushes 4 can be adjusted anywhere from the minimum to the maximum distance apart, and thus be arranged to operate most effectively upon pans of any diameter. As shown there are four pairs of cleaning brushes 4 mounted in this manner in one series on the machine; and there are four pairs of greasing brushes 4^a similarly mounted in one series on the machine; the series of greasing brushes lying parallel with the series of cleaning brushes.

The brush spindles 3 are provided with spools or pulleys 3^a, and the pulleys 3^a in each longitudinal row of brush-spindles are driven by a common belt or rope 5 which extends from a pulley 6^a on a driven shaft 6, at one end of the machine, to and around the several pulleys 3 and to and over an idler pulley 7^a on an idler shaft 7 at the other end of the machine, and then straight back to the pulley 6^a,—the belt being given one turn around each pulley 3^a so that all the brushes will be driven in unison and at the same speed by a common belt. The other rows of brush-pulleys may be similarly driven by belts 5 from pulleys 6^a on shaft 6 as shown. This is a very simple and efficient form of drive, and enables the brushes to be independently adjusted without necessitating changing of the belts, and insures uniformity of rotation of the brushes.

The brushes 4 are preferably cylindric and may be removably fastened to the upper ends of the spindles 3 by screwing them

thereon or in other suitable manner. The brushes are preferably covered on their sides and tops with bristles as shown. The greasing brushes 4ª preferably have longer and softer bristles than the brushes 4, otherwise the cleaning and greasing devices are substantially alike.

In using the device the operator takes a pan and turns it upside down over a pair of the brushes as indicated in Figs. 1–3; and then moves the pan around over the brushes with a gyratory motion until it is cleaned; for ordinary sized pans two brushes are employed, this facilitates the cleaning operation, and as the brushes are small they can clean the corners more thoroughly than large brushes. For very small pans one brush can be used.

In large bakeries it is customary to connect several pans together, by riveting them to straps, so that such pans can be handled as one; and my machine is particularly adapted for use with such sets of pans, as the pairs of brushes can be adjusted so that all the pans in a set can be simultaneously cleaned as indicated in Figs. 1-3. The vertical arrangement of the brushes and adjustability of the brackets, whereby it is possible to adjust the brushes in each pair, and also to adjust the pairs of brushes, renders the machine very useful and adaptable for cleaning all sizes of pans and sets of pans. The greasing of the pans can be effected in the same manner as the cleaning; the workman after cleaning the pans simply placing them upon the greasing brushes in the same way.

Having described my invention what I claim as new and desire to secure by Letters Patent thereon is:

1. In combination a table, adjacent relatively adjustable brackets mounted on the table, a vertically disposed brush spindle journaled in each bracket, a brush on each spindle, said brushes being parallel and having their axes vertical, and means for driving the said spindles.

2. In combination a table, pairs of brackets adjustably mounted on the table, vertically disposed brush spindles journaled in said brackets, brushes on said spindles, and pulleys on the brush spindles; with a driven shaft at one end of the table, an idler shaft at the other end thereof, belts running from pulleys on the driving shaft successively around the belt pulleys on a row of spindles to and over pulleys on the idler shaft and back to the driving shaft.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

GEORGE W. WALK.

Witnesses:
C. E. HOUSHOLDER,
W. F. MCMECHAN.