

(No Model.)

F. R. GROUT.

STAND AND PRESS FOR PAINT AND OTHER CANS.

No. 295,492.

Patented Mar. 18, 1884.

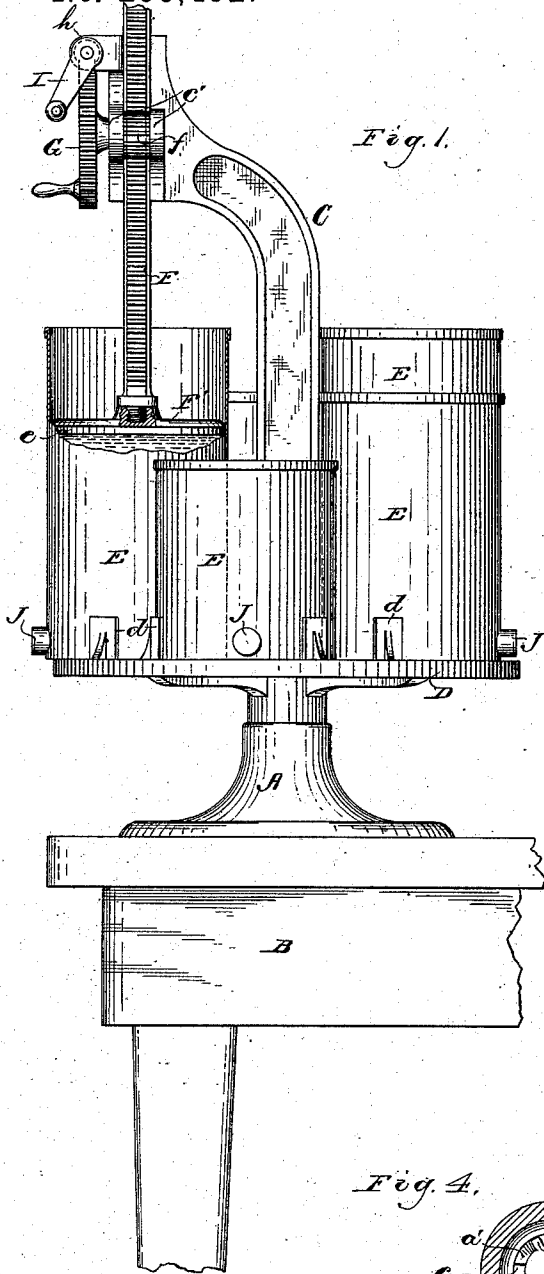


Fig. 1.

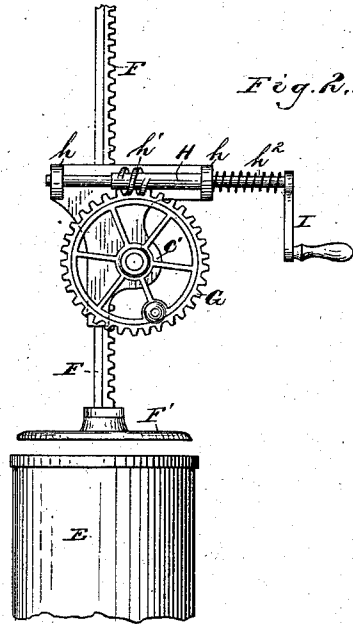


Fig. 2.

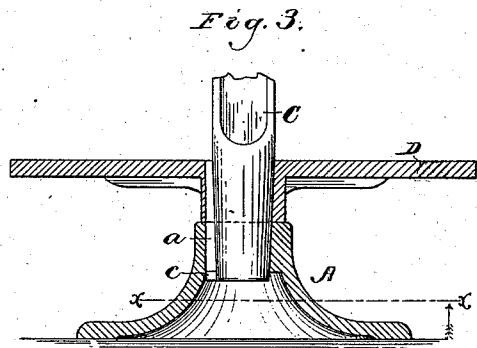


Fig. 3.

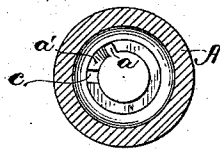


Fig. 4.

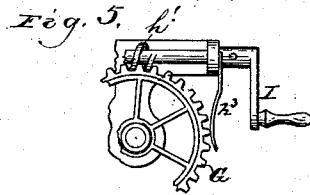


Fig. 5. h'

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UNITED STATES PATENT OFFICE.

FRANK R. GROUT, OF CHICAGO, ILLINOIS.

STAND AND PRESS FOR PAINT AND OTHER CANS.

SPECIFICATION forming part of Letters Patent No. 295,492, dated March 18, 1884.

Application filed January 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. GROUT, of Chicago, Illinois, have invented a new, useful, and Improved Stand and Press for Paint and other Cans, of which the following is a description, reference being had to the accompanying drawings, in which—

Figure 1 shows a side elevation of my improved press; Fig. 2, a detail view of a part of the same; Fig. 3, a central transverse sectional view of the base of said press; Fig. 4, a horizontal sectional view of said base on the line *xx*, Fig. 3, looking in the direction of the arrow; and Fig. 5 is a detail view of a portion of Fig. 2, showing a modification thereof.

