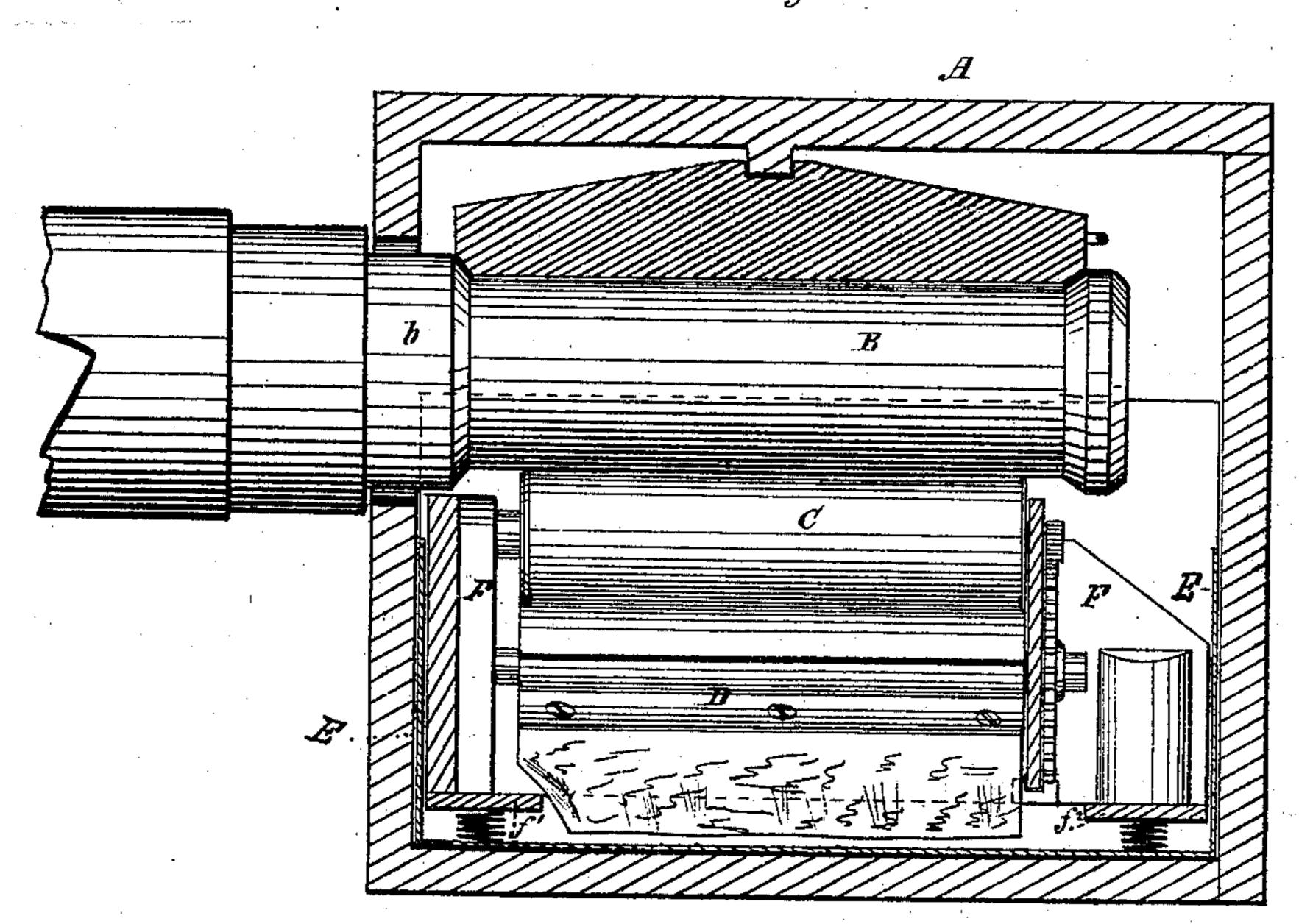
## G. A. BRANNAN.

