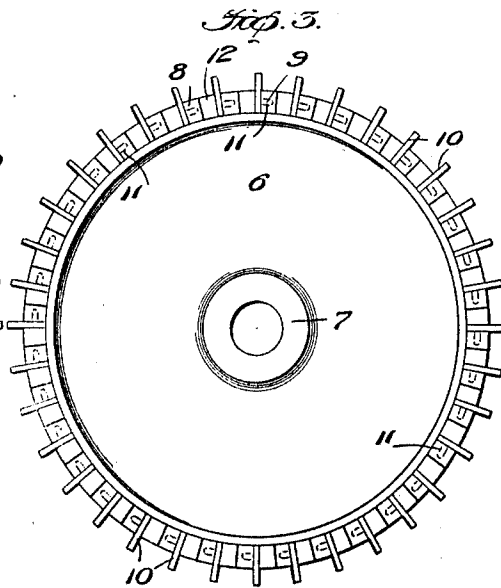
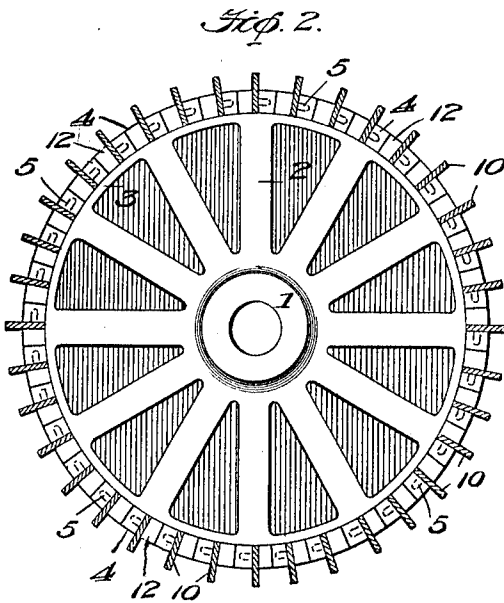
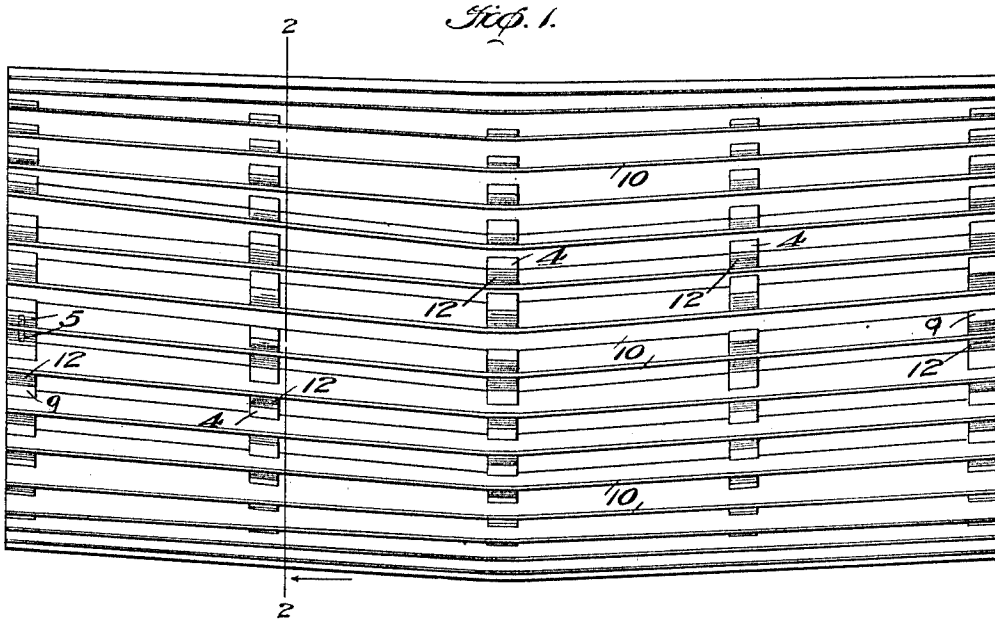


A. R. WILLIS & C. D. MAHONEY.
 BEATER ROLL FOR PAPER MILLS.
 APPLICATION FILED AUG. 12, 1910.

1,001,599.

Patented Aug. 22, 1911.



Witnesses
[Signature]
 A. M. Sauer.

By

Inventors
 Archie Ray Willis and
 Charles D. Mahoney
[Signature]
 Attorney

UNITED STATES PATENT OFFICE.

ARCHIE RAY WILLIS AND CHARLES D. MAHONEY, OF ELKHART, INDIANA.

BEATER-ROLL FOR PAPER-MILLS.

1,001,599.

Specification of Letters Patent.

Patented Aug. 22, 1911.

Application filed August 12, 1910. Serial No. 576,823.

To all whom it may concern:

Be it known that we, ARCHIE R. WILLIS and CHARLES D. MAHONEY, citizens of the United States, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Beater-Rolls for Paper-Mills, of which the following is a specification.

This invention relates to beater rolls for paper mills, and one of the principal objects of the same is to provide a comparatively light and durable roll for the purpose referred to, in which the bars can be readily renewed or removed from the roll whenever required without the use of special tools.

Another object of the invention is to provide a beater roll comprising a series of interior spider wheels, and a pair of end disks secured together upon a central shaft and having the bars secured to said spiders and disks, by means of projecting pins and wedge blocks.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing, in which,

Figure 1 is a side elevation of a beater roll made in accordance with our invention. Fig. 2 is a sectional view on the line 2—2 of Fig. 1 looking in the direction indicated by the arrow. Fig. 3 is an end view of the roll.

Referring to the drawing the numeral 1 designates the hub of a spider wheel and 2 are the spokes connected to said hub and provided with a rim 3. Extending outward from the rim is a series of lugs 4, each provided with a socket 5. As shown in Fig. 1 there are three of the spider wheels but it will be understood that any suitable number may be used. At the end of the roll the heads are unbroken forming disks 6, each provided with a hub 7, through which the shaft projects. The end heads 6 are also provided with lugs 8 spaced apart around the periph-

eries thereof, said lugs being provided with sockets 9, as shown more clearly in Fig. 3.

The beater bars 10 extend from end to end of the roll and are bent in the center, as shown in Fig. 1. These bars are each provided with pins 11 which are adapted to fit in the sockets 9 and 5 in the lugs 8 and 4. For holding the bars in place and for preventing the pins 11 from being withdrawn from the sockets 5 and 9, wedge blocks 12 are inserted between the lugs and the next adjacent bar, as shown more clearly in Figs. 2 and 3. The wedge blocks 12 serve to hold the pins into the sockets in the lugs, thus securely holding the bars in place to permit them to be readily disconnected from the roll for repairs or renewals.

From the foregoing it will be obvious that a beater roll made in accordance with our invention; is comparatively simple in construction; can be manufactured at low cost; is strong durable and efficient for its purpose; can be quickly assembled; and can be readily repaired whenever injured.

We claim:

The herein described beater roll for paper mills comprising a series of spiders having peripheral lugs cast thereon, said lugs each being provided with a socket, heads for said beater roll also provided with socketed lugs on the peripheries thereof, beater bars connected to said lugs by means of pins extending into the sockets of said lugs, said pins being formed integrally with the bars, and wedge blocks for holding the pins in the sockets of said lugs, said bars being bent centrally as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

ARCHIE RAY WILLIS.
CHARLES D. MAHONEY.

Witnesses:

CLEM LUTTMAN,
ARTHUR WILSON.