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1,508,345

J. LUPO, JR

TUMBLING BARREL

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Fig. 1,

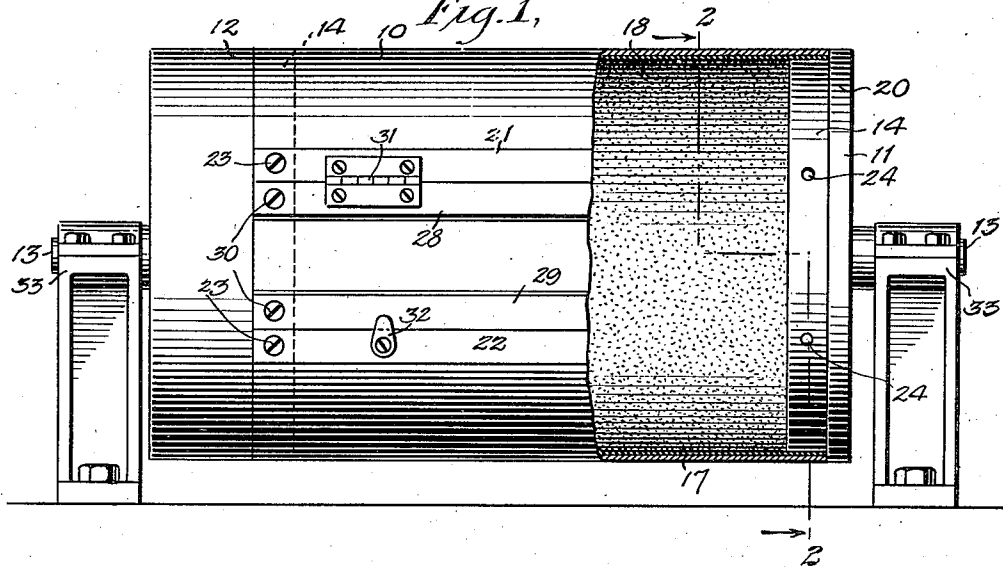


Fig. 2,

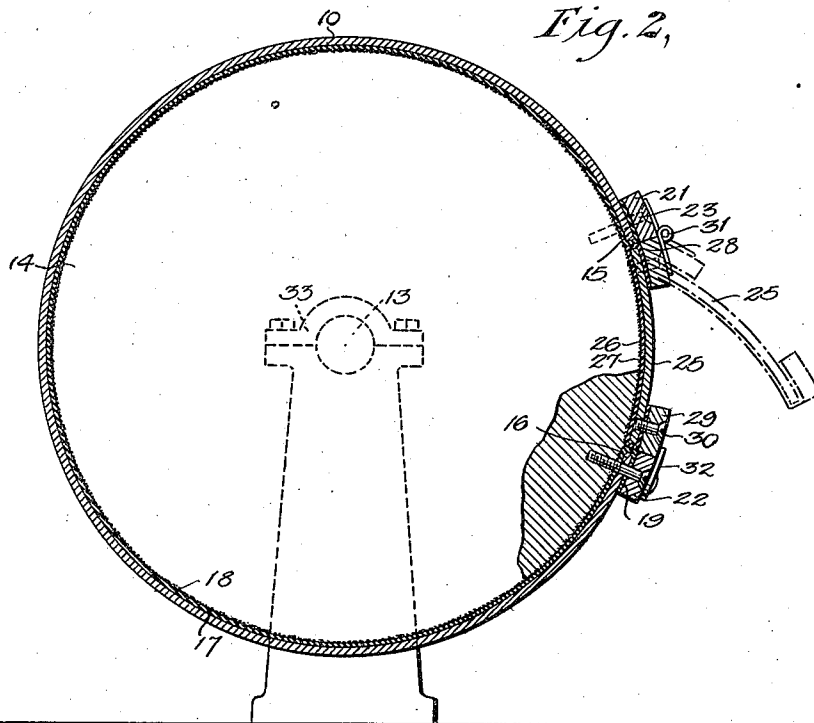
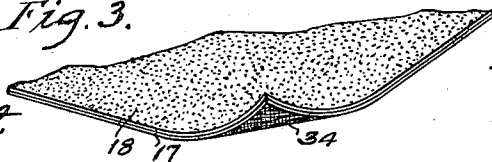


Fig. 3.



WITNESSES

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JOSEPH LUPO, JR., OF NEW YORK, N. Y.

TUMBLING BARREL.

Application filed October 15, 1923. Serial No. 668,772.

To all whom it may concern:

Be it known that I, JOSEPH LUPO, JR., a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Tumbling Barrel, of which the following is a full, clear, and exact description.

The present invention has relation to an improvement in tumbling barrels employed for the purpose of cleaning, polishing and finishing articles.

The present invention contemplates a tumbling barrel which consists of a number of parts or elements capable of ready association or disassociation whereby to facilitate the application and removal of the abrasive or other lining in order that the same may be renewed, when worn.

