

C. E. HOLT.

Oil-Guards for Shafting-Boxes.

No. 150,419.

Patented May 5, 1874.

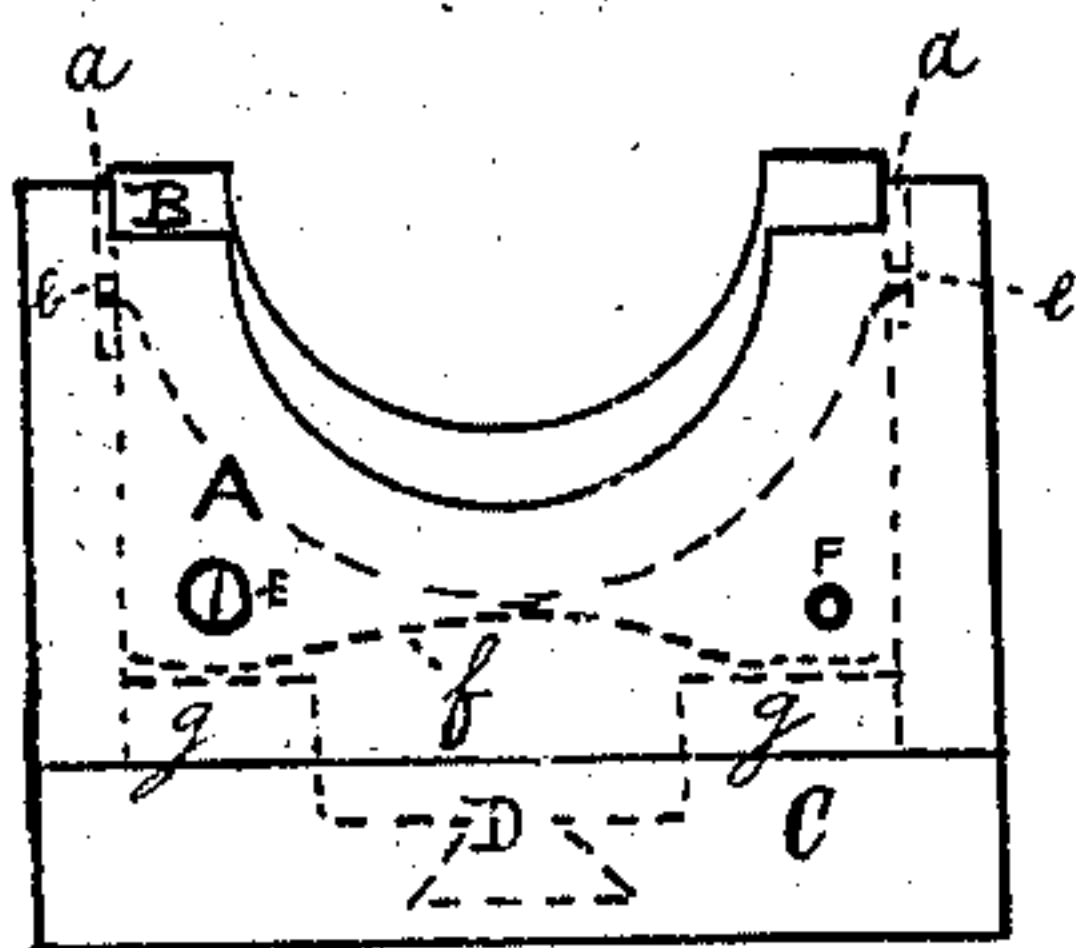
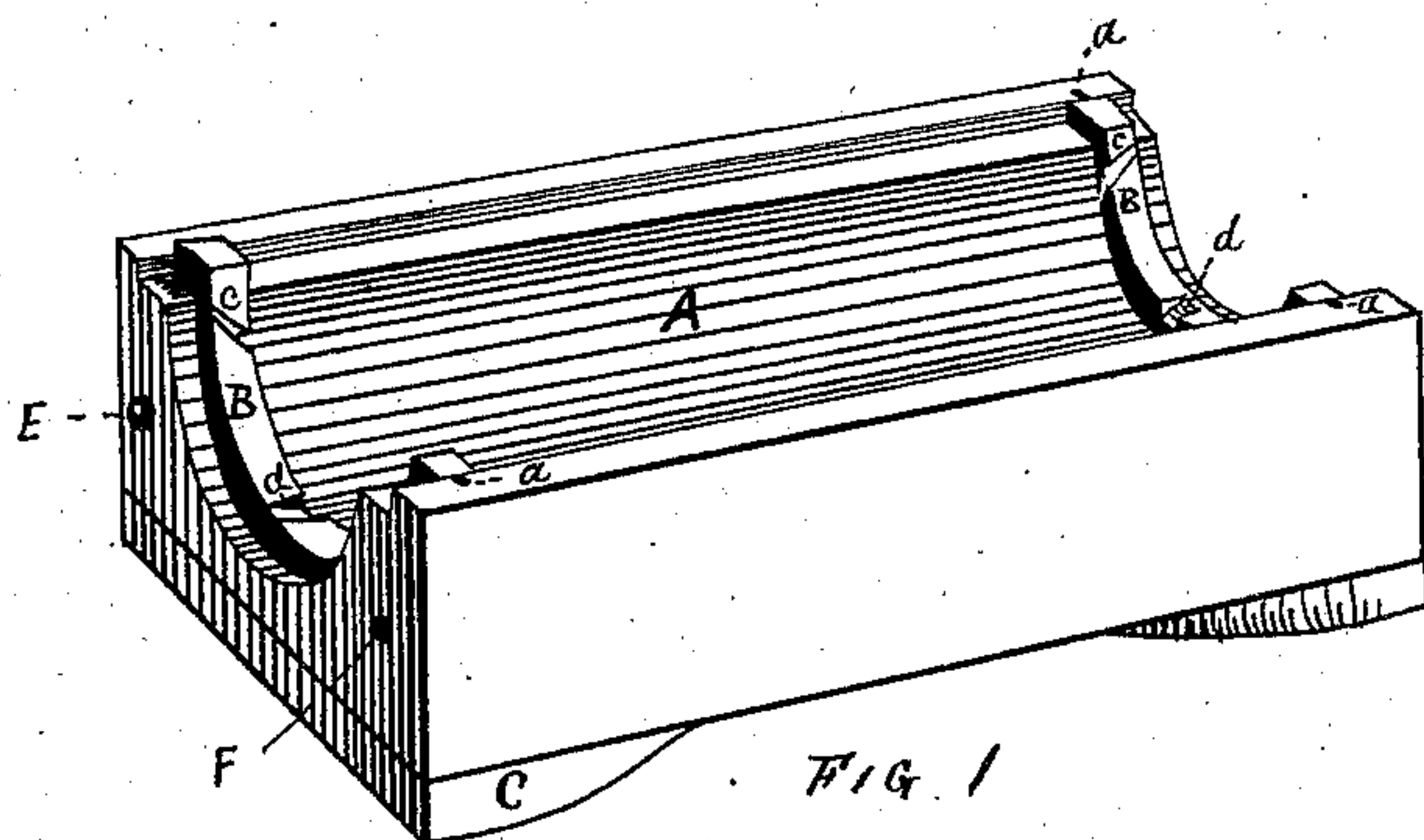


