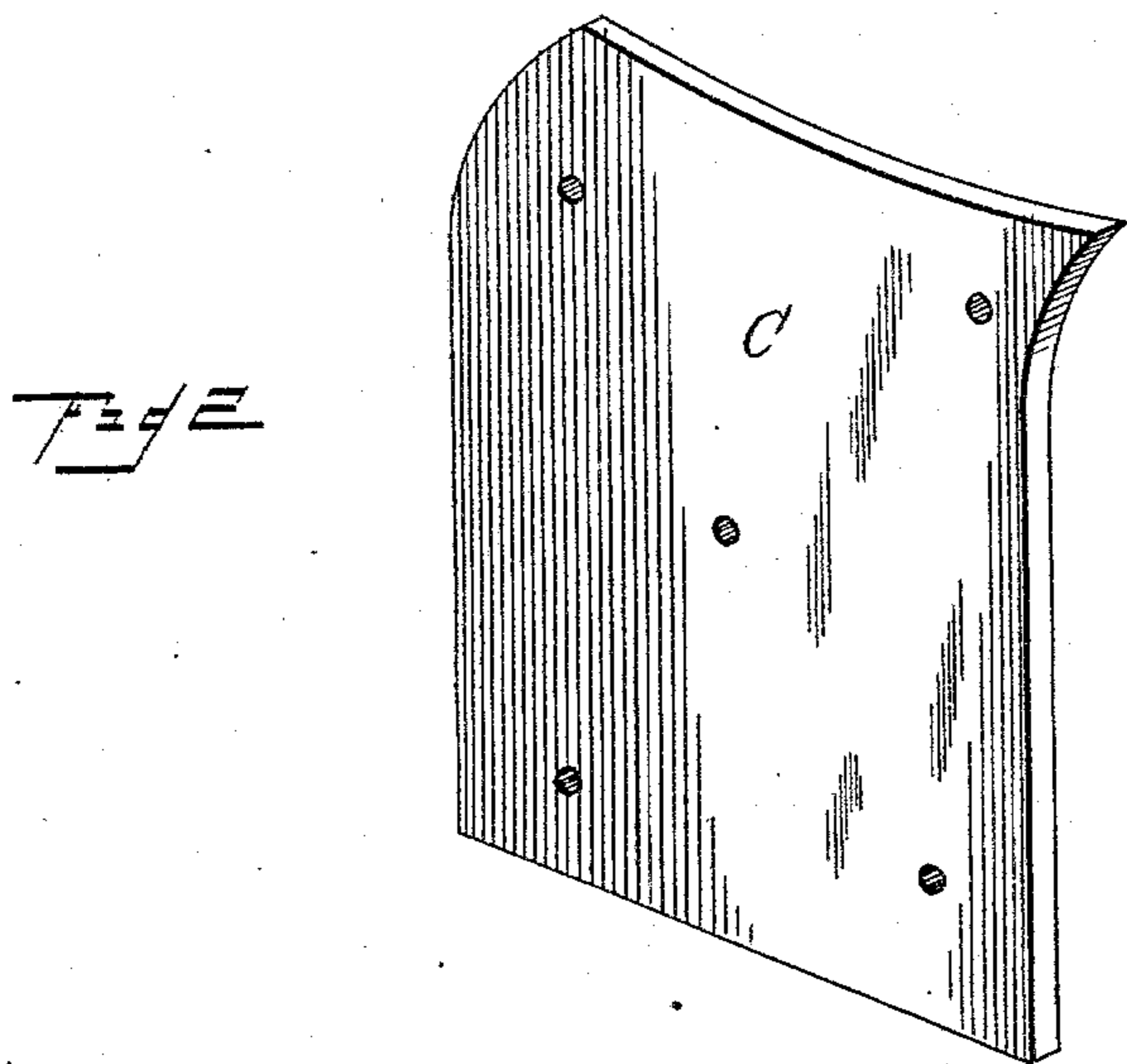
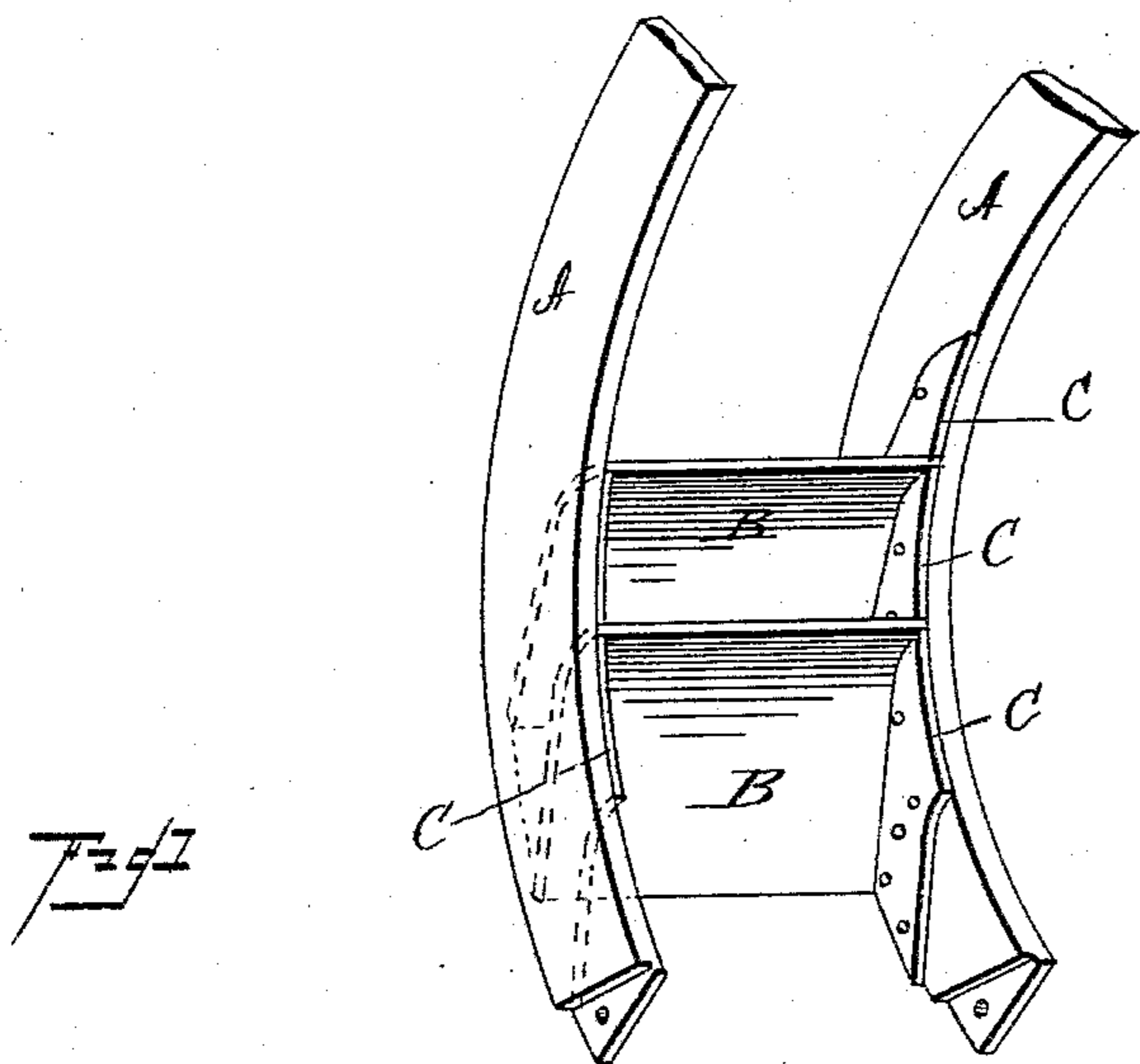


