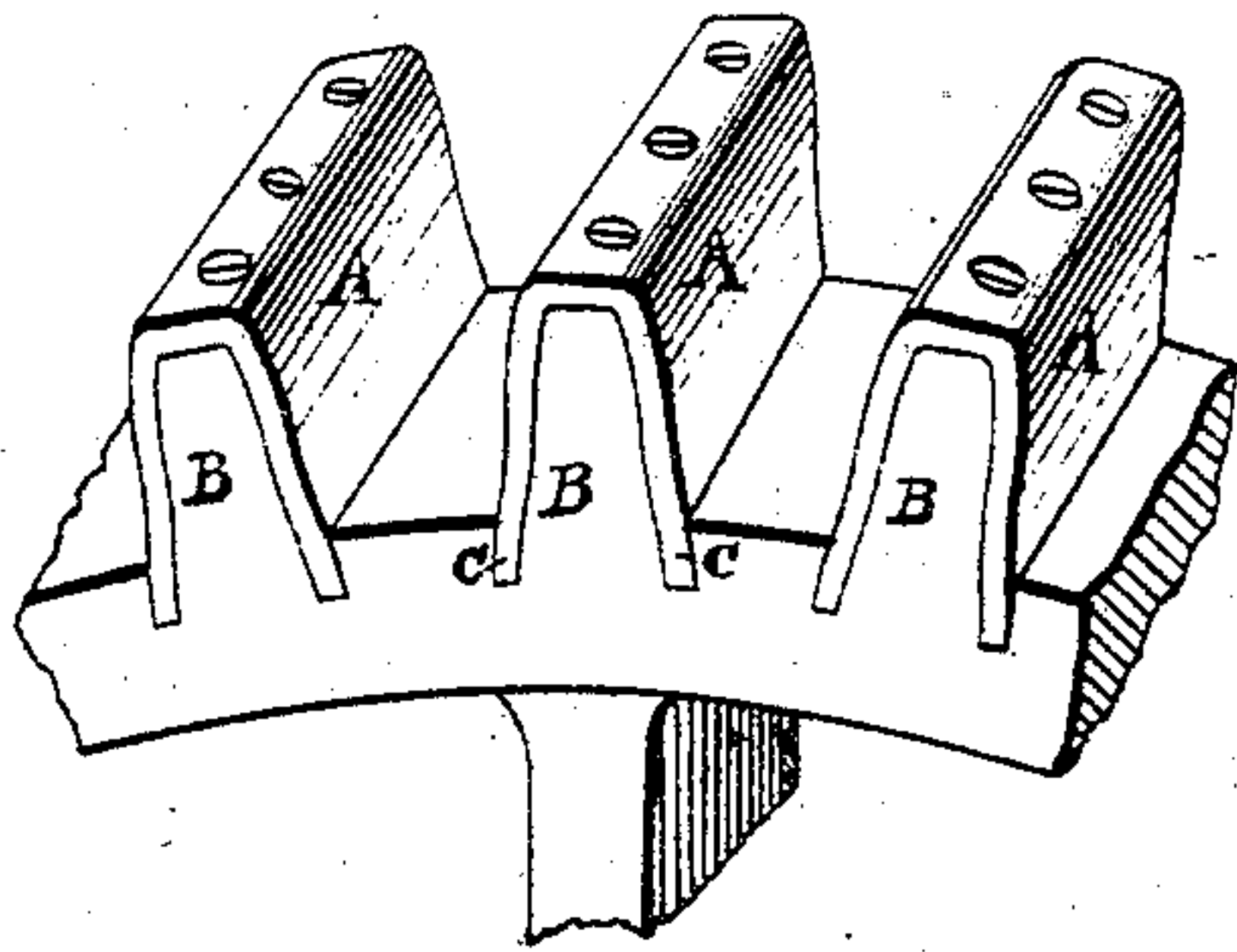


C. E. BROOKS.

COG-WHEEL.

No. 170,049.

Patented Nov. 16, 1875.



WITNESSES:

Herbert E. Winsor
Otto L. Johnson.

INVENTOR:

Charles E. Brooks

UNITED STATES PATENT OFFICE.

CHARLES E. BROOKS, OF MARSHALL, MICHIGAN.

IMPROVEMENT IN COG-WHEELS.

Specification forming part of Letters Patent No. **170,049**, dated November 16, 1875; application filed October 12, 1875.

To all whom it may concern:

Be it known that I, CHARLES E. BROOKS, of the city of Marshall, Calhoun county, and State of Michigan, have invented an Improvement in Cog-Wheels, of which the following is a specification:

The subject of this invention is a metal gear-wheel, the cogs of which are provided with a covering of sole-leather or other suitable material, which has been previously pressed in a form to the exact shape of the cog, and is secured by screws, as shown in the drawing, to the ends of the cogs. The ends of the caps are held in grooves cast or planed across the rim of the wheel.

In the perspective view of the accompanying drawing, showing a portion of the arm and rim of a cog-wheel, A represents the caps or covering, and B the cogs, planed down to the thickness of the leather caps. *c c* are the grooves, cast or planed across the rim of the wheel, in line with the sides of the cogs, and of sufficient depth to retain the ends of the cap in close contact with the sides of the cogs when put on and secured by the screws.

My invention is more applicable to that class of gear-wheels used in mill machinery for driving millstones, and which I design as a substitute for the said wooden cog-wheels now in use.

By the use of this invention any mechanic can "cog up" a wheel without delay by simply taking off the old coverings and putting on a new set. In the case of spur-gearing the coverings A can be reversed when one side is worn out.

My invention can be used with profit on wooden cog-wheels, or on any gearing in which the noise attendant upon the use of metal gearing is to be dispensed with.

I claim as my invention—

The covering of sole-leather A, or other suitable material for the cogs of gear-wheels, as herein described, and for the purpose set forth.

CHARLES E. BROOKS,

Witnesses:

HERBERT E. WINSOR,
OTTO L. JOHNSON.