FIG. 3

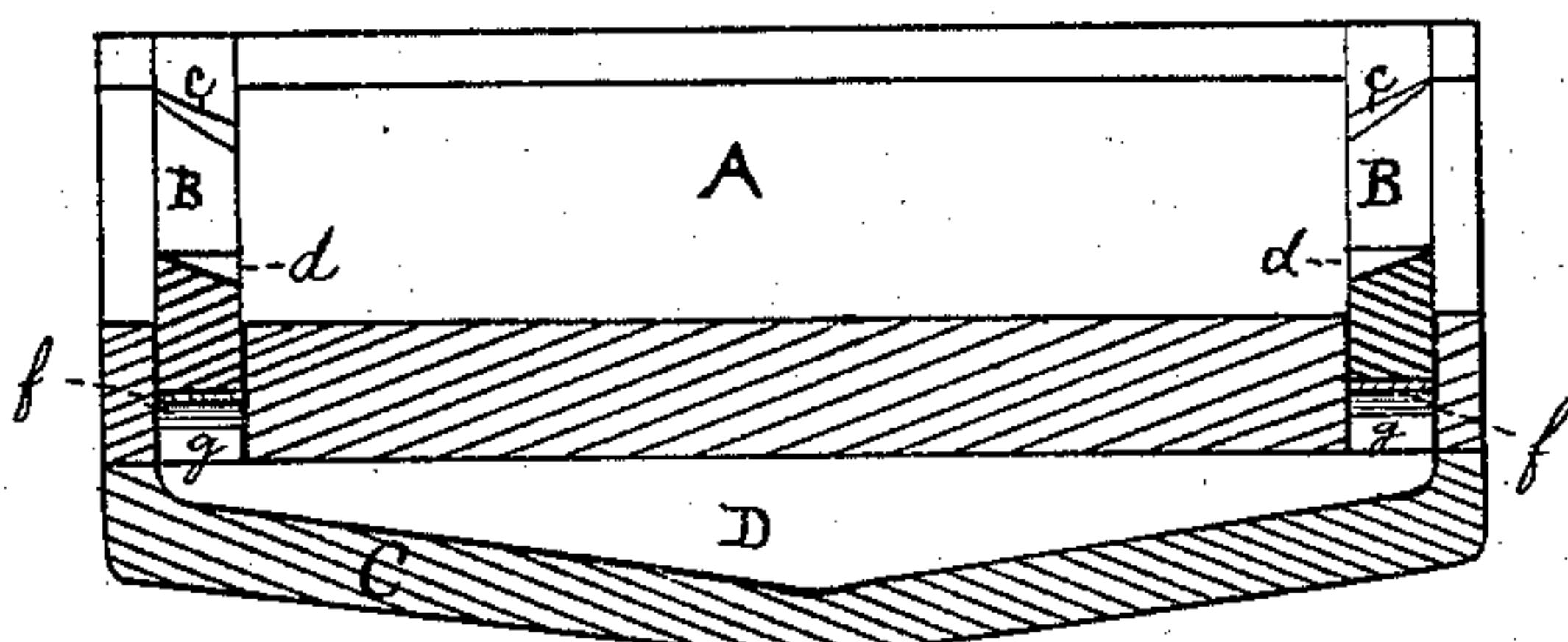


FIG. 2

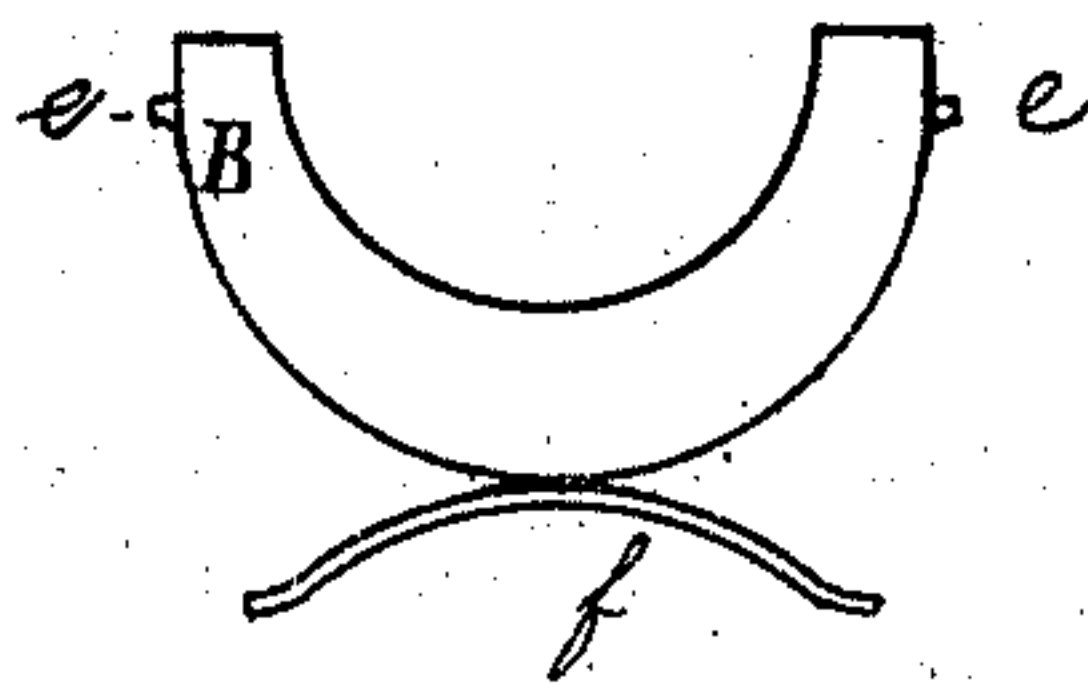


FIG. 5

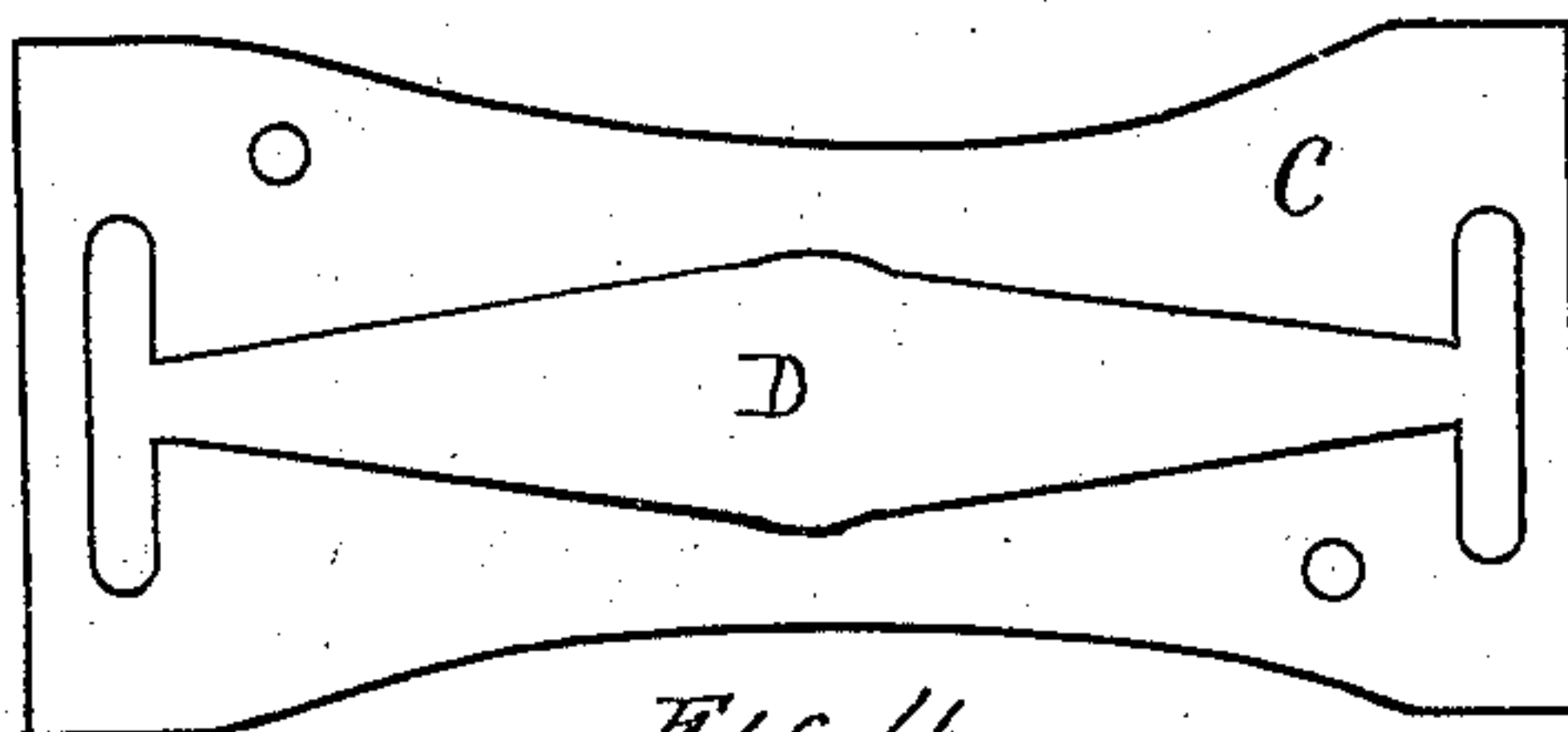


FIG. 4

Witnesses

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## IMPROVEMENT IN OIL-GUARDS FOR SHAFTING-BOXES.

Specification forming part of Letters Patent No. **150,419**, dated May 5, 1874; application filed March 4, 1874.

*To all whom it may concern:*

Be it known that I, CHARLES E. HOLT, of Somerville, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Oil-Guards for Shafting-Boxes, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an isometrical perspective view of a box fitted with my improved guards or retainers. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a sectional view. Fig. 4 is a plan of the chamber. Fig. 5 is a side elevation of the retainer and its spring.

Like letters refer to like parts in the different figures of the drawing.

My invention relates more especially to boxes used with shafting running at a high rate of speed; and consists of a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, the object being to furnish a simple and effective means of preventing the waste of oil.