(No Model.)

J. BAUER.
WATER WHEEL.

No. 414,484.

Patented Nov. 5, 1889.



Witnesses
John Imrie
William C. Lewis.

Inventor.
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UNITED STATES PATENT OFFICE.

JACOB BAUER, OF DAYTON, OHIO.

WATER-WHEEL.

SPECIFICATION forming part of Letters Patent No. 414,484, dated November 5, 1889.

Application filed December 29, 1888. Serial No. 294,953. (No model.)

To all whom it may concern:

Be it known that I, JACOB BAUER, a citizen of the United States, residing at the city of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Water-Wheels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in water-wheels having special reference to the manner in which the buckets are attached in overshot, undershot, and breast wheels. The way these so-called "buckets" are now fastened, by cutting grooves on the sides of the rims of the wheel to receive the partitions forming the buckets, is costly and laborious. Besides, by cutting away the rims to form the grooves the rims are weakened, the grain of the wood in the rims runs crosswise, and the grooves chip off and wash out, causing the buckets to leak. To repair the wheels great cost is incurred.

The object of my invention is to simplify the make of these buckets, render them water-tight, cheapen the first cost of the wheel and its repair, and to strengthen the wheel. I secure these objects by the mechanism shown by the accompanying drawings, in which—

Figure 1 represents a perspective view of two parallel segments of the rims of an ordinary overshot water-wheel and two buckets in place. Fig. 2 is a detail view of one of the buckets.

Similar letters refer to similar parts throughout the several views.

Letters A A represent segments of overshot

water-wheel rims parallel with each other at any convenient distance apart.

B B are partitions of wood or metal placed at any desired distance apart at right angles with and between the rims A A, and are curved to form the back end of the bucket. Fitted snugly between partitions B B and fastened by nailing or other suitable means to the rims A A are brackets C C, which form the sides of the buckets. In the same manner are formed the successive buckets throughout the entire wheel.

It will be readily seen that by the shaping and fitting of partitions B B and brackets C C with each other any desired form of bucket may be made and attached to the wheel to suit an undershot or breast water-wheel.

The manner of using my device is as follows: After the water-wheel is put up and leveled a bracket C is nailed on either side of rims A A on a level with each other. Starting at any desired point on the rims, a partition previously formed to fit the bracket is then placed between the rims, the ends fitting and resting between the brackets, and the brackets again nailed tight up to the partitions, another partition placed thereon, and so on until the starting-point is reached.

It will readily be seen that the buckets will be water-tight and easily replaced if broken.

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

The combination, with the wheel-rims, of the transverse buckets and the fastening-brackets, the latter extending on said rims the entire distance between the adjacent buckets, as and for the purpose set forth.

JACOB BAUER.

Witnesses:

C. L. HINTON,
LEWIS J. MOORE.