Like letters of reference indicate like parts in the different figures.

The object of my invention is to provide a stand and press for paint and other cans used for holding semi-fluid or plastic material, from which small quantities are used from time to time, which press may not only expel the contents of the can uniformly and at any rate of speed required, but may accommodate a number of cans, so that any color may be chosen as desired and the contents expelled therefrom at will without the inconvenience of removing any of the cans from the stand.

The presses heretofore in use have been constructed to accommodate but a single can, and are otherwise objectionable in that no means have been adopted to regulate the pressure upon the contents of the can; and as the paint around the diaphragm is liable to become dry great pressure is at first required to initiate the movement thereof; and as said diaphragm usually starts suddenly the paint or other liquid is caused to spurt from the gate or opening, thereby not only wasting the material but injuring any object with which it is brought in contact. By the use of my improved press I am enabled to overcome this difficulty.

In the drawings, A represents the base of said stand secured to a bench or table, B. C is a standard secured to said base in any well-known manner, but preferably by tapering said base, as clearly shown in the drawings, and casting a small projection or lug, *c*, Figs. 3 and 4, thereon, which may be inserted in a corresponding slot, *a*, in said base, and upon turning said standard the projection *c* is pressed firmly against a cam-shaped or beveled surface,

a', within the base, as shown in Fig. 4, when said standard is secured firmly in position. Above said base, and securely maintained by said standard and base, is a revolving table or support, D, of a size sufficient to hold any desired number of cans, the same having suitable upward-projecting lugs or flanges, *d*, Fig. 1 for holding said cans in the relative position required, concentric with said standard C, as shown in said last-named figure, E representing the cans of varying height, but preferably of the same diameter. Said standard is bent outward at the top, as shown in Fig. 1, so that a piston-rod, F, or plunger placed in a suitable slot therein may stand in a position above the center of each can as the same, respectively, are brought thereunder. Upon the lower end of said rod F is secured in the usual manner a piston-head, F', which is preferably somewhat smaller than the diameter of the can, and presses directly upon the usual diaphragm, *e*, Fig. 1. Said piston-head may be detached from the rod F, as shown in Fig. 1, so that any size may be used accordingly as the diameter of the cans vary. Cast upon the head of said standard C are bearings *c'*, into which are fitted a shaft for the reception of the small pinion *f*, Fig. 1, adapted to engage in a rack upon the piston-rod F and the crank-wheel G. At right angles to said last-named shaft is a shaft, H, adjusted in bearings *h h*, likewise cast upon the head of said standard C. The shaft H is provided with a worm-gear, *h'*, engaging in cogs upon the periphery of the wheel G, and is capable of a longitudinal movement in its bearings, whereby said worm-gear may be disengaged from contact with the wheel G. If desired, a spiral spring, *h''*, may be placed upon the shaft H to hold said worm normally in position. A crank, I, upon the outer end serves to rotate said shaft. As the plunger is liable by its weight to revolve the wheel G and fall down when not otherwise temporarily supported, it is obvious that some device is necessary to hold the same in position. This may be accomplished by means of the worm *h'* and spring *h''*, or by a spring-brake, *h'''*, Fig. 5, which presses against the cogs of the wheel G. Should this be adopted the spiral spring *h''* may be dispensed with.

In adjusting said press to a particular can, the shaft H may be pressed back sufficiently

to disengage the worm-gear from the gear of the cog-wheel G, when the latter may be revolved and the piston raised as rapidly as desired to the required height, the table D rotated until the proper can is brought in position, when said piston may be lowered upon the diaphragm e, after which the worm h' is brought into engagement with the wheel G, when the crank I may be turned for the purpose of expelling the contents of the can through the usual gates or openings, J. It is obvious that this movement is not only sufficiently powerful to force the same downward, whatever may be its condition, but is uniform as well, and cannot cause the material to spurt suddenly from the opening, as would be the case if the wheel G alone were used.

It is apparent that said press may be used not only in connection with paint but any semi-fluid or plastic material.

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

1. A stand and press for paint and other cans, consisting of the standard C, removably

secured to a suitable base, a revolving table adapted to hold the cans in positions respectively concentric with said standard, a plunger and piston for expelling the contents of the can, with the cogged crank-wheel G, worm-gear h', and crank I, substantially as and for the purposes set forth.

2. In a press and stand for paint and other cans, the combination of the standard C with a suitable base, the rotary table D, plunger F F', wheel G, shaft H, and worm h', all constructed and operating substantially in the manner and for the purposes set forth.

3. In a press and stand for paint and other cans, the combination of the standard C with a suitable base, the rotary table D, plunger F F', wheel G, shaft H, worm h', and spring-brake h³, all constructed and operating substantially in the manner and for the purposes set forth.

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Witnesses:

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