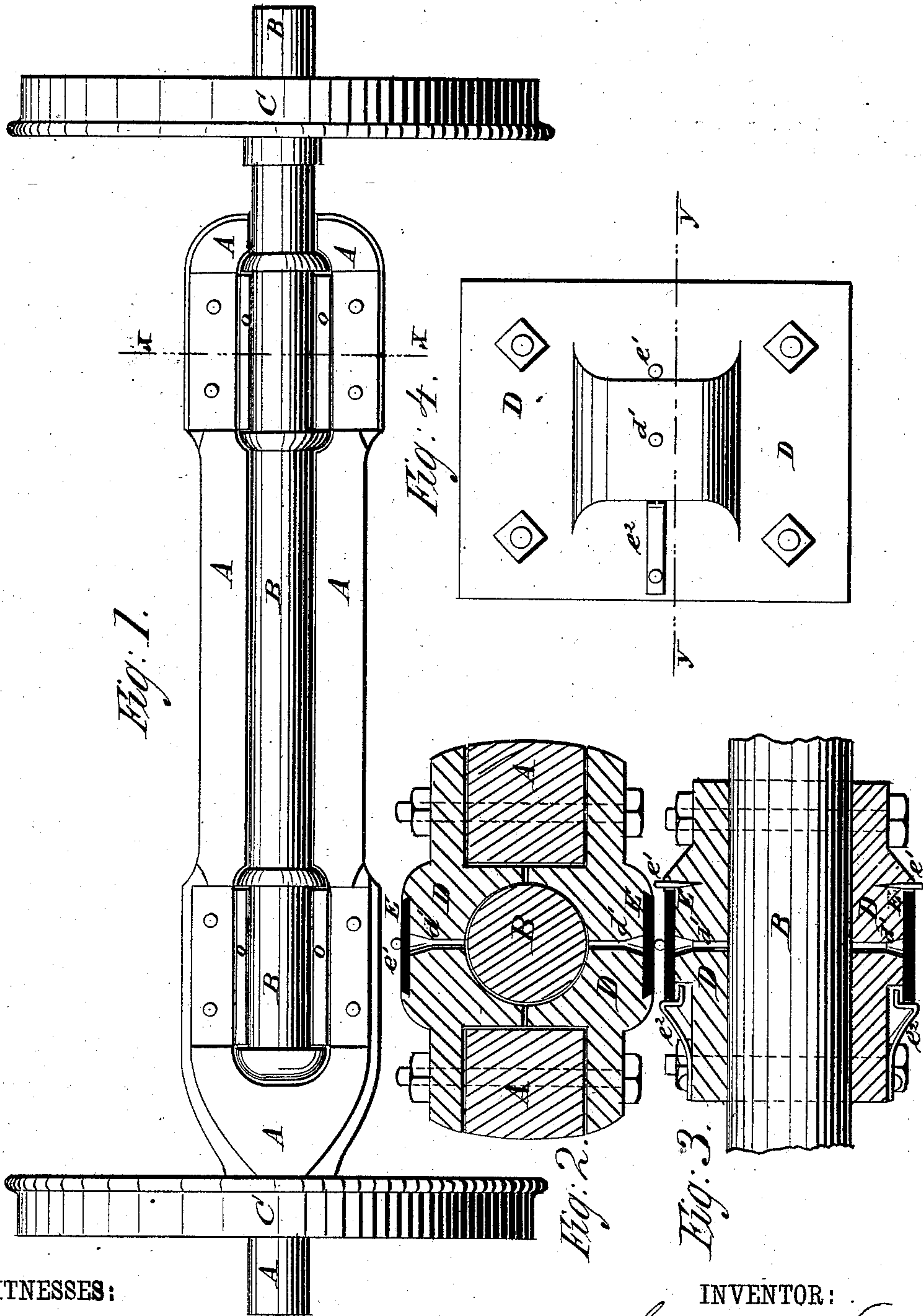


S. D. WEBSTER.
Car-Axle.

No. 222,108.

Patented Nov. 25, 1879.



WITNESSES:

Achilles Schehl.
C. Seagrove

INVENTOR:

S. D. Webster
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

SAMUEL D. WEBSTER, OF CANON CITY, COLORADO.

IMPROVEMENT IN CAR-AXLES.

Specification forming part of Letters Patent No. **222,108**, dated November 25, 1879; application filed March 20, 1879.

To all whom it may concern:

Be it known that I, SAMUEL D. WEBSTER, of Canon City, in the county of Fremont and State of Colorado, have invented a new and useful Improvement in Duplex Axles, of which the following is a specification.

Figure 1 is a plan view of my improved axle, the upper parts of the bearings being detached. Fig. 2 is a detail cross-section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a detail longitudinal section of a part of the same, taken through the line *y y*, Fig. 4. Fig. 4 is a top view of one of the bearings, the oil-cup cap being removed.

Similar letters of reference indicate corresponding parts.

The invention consists in combining the bearings, cap-plates, oil-cups, stop-pins, and spring-catches, as hereinafter described.

A and B are the parts of the axle, to which the wheels C are applied in the usual way. The axle A is forked or divided near the inner side of its wheel to receive the other part, B, of the axle, so that the axes of the two parts may be in the same line.

To the part A of the axle, at the inner and outer ends of its forks, are attached bearings D, to receive the journals of the other part, B, which journals have shoulders or collars at each end, to prevent them from having any

longitudinal movement in their said bearings. Each bearing D is made in two parts, bolted to each other and to the arms of the part A of the axle, and in each of the said parts is formed an oil-cup, *d'*, to receive lubricating material. The oil-cups *d'* are covered with cap-plates E, which are slipped into grooves in projections formed upon the said bearings. The cap-plates E are kept from being pushed too far by stop-pins *e'*, attached to the bearings D, and are held in place by springs *e²*, also attached to the said bearings D, and the shoulders of which rest against the rear edges of the said plates E.

The arms of the forked part A of the axle may be made rectangular or half-round, or concavo-convex, or semi-tubular, or of any other desired shape.

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

The combination of the cap-plates E, the stop-pins *e'*, and the spring-catches *e²* with the parts D of the bearings, provided with oil-cups *d'*, substantially as herein shown and described.

SAMUEL D. WEBSTER.

Witnesses:

B. F. ROCKAFELLOW,
JNO. WILSON.