June 5, 1934. C. SCRUGGS 1,961,832

CAN RECONDITIONER

Filed June 13, 1933

Fig.1.

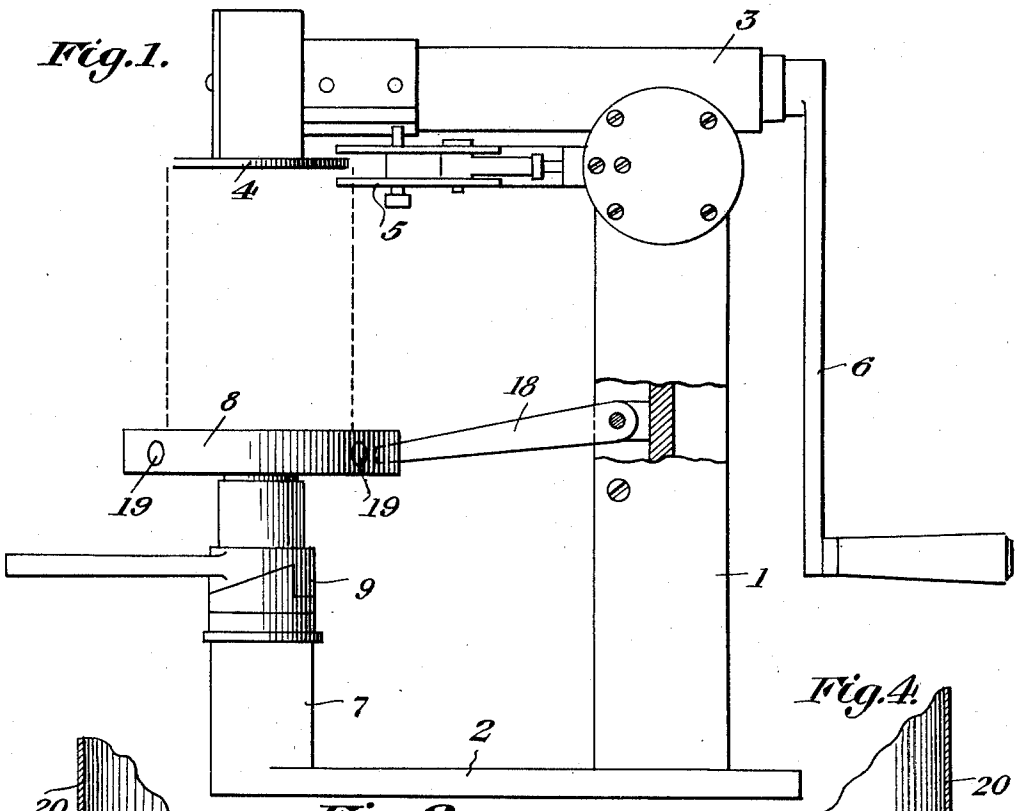


Fig.2.

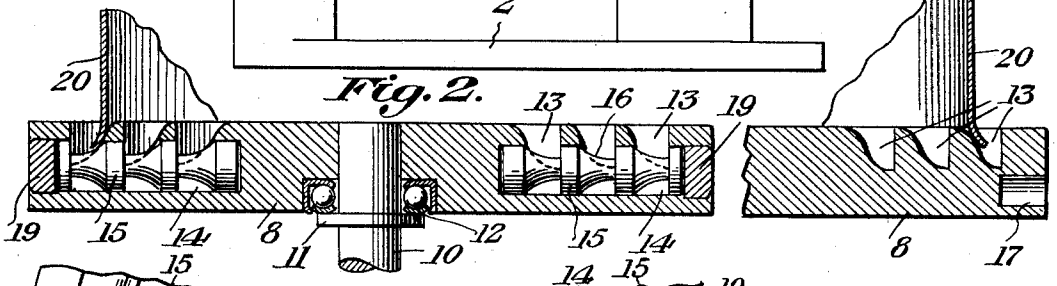
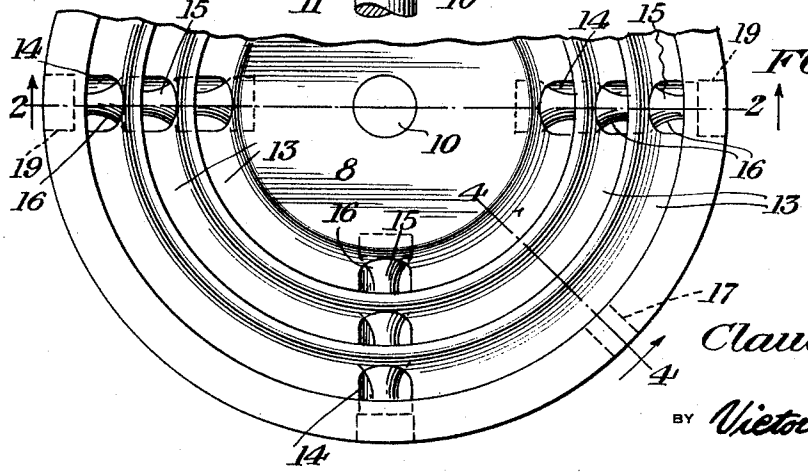


Fig.4.

