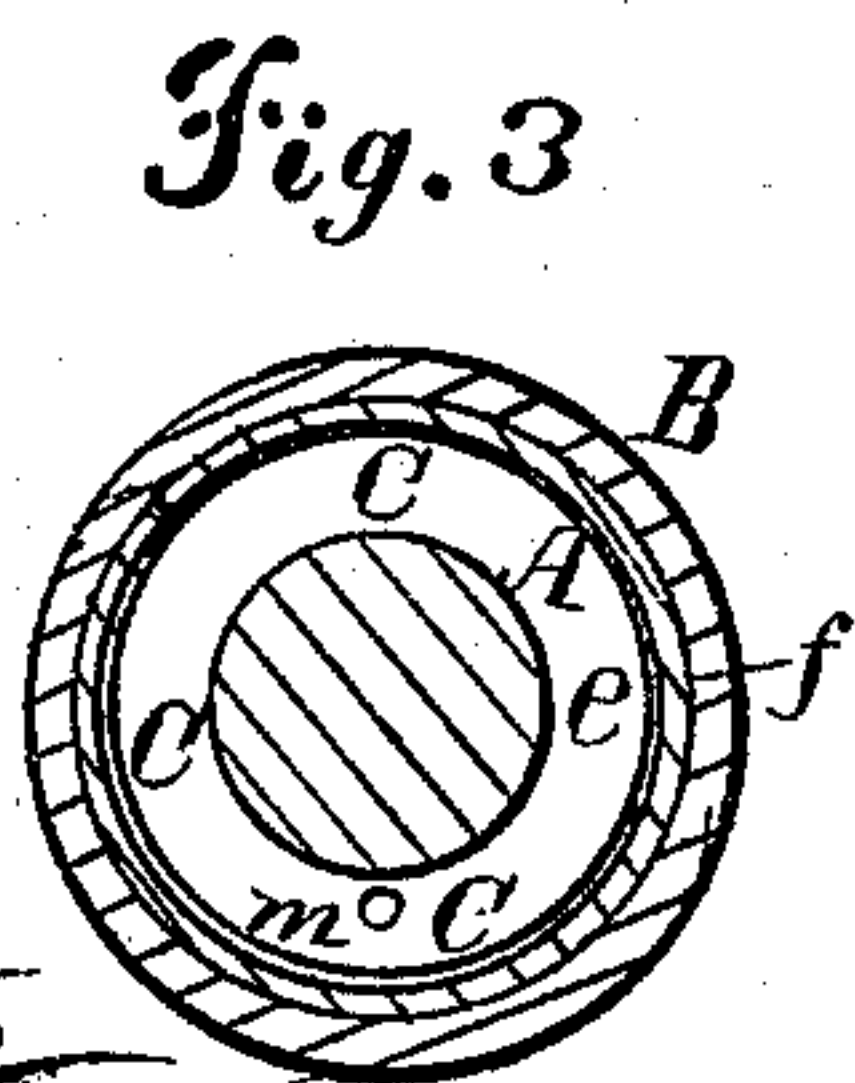
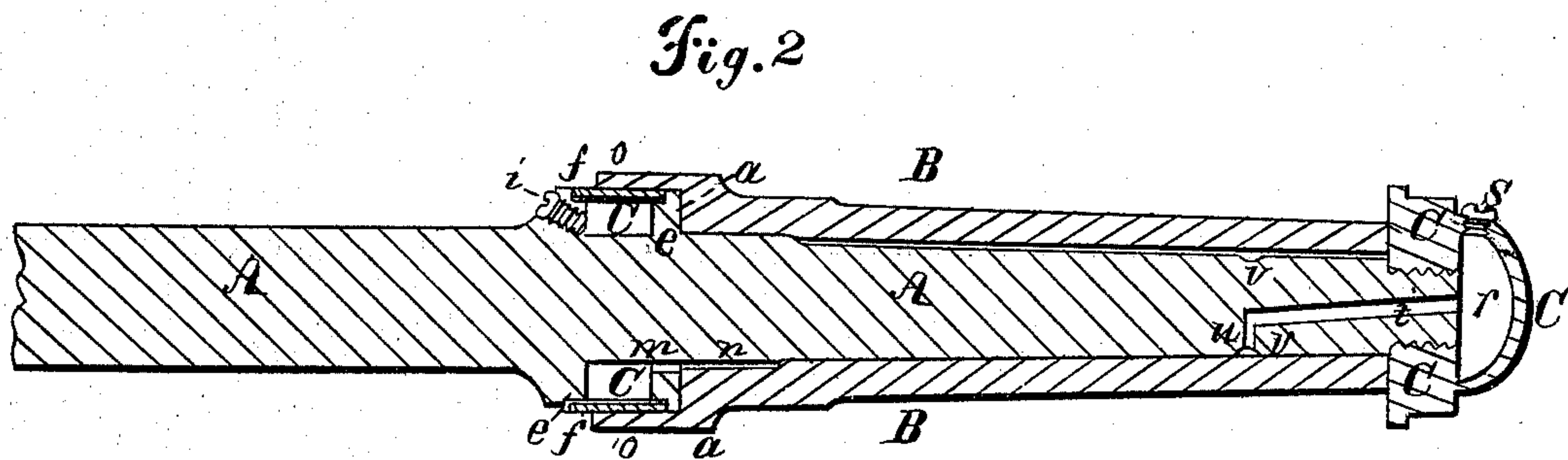
