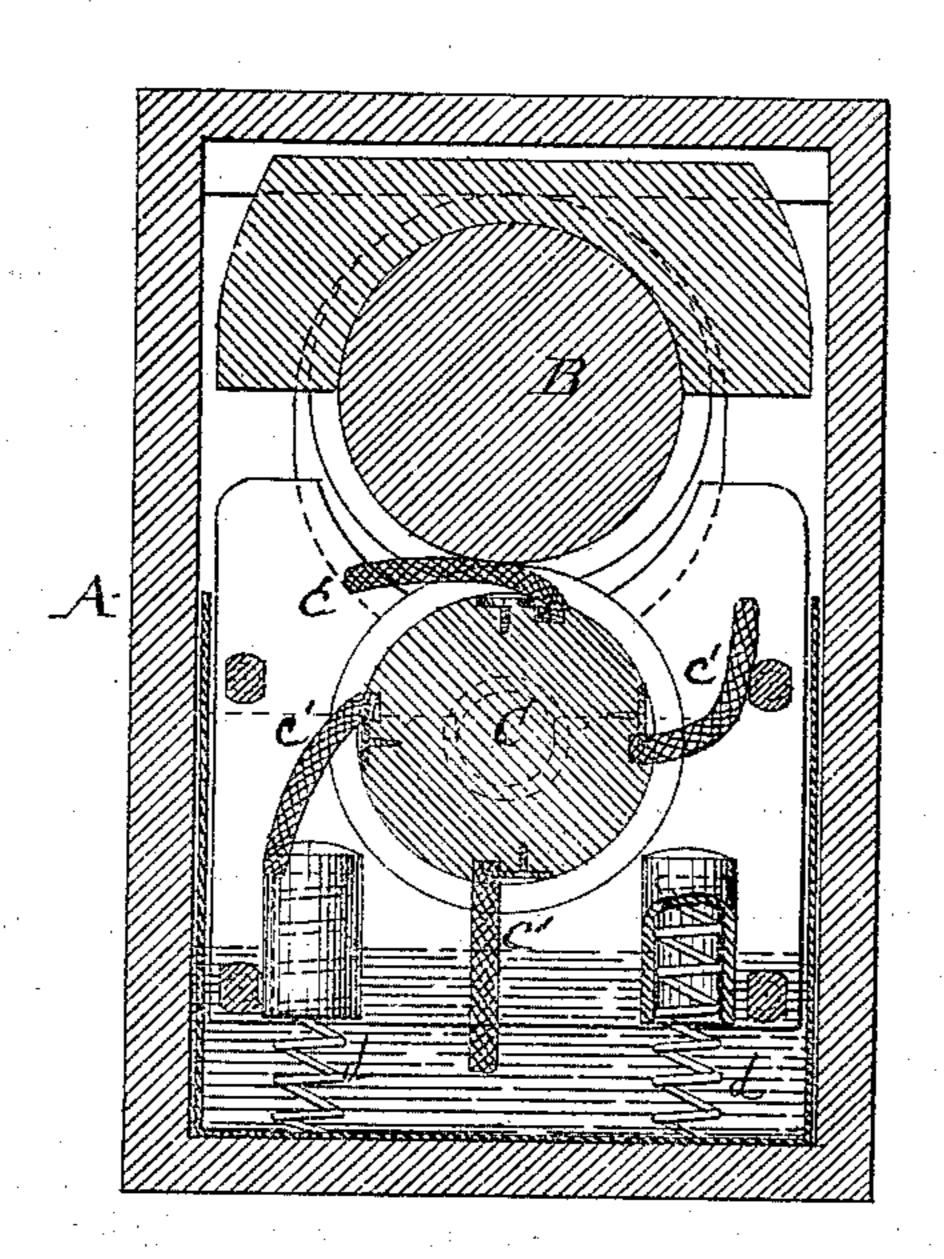
## G. A. BRANNAN.

