C. E. HOLT.

Lubricator.

No. 163,591. Patented May 25, 1875.

Fig. 1

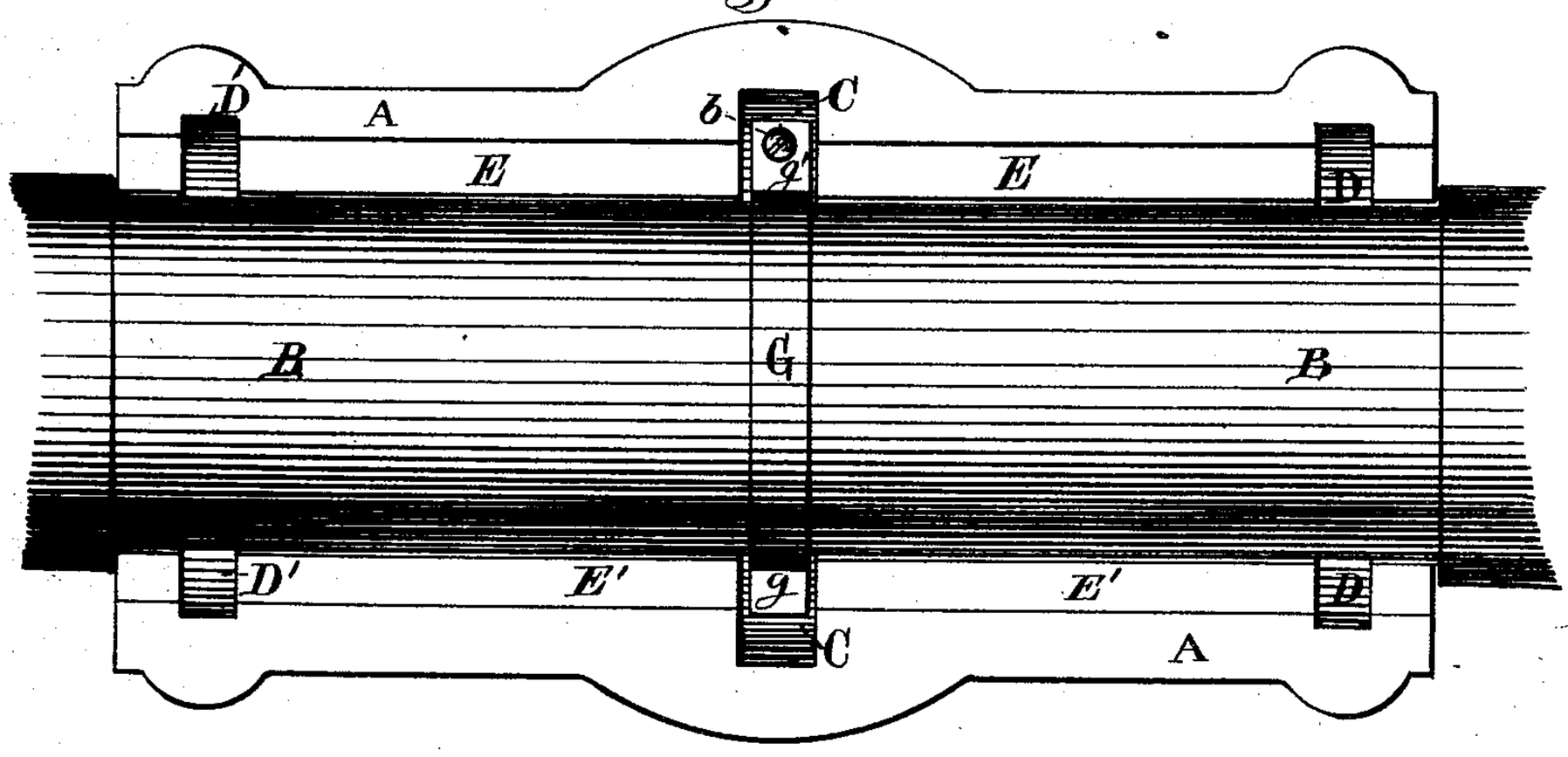


Fig. 2

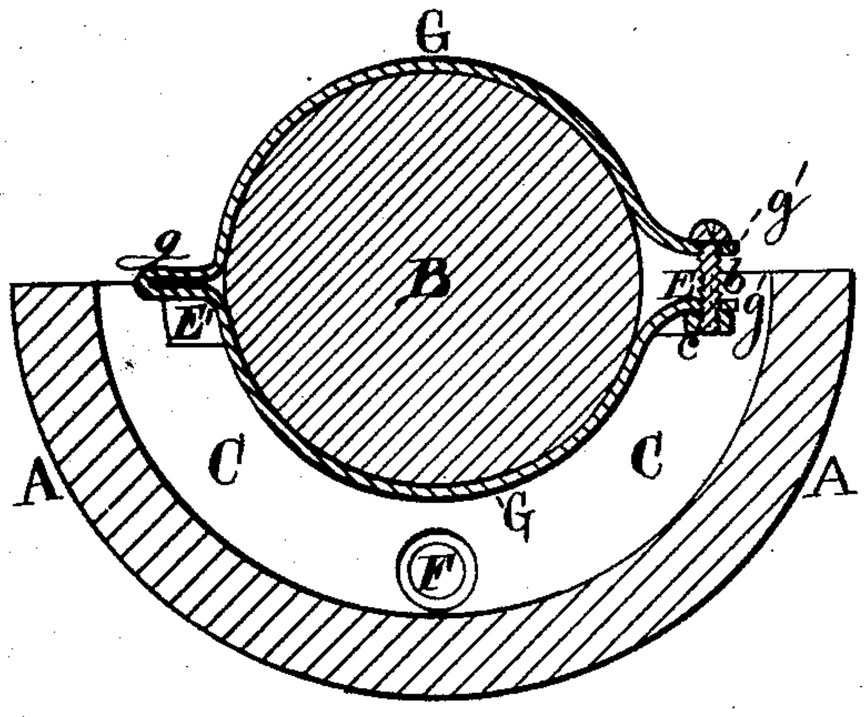
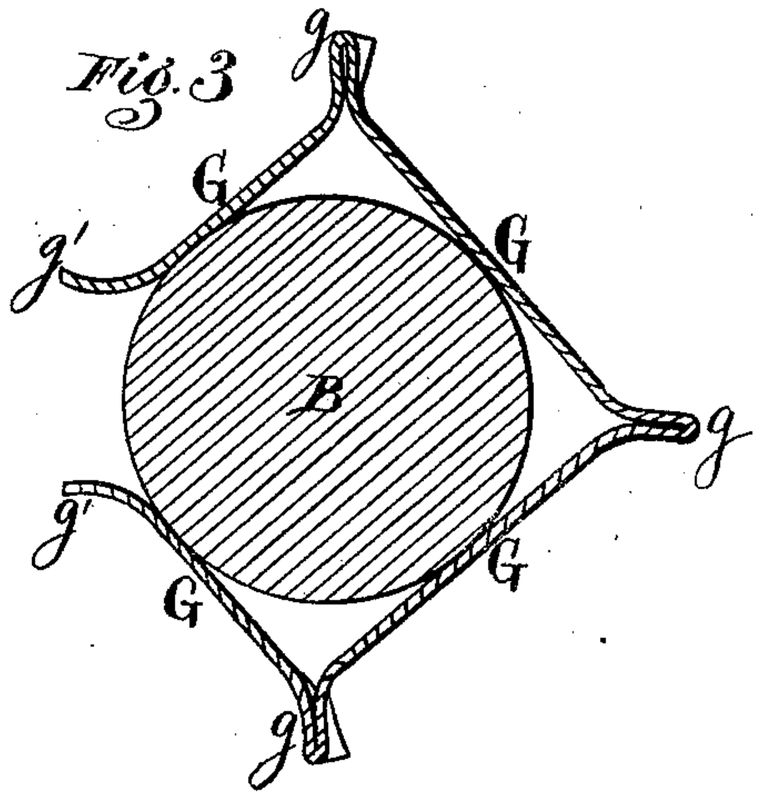


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES E. HOLT, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **163,591**, dated May 25, 1875; application filed October 26, 1874.