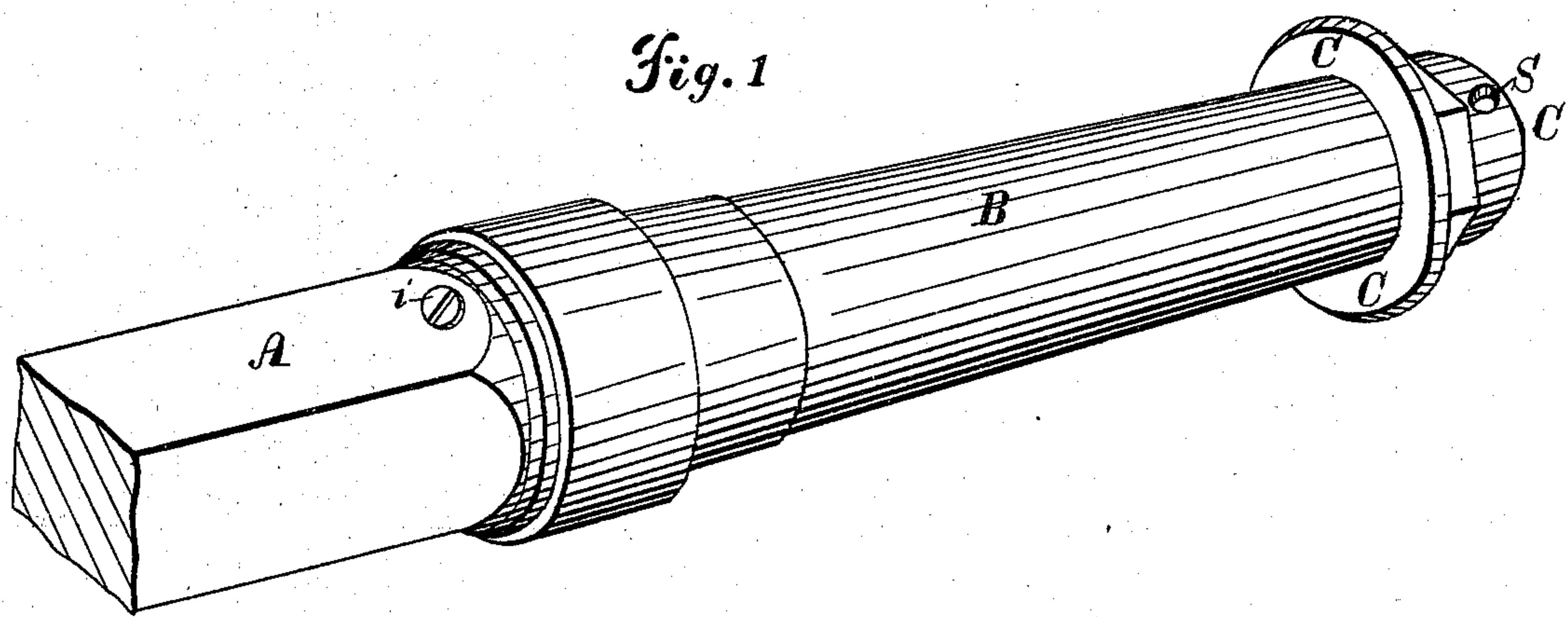