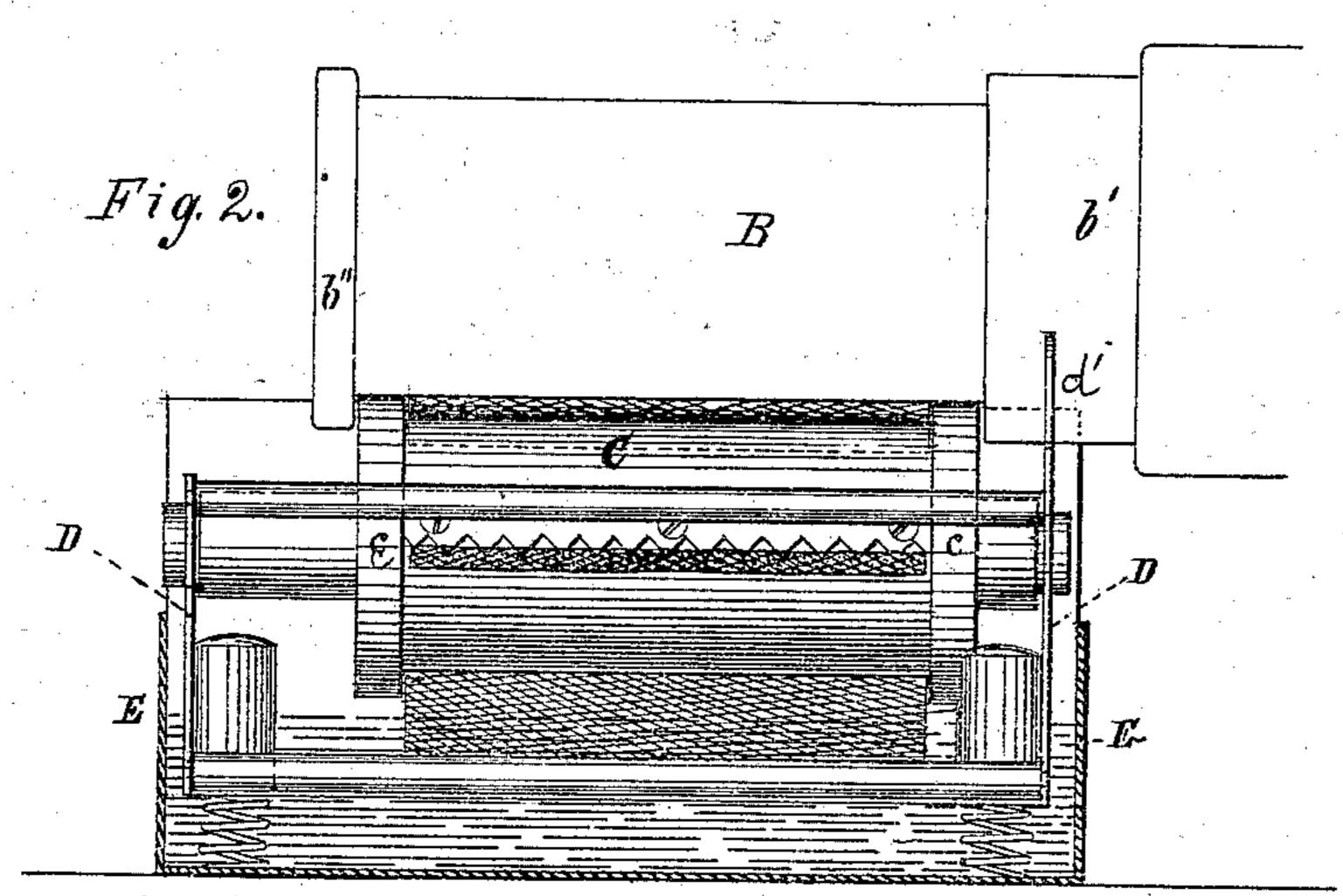
## Car Axle-Lubricators.

No. 135,517.

Patented Feb. 4, 1873.

Fig 1





The D. D. Carand

Guventor: G.A.Brannan.

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Attorneys.

## UNITED STATES PATENT OFFICE.

GEORGE A. BRANNAN, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN CAR-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. 135,517, dated February 4, 1873.

To all whom it may concern:

Be it known that I, GEORGE A. BRANNAN, of Baltimore, in the county of Baltimore and State of Maryland, have invented an Improvement in Car-Axle Lubricators, of which the following is a specification:

The invention will be first fully described and then clearly pointed out in the claim.

Figure 1 is a transverse sectional elevation of an ordinary car-axle box provided with my invention. Fig. 2 is a longitudinal section of same.

A represents the ordinary axle-box, and B a car-axle. C is a roller, having circular and rubber end flanges cc, on which the axle rests. In the annular recess between these flanges is a series of longitudinal grooves, in which are fastened broad flaps c', formed of some flexible fabric. D is a detachable frame, having bearings (one open and the other closed) for the roller C, and which rests upon springs d. This frame is also provided with end plate d', which forms a bearing for the shoulder  $b^1$ of axle. E is the oil-reservoir. This reservoir E being supplied with oil, the frame D, containing roll C, is placed within it and forced down upon the springs d until the whole device will slide beneath the end flange  $b^2$  and

the shoulder  $b^1$  of axle B. This being accomplished, as shown in Fig. 2 of drawing, the axle B rests directly upon the flanges c c of roller C, while the shoulder  $b^1$  rests upon end plate d'. As the axle B rotates upon the frictional bearings c c the lubricating-roller C is revolved, the flexible flaps c' take up oil, (as they pass through it,) and the axle is continually lubricated.

I am aware that it is not broadly new to cover a lubricating-roller, in whole or in part, with an absorbent fabric, and I therefore do not wish to be understood as claiming such; but

What I do claim as new and of my invention is—

The lubricating-roller C, provided with flanges c c and flexible flaps c', combined and arranged, in relation to a car-axle journal and its box, so as to operate in the manner and for the purpose specified.

The above specification of my invention signed by me this 22d day of November, A. D. 1871.

GEO. A. BRANNAN.

Witnesses:

THOS. D. D. OURAND.