Fig.3.



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CAN RECONDITIONER

Claude Scruggs, Whitney, Tex.

Application June 13, 1933, Serial No. 675,612

2 Claims. (Cl. 153—54)

This invention relates to apparatus for reconditioning tin cans and has special reference to the table or can support, the object of the invention being to provide simple means whereby the can may be permitted to rotate with minimum frictional resistance from the table while its mouth is being crimped or placed in condition to receive a new cover.

The invention is illustrated in the accompanying drawing and will be hereinafter fully set forth and defined.

In the drawing:—

Figure 1 is a side elevation of a can conditioning machine to which the present invention is applied.

Figure 2 is an enlarged diametrical section through the table.

Figure 3 is a plan view of the table, the line 2—2 in this figure indicating the plane of the section shown in Figure 2.

Figure 4 is a detail section on the line 4—4 of Figure 3.

The machine in which my present invention is embodied and for which it is more particularly designed, comprises a standard 1 rising from a base 2 and having gearing supported in a casing 3 on its upper end whereby a can-engaging disc 4 may be rotated. A head 5 is supported by a suitable bracket projecting from the standard 1 and this head is adapted to carry implements for engaging the upper end of the can and cooperating with the disc 4 for cutting the can and for crimping and sealing a new cover in place. The gearing within the casing 3 may be driven by a hand crank 6, as will be readily understood. Upon the base 2, in spaced relation to the standard 1 and aligned axially with the disc 4, is a hollow standard or post 7 upon which the table 8 is mounted, cam devices, indicated generally at 9, being interposed between the upper end of the post or standard 7 and the table, whereby the table may be supported at the desired height and the apparatus adjusted to accommodate cans of different lengths. The table 8 is mounted rotatably upon an inner post 10 which is housed within the hollow post or standard 7 and which is provided with an annular shoulder or rib 11 whereby the table 8 is supported, anti-friction bearings 12 being interposed between the post and the table to assure easy rotation of the table. The table is formed in its upper side with concentric grooves 13 and the mouth of the can being conditioned is to be received within one of these grooves, the provision of a plurality of grooves obviously accommodating cans of various diameters.

At intervals in the circumferential extent of the table, radial openings 14 are formed therein and these openings receive rollers 15, the peripheries of which are annularly notched or grooved, as shown at 16, the rollers extending across the grooves 13 in the table and the notches in the rollers registering with the respective grooves in the table, as will be readily understood upon reference to Figures 2 and 3. The grooves 13 in the table have their outer walls disposed vertically while their inner walls are inclined toward the outer vertical walls, as shown most clearly in Figure 4, the inner inclined walls being preferably curved whereby, as the inverted can is engaged in a groove, the edge or mouth of the can will rest upon the inclined wall of the engaged groove. The can having been engaged in the table, the table is adjusted vertically so that the closed end of the can will rest against and be frictionally engaged by the disc 4 whereupon the disc is rotated and the can caused to be turned about its own vertical axis upon the table. Through the turning of the can and the pressure applied thereto through the disc the mouth of the can will be flared or bent outwardly, as shown in Figures 2 and 3 so that it will be put in condition to receive a new cover. As the flaring operation proceeds the can will, of course, move downwardly within the engaged groove 13 and its edge will eventually be brought to bear upon the rollers 15 and the rollers will, of course, turn about their own axes and thereby facilitate the turning of the can so that the operation will proceed with maximum efficiency.

It is, of course, desirable that the table be held against rotation during the flaring operation and for this purpose a socket 17 is formed in the periphery of the table to receive a latch or locking arm 18 which is pivoted upon the standard 1 and may be engaged in said socket, as will be understood upon reference to Figure 1. It is also obviously desirable that the rollers 15 be retained within the openings or bores 14 after they have once been inserted and for this purpose plugs 19 are fitted snugly in the outer ends of the openings, as shown in Figure 2.

From the foregoing description, taken in connection with the accompanying drawing, it will be seen that I have provided a very simple and efficient means whereby the can to be reconditioned may be firmly supported upon the table and turned with respect thereto so that its mouth will be rapidly flared without excessive frictional wear

upon the table. Inasmuch as the frictional wear is minimized, the operation will proceed rapidly and the rollers 15 will receive the brunt of the pressure exerted through the can, which is indicated at 20, and said rollers may be of metal so that they will last through a long period and withstand hard usage.

Having described the invention, I claim:

1. A table for use in machines for reconditioning tin cans provided with concentric channels in its upper surface, said channels having their outer walls vertical and their inner walls inclined downwardly toward their outer walls, and rollers mounted in the table to extend radially across the bottoms of the channels, said rollers having annular grooves in their circumferences approximating the cross sectional contour of the channels.

2. A table for use in machines for reconditioning tin cans provided with concentric channels in its upper surface, said table having bores in communication with the channels and opening outwardly of the table rollers mounted within the bores and extending radially across the channels and provided with annular grooves registering with the respective channels, and plugs closing the ends of the bores to retain the rollers in place.

CLAUDE SCRUGGS.