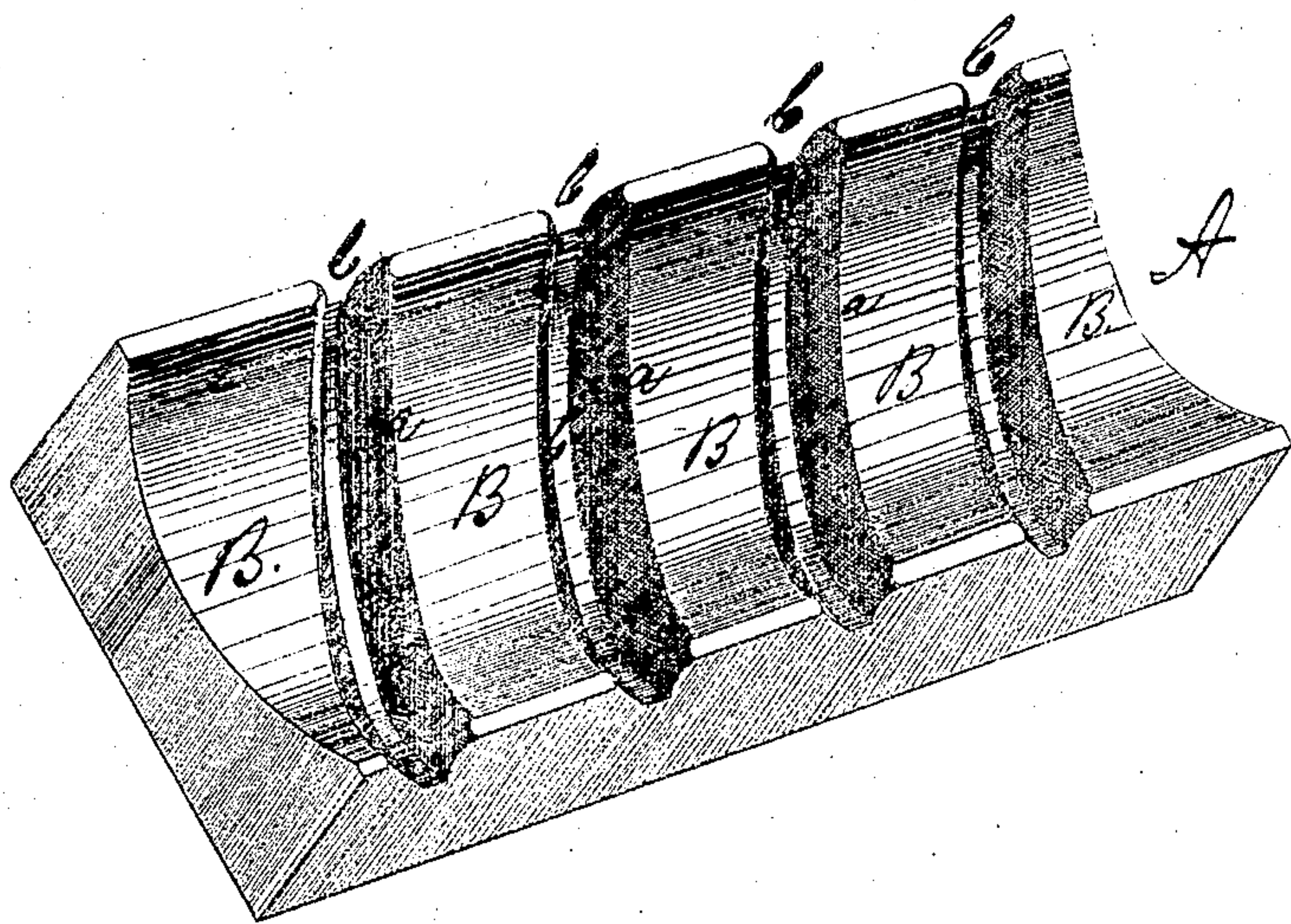


Henry Grogan's  
Improved Box or Bearing for Journals or Shafts

116952

PATENTED JUL 11 1871



Witnesses  
Oliver Drake  
Elias Francis

Inventor  
Henry Grogan  
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# UNITED STATES PATENT OFFICE.

HENRY GROGAN, OF FLATBUSH, NEW YORK.

## IMPROVEMENT IN BEARINGS FOR JOURNAL-BOXES.

Specification forming part of Letters Patent No. 116,952, dated July 11, 1871.

*To all whom it may concern:*

Be it known that I, HENRY GROGAN, of Flatbush, Kings county, State of New York; have invented a new and useful Improvement in Journal-Boxes; and I do hereby declare the following to be a clear and exact description thereof, sufficient to enable others skilled in the art to make and use the same, reference being had to the accompanying drawing making part of this specification, in which the figure is a perspective view of my improved journal-box.

This invention relates to that class of devices known as journal-boxes or bearings, upon or within which shafts or axles revolve; and it consists in providing the inner surfaces of said boxes with a series of spiral sections, by means of spiral grooves, as will hereinafter more fully be set forth.

In the drawing, A represents the journal-box or bearing, composed of suitable metal or other material. The inner surfaces of the boxes are formed with a series of spiral sections, B, the edges of which, in their cross-section, have preferably rounded edges *a a*. These sections are formed by means of the spiral grooves C C, the ends of which are open. The grooves are cut or formed, say, about one-quarter of an inch deep and about the same distance in width. It is found that, by means of the spiral sections

and grooves, the lubricating material is sucked up as the shaft or journal revolves, thus oiling the journal and permitting it to revolve freely and smoothly. At the same time the shaft or journal does not hang, owing to the thorough and constant ventilation afforded. It will also be perceived that the end sections are always of a triangular formation. Should any dust or sediment enter the box or bearing the same is collected from the surface of the spiral sections into the grooves, owing to the revolution of the shaft or journal. When it is desired to remove such sediment from the grooves the same is readily accomplished by inserting a swab or flexible rod.

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

The journal-box or bearing herein shown and described, the surface of the same formed with a series of broad spiral sections, B B, and flaring grooves C C with open ends, constructed and arranged, as herein shown, for the purpose specified.

HENRY GROGAN.

Witnesses:

OLIVER DRAKE,  
ELIAS FRANCIS.