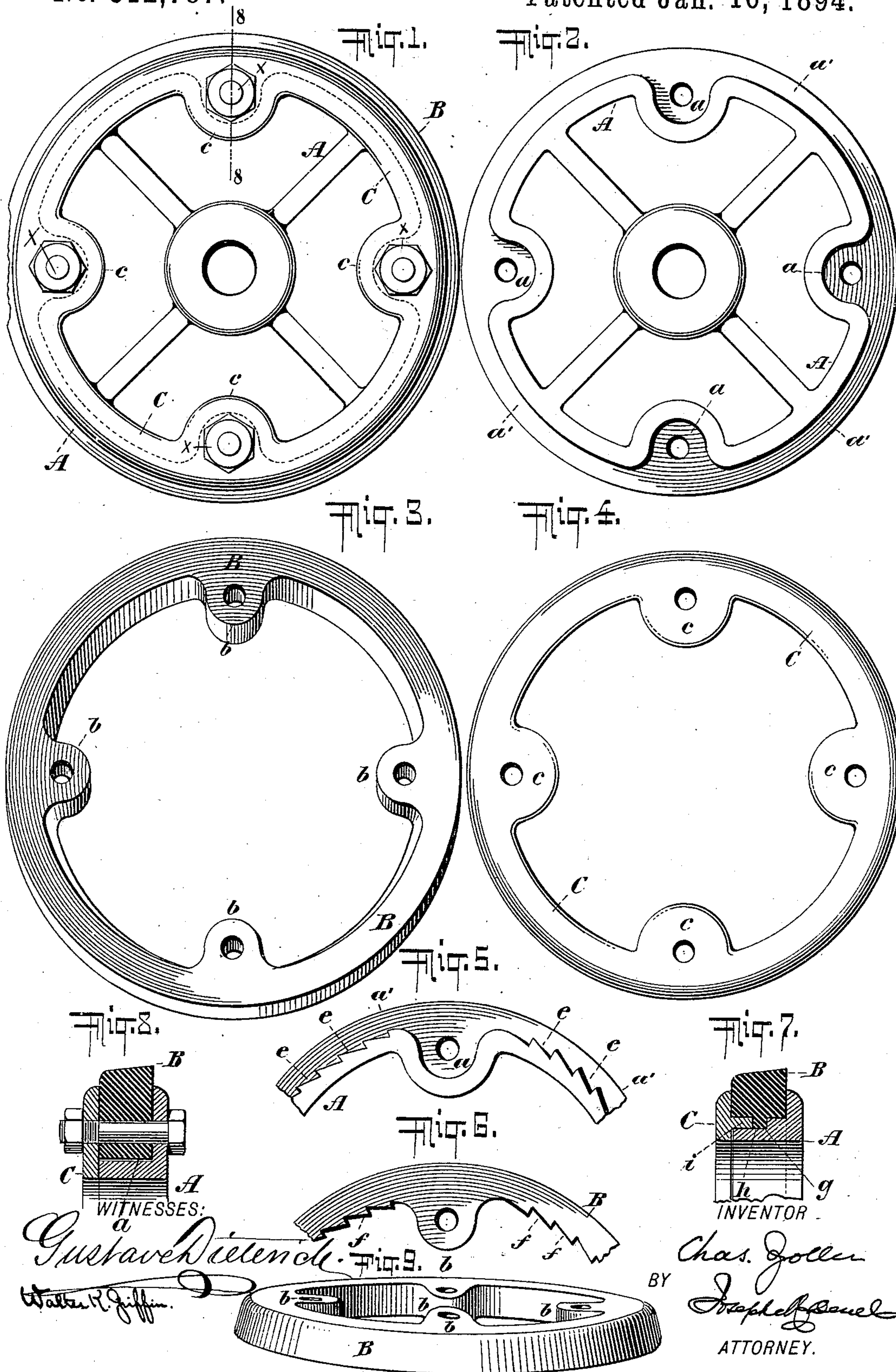


(No Model.)

C. ZOLLER.
FRICTION WHEEL.

No. 512,787.

Patented Jan. 16, 1894.



UNITED STATES PATENT OFFICE.

CHARLES ZOLLER, OF NEW YORK, N. Y.

FRICTION-WHEEL.

SPECIFICATION forming part of Letters Patent No. 512,787, dated January 16, 1894.

Application filed July 1, 1893. Serial No. 479,390. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ZOLLER, a citizen of the United States, residing in the city, county, and State of New York, have invented
5 a new and useful Improvement in Friction-Wheels, especially useful and economical, in connection with keg and barrel washing machines, for supporting and keeping the packages in revolution while being cleansed on
10 the outside, of which the following is a specification.

These wheels I construct of three separate parts which when fastened together by ordinary means, such as bolts and nuts, make a
15 wheel ready for use and permit an easy and convenient method for substituting a flexible band or ring when the one in use may have been worn out or injured; and as constructed by me the flexible portion can be used longer
20 and with more certainty than other wheels for similar purposes.

In the accompanying drawings Figure 1 shows the parts in place and fastened together for use wherein A represents a rigid form
25 preferably made of metal and flanged on one side; B a flexible ring or band and C a removable flange; the peripheral face of form A is provided with a series of depressions *a*, *a*, as seen in Fig. 2, which shows form A by itself, the flange being shown at *a'*. These
30 peripheral depressions are intended to engage with corresponding projections *b*, *b*, on the interior opening of flexible ring or band B which is shown by itself in Figs. 3 and 9. Fig. 4 shows the removable flange C which is also provided
35 with a corresponding series of inwardly projecting extensions *c*, *c*. These parts, respectively, are made of corresponding sizes and shapes so that the flexible ring or band *b* can
40 be slipped on form A, and then the removable flange put in place and the three securely fastened by ordinary means such as by bolts or rivets passing through corresponding openings in the three parts as shown at *x*, *x*, Fig.

45 1. If for any reason the flexible ring or band *b* becomes useless it can be easily removed and a new ring or band substituted. A wheel

thus constructed can be used until the flexible ring is worn down to the flanges on the wheel during which use it is always operative,
50 as the means of fastening compel such ring to move at all times with the revolution of the wheel. This is a decided advantage over all similar wheels now in use wherein the parts loosened by wear are wholly inoperative. 55
I vary this mode of construction by providing a series of ridges or shoulders *e*, *e*, across the peripheral face of form A as shown in the sectional view Fig. 5 in which case corresponding sockets or shoulders *f*, *f*, to fit therein and
60 engage therewith are provided on the interior opening or ring or band B as shown in sectional view Fig. 6.

Fig. 7 being a sectional view shows another form of construction wherein flexible ring or
65 band B has a tongued extension around its interior opening in which case I construct form A and removable flange C so that when put together a groove *h* is provided on the
70 peripheral face of the wheel form. In this case a portion of the face of form A on the removable flange side is cut away to the depth of the groove and a side flange *i* is made on the removable flange C. This form of construction admits of the shoulders *e*, *e*, and
75 sockets *f*, *f*, as shown in Figs. 5 and 6.

Fig. 8 being a cross section on line 8, 8, Fig. 1 shows one means of fastening the parts securely together, by a bolt passing through the
80 respective parts and held by a nut.

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

The combination with the rigid wheel form A and its flange *a'* and peripheral depressions
85 *a*, *a*, of the flexible ring or band B provided with projections *b*, *b* on its inner face, the removable flange C provided with the interior projections *c*, *c*, and the securing bolts, substantially as described.

CHARLES ZOLLER.

Witnesses:

G. A. JRNAGER,
HERMAN ROEPCKE.