J. T. WILSON.
Axle Lubricator.

No. 87,609.

Patented March 9, 1869.



Witnesses.
Jno. D. Patten
Edmund Masson

Inventor
John T. Wilson
By his atty. *A. B. Stoughton*

UNITED STATES PATENT OFFICE.

JOHN T. WILSON, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO HIMSELF
AND COLEMAN, RAHM & CO., OF SAME PLACE.

IMPROVEMENT IN CARRIAGE-AXLES.

Specification forming part of Letters Patent No. 87,609, dated March 9, 1869.

To all whom it may concern:

Be it known that I, JOHN T. WILSON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Carriage-Axles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents, in perspective, one end of a carriage-axle, with the axle-box therein, as also the cap. Fig. 2 represents a longitudinal section through the same. Fig. 3 represents a cross-section taken through the rear oil-reservoir, and the box and axle at that point.

Similar letters of reference, where they occur in the separate figures, denote like parts in all the drawings.

My invention relates to the arrangement and location of the oil or other lubricating reservoirs, in connection with the journals of the axle, and of the avenues leading therefrom to the journal, as will be explained.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents one end of an iron carriage-axle, and B the axle or journal box thereof. In the axle A, and just in rear of the shoulder *a*, against which the box B abuts, is formed a circular groove or recess, *c*, which, after being formed, may be covered near the perimeter by a piece of thin metal or other suitable material, *e*, and the remainder of the groove or recess is filled by a soft metal, *f*, poured or otherwise secured therein, so as to form an oil-chamber, into which a lubricating material can be placed through an opening from the exterior that is afterward stopped by a screw-plug, *i*. From this oil-chamber a small hole, *m*, extends to the journal, which hole leads into a slight longitudinal groove, *n*, in the journal, and thus makes a passage for the lubricat-

ing material to leak slowly through from the reservoir to the journal. The end *o* of the journal-box B may cover the exterior shell of the reservoir, and thus protect it from casualty. On the point of the journal is screwed a cap, C, which holds the box (and wheel in the hub of which the box is held) to the journal or axle. In this cap there is an oil-chamber, *r*, for containing oil or other fluid lubricating compound, access to said chamber to fill it being had by means of a screw-plug, *s*, that closes and discloses an opening therein. From the end of the journal or axle which the cap C covers a small leak-hole, *t*, is made, inclining slightly downward toward the under side of said journal, and thence is met by another opening or hole, *u*, bored in from said under side to meet that, *t*, above described. Where the opening *u* meets the exterior of the journal there is a recess, *v*, formed in the box or sleeve B, so that it will not prevent the material from entering between said journal and box or sleeve to oil their rubbing surfaces.

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

1. An oil-reservoir, *c*, constructed in the axle A, and furnished with an accessible opening through which it may be supplied with a lubricating material, and openings for its transmission to and between the journal and box or sleeve, substantially as described.

2. In combination with the cap C, the oil-chamber *r*, its inlet-supply opening, and channels in the axle A for furnishing the lubricating compound to the box and journal at or near the points thereof, substantially as described.

JOHN T. WILSON.

Witnesses:

A. B. STOUGHTON,
EDMUND MASSON.