The invention furthermore contemplates a tumbling barrel which is comparatively simple in its construction, inexpensive to manufacture, and which is highly efficient in its purpose.

With the above recited and other objects in view, the invention resides in the novel construction set forth in the following specification, particularly pointed out in the appended claims and illustrated in the accompanying drawings, it being understood that the right is reserved to embodiments other than those actually illustrated herein to the full extent indicated by the general meaning of the terms in which the claims are expressed.

In the drawings—

Figure 1 is a front view of a tumbling barrel constructed in accordance with the invention, parts being broken away and shown in section to disclose the underlying structure.

Fig. 2 is a transverse sectional view taken approximately on the line 2—2 of Fig. 1.

Fig. 3 is a fragmentary perspective view of the abrasive lining for the tumbling barrel.

Referring to the drawings by characters of reference the tumbling barrel comprising an open ended split cylindrical body 10 constructed of a material of the requisite flexibility and a pair of circular heads 11 and 12 each of which is provided with an outwardly projecting axial journal or trunnion 13. The heads 11 and 12 are provided with a reduced concentric inwardly projecting portion 14 designed to be received

within the opposite ends of the body which encircles the portions 14 when the barrel is assembled. The length of the cylindrical body 10 is substantially less than the circumference of the portions 14 whereby the end edges 15 and 16 will be spaced apart a sufficient distance to afford an opening for the introduction and removal of the articles to the barrel. The lining 17 which is formed with an abrasive substance 18 on its inner surface is of the same width as the cylindrical body 10 and of slightly greater length whereby the end edges 19 thereof may be turned over the end edges 15 and 16 of the body. In assembling the barrel the side edges of the lining 17 are interposed between the side edges of the body 10 and the reduced portions 14 of the heads 11 and 12, said side edges abutting against the shoulders 20 at the juncture of the portions 14 with the heads 11 and 12. Clamping bars 21 and 22 are superimposed on the end edges 15 and 16 of the body 10 with the turned over end edges 19 of the liner 17 therebetween and retaining elements 23 extend through the clamping bars, the end edges 19 of the liner, the end edges 15 and 16 of the body, and are anchored in the reduced portions 14. The retaining elements 23 preferably consist of screws which are received in threaded openings 24 in the reduced portions 14. In order to provide means for closing the opening defined by the spaced end edges 15 and 16 of the body, a cover plate 25 is provided which is of an appropriate size to snugly fit within the opening and is curved in conformity with the peripheral exposed parts of the reduced portions 14. The cover plate is lined on its inner side by a lining strip section 26 having an abrasive inner surface 27, the opposite ends of which are bent around the opposite end edges of the cover plate and are clamped between the clamping bars 28 and 29 which are detachably secured by screws or other fastening means 30 passing through the clamping bars and anchored in the cover plate. The clamping bar 28 is attached to the clamping bar 21 by hinges 31 which admit of the swinging of the cover to open or closed position. Preferably the cover is retained in closed condition by means of keepers 32 on the clamping bar 22. After the barrel elements or parts are assembled, the trunnions or journals 13 are received in the bearings 33. The head 12 which is of an

appreciably greater width than the head 11 may constitute a pulley around which a belt is trained for driving and rotating the barrel, or, if desired, the barrel may be rotated 5 by means of one of the trunnions or journals. Where the lining 17 which is employed is sandpaper it is preferably backed by a fabric 34 as illustrated in Fig. 3 for the purpose of strengthening the sandpaper and 10 preventing cracking of the same when it is flexed or curved to conform to the cylindrical body.

I claim:

1. A tumbling barrel comprising a split 15 cylindrical body, circular heads received within the opposite ends of the body, an outwardly projecting axial journal on each head adapted to be received in bearings for rotatably mounting the barrel, a lining hav- 20 ing an abrasive inner surface, the side edges of said lining being clamped between the periphery of the heads and the side edges of the body with the end edges of the lining turned over the end edges of the body, clamp- 25 ing bars overlying the end edges of the body, and means extending through the

clamping bars and body and anchored in the heads for assembling the barrel.

2. A tumbling barrel comprising a split cylindrical body, circular heads received 30 within the opposite ends of the body, an outwardly projecting axial journal on each head adapted to be received in bearings for rotatably mounting the barrel, a lining hav- 35 ing an abrasive inner surface, the side edges of said lining being clamped between the periphery of the heads and the side edges of the body with the end edges of the lining turned over the end edges of the body, 40 clamping bars overlying the end edges of the body, means extending through the clamping bars and body and anchored in the heads for assembling the barrel, the end edges of said 45 body being spaced apart to define an opening for introducing and removing the contents of the barrel, and a cover section hinged at one edge to one clamping bar and means carried by the other clamping bar for engagement with the free edge of the cover to retain the same in closed position.

JOSEPH LUPO, JR.