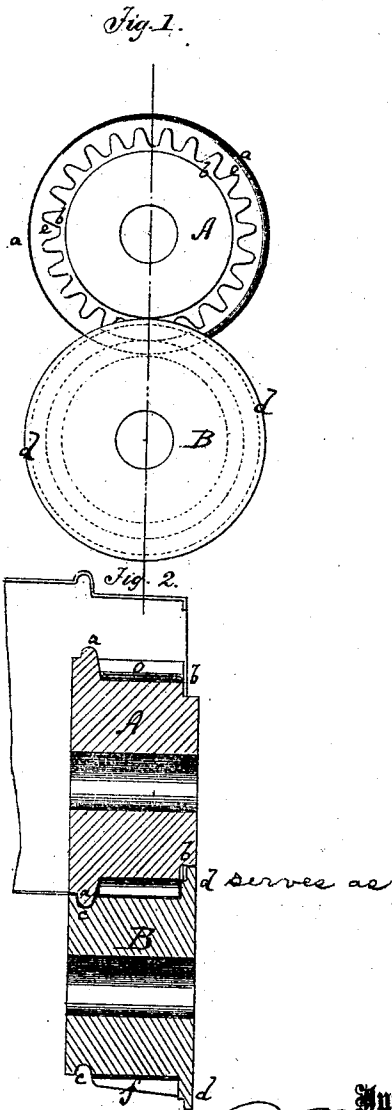


B. S. PARTRIDGE.
 WHEEL FOR TINNERS' BEADING MACHINES.
 No. 103,648. Patented May 31, 1870.



Witnesses:
Gustave Dietrich
John Brook

Inventor:
B. S. Partridge
 PER *M. M. Co.*
 Attorneys.

United States Patent Office.

BENJAMIN S. PARTRIDGE, OF PILATKA, FLORIDA, ASSIGNOR TO HIMSELF AND W. A. STAFFORD, OF SAME PLACE.

Letters Patent No. 103,648, dated May 31, 1870; antedated May 19, 1870.

IMPROVEMENT IN WHEELS FOR TINNERS' BEADING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, BENJAMIN S. PARTRIDGE, of Pilatka, in the county of Putnam and State of Florida, have invented a new and improved Wheel for Tanners' Beading-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents an end view of my improved wheels for beading-machines.

Figure 2 is a longitudinal section of the same.

Similar letters of reference indicate corresponding parts.

This invention has for its object to provide machinery, by which the shoulder required at the lower part of a coffee-machine dripper can be formed, and also the lower edge turned in, without requiring the addition to such dripper of an extra lower piece. Heretofore the lower parts of coffee-machine drippers have been attached separately to the upper parts by forming a projecting groove on the lower end of the upper part, into which a shoulder on the upper end of the lower part was inserted.

This process was laborious and expensive. I overcome the difficulty by the use of two toothed wheels, A and B, by which the bead or shoulder is formed on the dripper, and the lower edge turned in at the same, the teeth serving to crimp the lower part of such dripper, in order to take up the expansion otherwise produced by the formation of the bead. The teeth on both these wheels do not extend from end to end.

On the wheel A they reach from the shoulder *a* at one end to a rabbet, *b*, at the other end.

On the wheel B they reach from a groove, *c*, at one end to a shoulder, *d*, at the other end.

The two wheels are of equal length, and are to be fitted upon the arms of a beading-machine in such a manner that their teeth mesh into each other, and that the shoulder *a* fits into the groove *c*, and the shoulder *d* into the rabbet *b*, as in fig. 2.

The teeth *e* of the wheel A are deeper than those, *f*, of the wheel B. The latter are tapering, being highest near the shoulder *d*, as shown. The ends of the teeth should be rounded, to prevent them from cutting the sheet metal.

The dripper to be crimped and beaded is placed around the wheel A, and with its lower edge against the shoulder *d*, which serves as a gauge. The wheels are then revolved, and crimp that part of the dripper which is held between them, besides throwing out a bead by the shoulder *a* and groove *c*, and drawing in the lower edge by the shoulder *d* and the rabbet *b*. The dripper is thus completed out of one piece, and by simple operation. The tapering teeth will serve to make the lower part of the dipper of tapering or conical form.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The toothed wheels A B, having the shoulder *a* and rabbet *b*, and the groove *c* and shoulder *d* respectively, and to be applied to a beading-machine, substantially as herein shown and described.

BENJ. S. PARTRIDGE.

Witnesses:

GEORGE L. LUCAS,
WILLIAM STAFFORD.