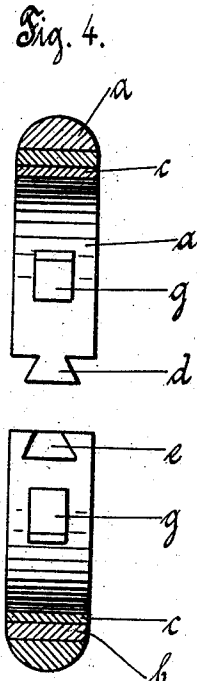
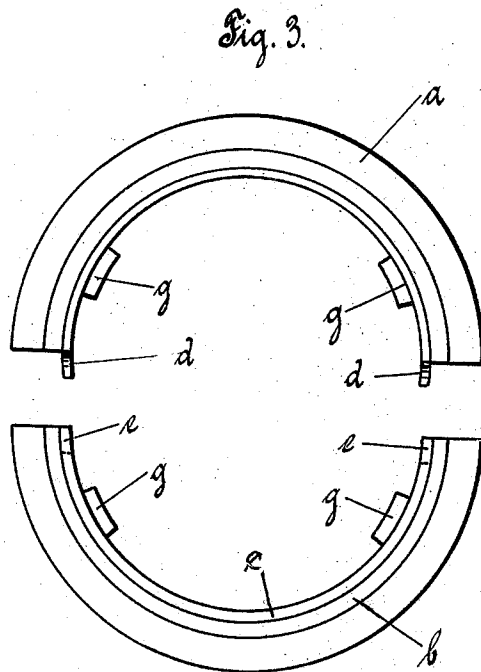
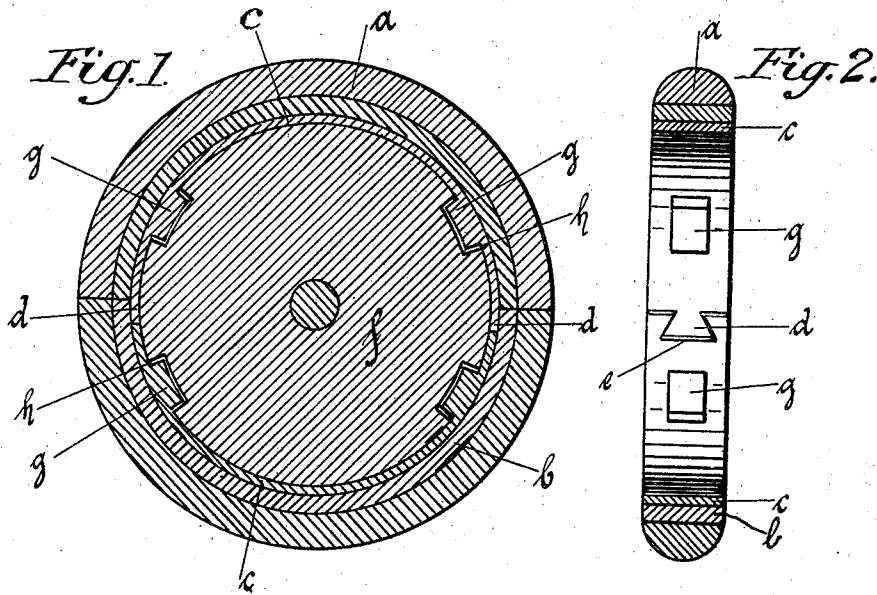


H. HIPPI.
 VAT WASHING MACHINE RING.
 APPLICATION FILED MAR. 23, 1910.

986,712.

Patented Mar. 14, 1911.



Witnesses
 H. Kasper.
 J. E. Heklen

Inventor
 Hermann Hipp

By B. Singer.
 Attorney

UNITED STATES PATENT OFFICE.

HERMANN HIPPI, OF STAUFEN, GERMANY.

VAT-WASHING-MACHINE RING.

986,712.

Specification of Letters Patent.

Patented Mar. 14, 1911.

Application filed March 23, 1910. Serial No. 551,206.

To all whom it may concern:

Be it known that I, HERMANN HIPPI, a subject of the German Emperor, and a resident of Staufen, in the Grand Duchy of Baden, Germany, have invented Improvements in Vat-Washing-Machine Rings, of which the following is a specification.

It is well known that the rings placed around the guiding rollers for the barrels in barrel washing machines heretofore were made of one piece. In order to exchange these rings it became therefore necessary in every instance to lift the shaft carrying said rollers out of its bearings. This presented considerable difficulty and inconveniences especially in automatic barrel washing machines, and caused the loss of considerable time. In order to overcome these disadvantages the rings according to the present invention are made in two or more parts united by suitable fastening means arranged upon one part and adapted to engage a corresponding recess in the other part. In this way it is possible to bring the rings upon the rollers of a shaft without the necessity of lifting and removing the latter out of the machine, and it is clear that thereby a great deal of time and labor is saved, and that the working of the machine is not interrupted to a noticeable extent.

In the accompanying drawing forming a part of this specification: Figure 1 shows in section the arrangement of a ring according to the present invention in position upon one of the guiding rollers of a barrel washing machine. Fig. 2 is a cross-section thereof. Fig. 3 shows in front view a bipartite ring, both parts being separated. Fig. 4 is a cross-section thereof.

Like characters of reference indicate the same part in all the figures of the drawing.

According to this invention the rings to be used in connection with the guiding rollers of the barrel washing machines consist of two parts one of said parts *a* consisting of soft rubber, and the other, *b* of hard

rubber, both being mounted during the process of vulcanization upon suitable steel or metal bands *c* or fastened thereto in any other well known manner. The ends of the metal band of one of the parts, for instance of part *a* as shown, are shaped to form suitable fasteners *d* of any desired cross-section adapted to engage correspondingly shaped recesses *e* in the ends of the metal band of the second part, so that after uniting both parts a complete and uninterrupted smooth ring for the roller of a barrel washing machine is formed. For the purpose of greatly strengthening the hold of said rings upon a roller *f* the inner faces of the metal bands *c* are provided with suitable projecting lugs *g* adapted to engage correspondingly shaped recesses *h* sunk in the periphery of the rollers *f* so as to effectively prevent any displacement of roller and ring.

It is clear that the rings may be constructed instead of in two in any convenient desired number of parts.

The construction is simple and may be economically made, and while I have described the various parts specifically, it will be obvious that variations may be made in the construction thereof so for instance the cross-section of the fastening means and of the recesses receiving the same may be changed without departing from the spirit and scope of my invention.

Having thus described my invention what I claim is:—

Guide rollers for barrel washing machines, comprising a hub having recesses in its periphery, metal bands consisting of a plurality of sections carried by said hub and provided with lugs upon their underside adapted to engage the recesses in the periphery of said hub for the purpose of preventing a displacement of said metal bands upon the same, an inner ring of hard rubber and an outer ring of soft rubber composed of a plurality of sections corresponding to the number of sections of said metal bands to which the latter are fastened

by vulcanization, said metal bands being provided with dove-tail shaped coupling pins upon one end of each of their sections near their inner periphery, and having ap-
5 appropriately shaped recesses in the adjacent other ends adapted to be engaged by said coupling pins.

In testimony whereof I affix my signature in presence of two witnesses.

HERMANN HIPP.

Witnesses:

CARL W. SCHMITT,
AUGUST OOSTERMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