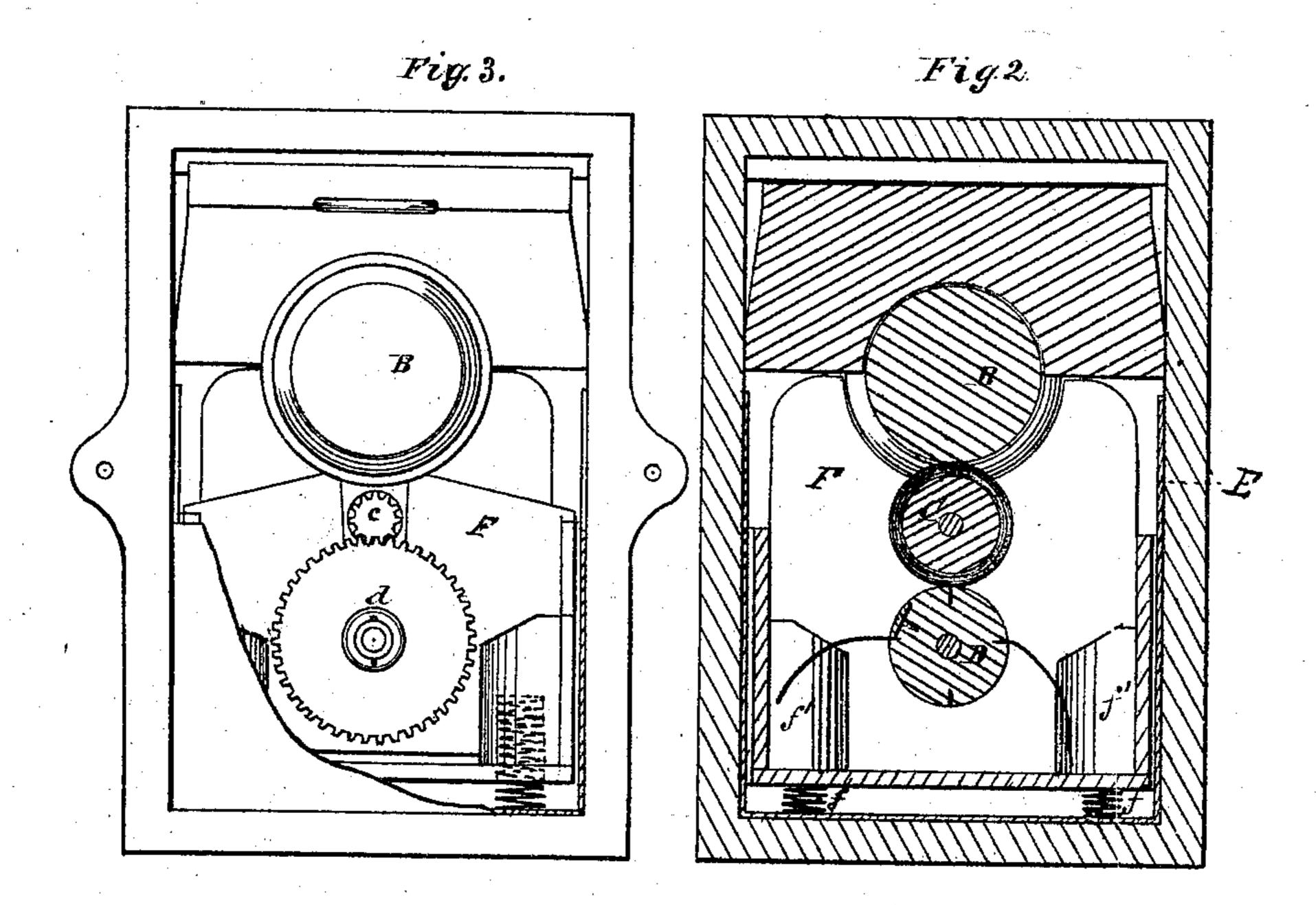
Improvement in Lubricators for Car-Axles.

No. 130,470.

Patented Aug. 13, 1872.

Fig.1.





Witnesses.

Edwin H. Meliams

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## UNITED STATES PATENT OFFICE.

GEORGE A. BRANNAN, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN LUBRICATORS FOR CAR-AXLES.

Specification forming part of Letters Patent No. 130,470, dated August 13, 1872.

Specification describing means for Lubricating Car-Axle Journals, invented by George A. Brannan, of Baltimore city, in the county of Baltimore and State of Maryland.

The invention consists in lubricating the journal of a car-axle by means of two felt-covered rolls, one of which has said felt in arc-flaps which dip into the oil-reservoir, and receives its motion through the medium of spur-gears from the upper felt-covered roll which is driven by frictional contact with the car-axle journal.

Figure 1 is a longitudinal section of journal-box, and Figs. 2 and 3, transverse sections.

A represents the journal-box, and B the journal. C is a roll covered with felt, while D is another roll provided with two or more absorbent arc-flaps, of felt or analogous material. c d are spur-wheels which connect and enable the rolls to work together. E is the oil-vessel, and F the roller-frame supported upon springs f, which are fastened in sockets f. These sockets and the upright bearings rest upon the cross-pieces f f. The

frame is also made to fit snugly up to the journals against the annular projection b.

The mode of operation is as follows: As the car-axle revolves the felt-roll C, being pressed into contact therewith by springs f, is rotated by friction. By means of the spur-wheels c d the roll D is turned and caused to dip its flaps in the oil of box E. As the rotation continues the flaps on roll D oil the felt-surface of roll C, which in turn lubricates the journal B. Thus is produced a gradual and uniform lubrication without any waste of the oil.

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

The combination with journal B of the felt-covered roll C, flap-roll D, and spur-gears  $c\ d$ , as and for the purpose described.

GEO. A. BRANNAN.

Witnesses:

M. R. Walter, Jas. R. Brannan.