The extreme simplicity of my invention renders an elaborate description unnecessary.

In Fig. 1, A is the body or bearing of the box, and B B the guards or retainers, provided on their upper edges with diagonal grooves *c c* and chutes *d d*, inwardly inclined, as better seen in Fig. 2. The guards B B are each attached to an elliptic spring, *f*, Fig. 5, the ends of which rest upon the ledges *g g*, Figs. 2 and 3, and are kept in position by the pin F and screw E, Figs. 1 and 3. The body of the box A is transversely grooved at each end to admit the guards, the grooves opening into the chamber D, as seen in Figs. 2 and 3, which chamber is formed by the cup C, Fig. 4, attached to the lower part of the box A, and

serves to catch and preserve any surplus oil which finds its way between the guards and box into said chamber. The grooves in which the retainers B B are disposed are also provided with short auxiliary grooves *a a*, Figs. 1 and 3, into which the pins *e e* project from the guards, and by which and said pins the retainers are prevented from turning with the shaft, as will be clearly obvious.

From the foregoing the nature and operation of my invention will be readily understood by all conversant with such matters.

A shaft being mounted in the box A, the guards B B will be forced downward to a level with the interior surface of the box, the springs *f* acting expansively to keep them constantly in contact with the shaft. As the shaft revolves, the oil taken up will have a tendency to run along the shaft beyond the box and thus be wasted, this tendency being greater or less in proportion to the speed of the shaft. To obviate this difficulty I make use of the guards or retainers B B, which, being fitted to conform to the shaft and pressing closely against it, prevent the oil from flowing beyond the box, the grooves *c d* acting as scrapers to catch the surplus oil and return it to the box to be again used.

Having thus described my invention, what I claim is—

1. In a shafting-box, the spring-retainer B, provided with inwardly-inclined channels *c d*, for catching and conducting the oil to the reservoir, constructed and arranged substantially as specified.

2. In a shafting-box, the combination of the retainer B, with its inclined grooves *c d*, channel D, and cup C, substantially as and for the purpose set forth.

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Witnesses:

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