To all whom it may concern:

Be it known that I, CHARLES E. HOLT, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Lubricators, of which the following is a specification:

Figure 1 of the accompanying drawings is a top view of my improvements as applied to a shaft-journal, with the top half of the box removed. Fig. 2 is a central transverse vertical section of the same. Fig. 3 is a transverse vertical section of my improved lubricator in another form, applied to a shaft.

The object of the present invention is to provide a simple, economical, and effective method of self-lubricating shaft-journals, axles, &c.; and to this end my invention consists, mainly, in a lubricator formed by a spring-clamp or split band of metal or other suitable material, shaped to be readily adjusted to and held on a shaft-journal or axle, &c., and formed with one or more projections, which, as the shaft, &c., is rotated, operate in an oil channel or passage formed transversely around the interior of a journal or axle box, so as to take up and carry the oil on the shaft-journal or axle, &c., around which are formed transverse channels connected with a longitudinal channel or channels, through which the oil passes from the ends back to the lubricator-channel, where it is taken up again by the projections of the lubricator, all of which I will now proceed more particularly to describe, and point out in the claim.

In the drawings, A represents the bottom half of a journal or axle box, which, when complete, is formed of a circular shape on the interior to receive a shaft-journal, B, or axle, &c., and with longitudinal side rabbets E, to receive the rabbeted bottom of the top portion. This box A is formed in the center, or other desired portion, and at each end, with transverse oil channels or passages C D D′, and at the bottom and top, if desired, between the center or other lubricator-channel C and end channels D D′, is a longitudinal aperture or passage, F, or apertures or passages. Formed in a circular, lozenge, or other suitable shape to be readily adjusted on, to surround or partly surround or abut against, the periphery of an axle, shaft, or journal B, so as to be held thereon, is a metallic or other lubricator, G, formed by a suitable spring-clamp or split band, having one or more projections, *g*, extending outward from the periphery, as shown in Fig. 2, or extending at the angles, as shown in Fig. 3. These projections *g* may be twisted or inclined, as shown at top and bottom of Fig. 3, the better to throw the oil in the direction of the length of the shaft, &c., or straight in section across the band or clamp. The ends *g′* of the clamp or band G project outward to assist in conveying the oil, and may be provided with a screw, *b*, and nut *c*, to hold them, or be otherwise held, if desired, to prevent the slipping of the clamp or band G when the shaft is rapidly rotated, although when a slowly-rotating shaft is used the natural spring of the clamp or band will be sufficient to hold it. The split formation of the spring-clamp or band or lubricator G allows of its ready adjustment on the shaft or axle, &c., as shown. The rotation of the shaft carries the lubricator G, so that its projections *g* strike in and take up the oil from the central or other channel or passage C, (into which the oil is admitted through any suitable aperture in its top, or otherwise connected therewith,) and convey it to the top of the interior of the box B, throwing it on either side, thence, by the action of the shaft or axle, is conveyed to the end channels D D′, from which it finds a passage through the longitudinal aperture or apertures F to the lubricator passage or channel C, thus keeping the shaft and box constantly and evenly lubricated as long as any oil remains to flow.

Having thus described my improvements, what I claim as my invention, and desire to have secured to me by Letters Patent, is—

The detachable clamp-ring G, having projections *g g*, in combination with journal B and bearing A, having groove C, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES E. HOLT.

Witnesses:

SAML. M. BARTON,

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