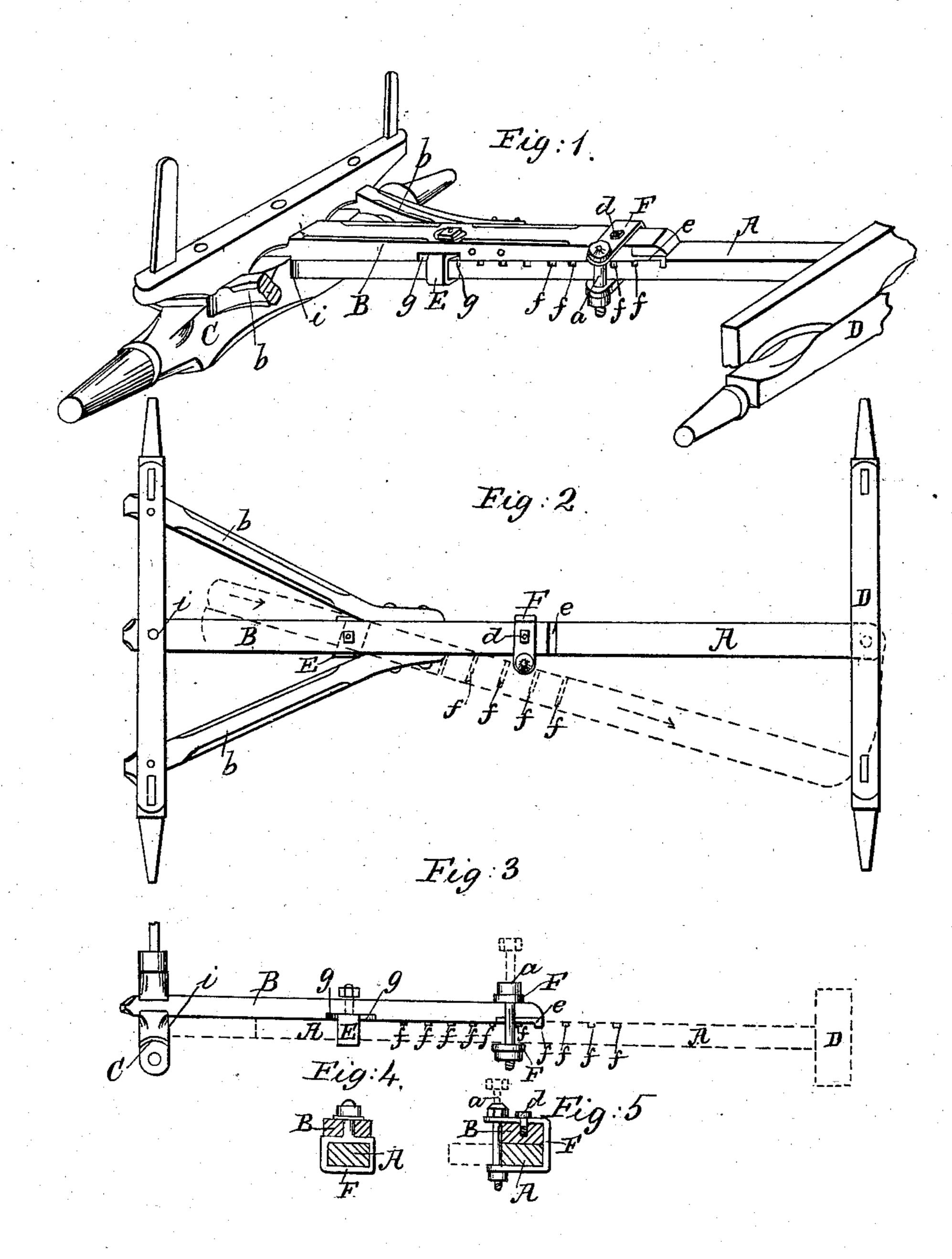
# J. P. ALLENSWORTH.

## Extension Wagon Coupling.

No. 91,811.

Patented June 29, 1869.



Witnesses; A. W. Mells Oring Williams.

Treventor. John P. Allens worth

PETERS, Photo-Lithographer, Washington, D. C.

# Anited States Patent Office.

### JOHN P. ALLENSWORTH, OF MACKINAW, ILLINOIS.

Letters Patent No. 91,811, dated June 29, 1869.

#### IMPROVED EXTENSION WAGON-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, John P. Allensworth, of Mackinaw, in the county of Tazewell, and in the State of Illinois, have invented a new and useful Improvement in the Construction of Extension-Couplings to Wagons and similar vehicles; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a perspective view of the "coupling."

Figure 2, a plan of the same.

Figure 3, longitudinal elevation of same.

Figure 4, elevation of "staple," showing the enclosed lower "reach," A, and the upper "reach," B.

Figure 5, elevation of the forward or stationary sta-

ple, enclosing both "reaches."

This coupling is designed to form a more quick, easy, and strong "extension-coupling" for wagons, lumber-wagons, trucks, &c., and mainly consists of the common sub-reach A, attached, by means of a king-bolt, to forward axle of a wagon, which is made to slide in staples E and F, attached to the rear or upper reach B, and when adjusted to the required length, the two reaches are held intact by a clamp on the upper reach, and closing the forward staple F by means of a bolt, a.

I will proceed to give a description of the parts in

detail.

To the forward end of the upper reach B, I fasten a clamp or plate, e, with a claw, which projects beyond the general surface of the reach, which claw fits into corresponding grooves or recesses, of sufficient depth to hold the claw, cut transversely on the opposing surface of the other reach A.

Just behind this plate is fastened, transversely across either reach, a staple, F, fitting closely against the perpendicular sides of both reaches, and embracing them above and below, but open the other side, the ends there projecting far enough to receive a bolt, a, through them, the bolt pressing tightly against the confined reaches A B, and secured by a nut, or some such equivalent fastening. (See fig. 5.)

About half way between this staple F and the rear axle, I place, on the under side of the upper reach, a swivel-eye or staple, E, turning in a recess, g, the staple being made with a square opening, to receive the forward reach, and admit of its sliding back and forth

when required.

The rear end of the forward reach fits into a socket, i, both the "end" and the socket being slightly rounded, to allow of the release of the "end" when it is required to swing the clamp e out of its groove in adjusting the coupling.

The position of these devices may be reversed, i. e., fastened to the forward reach, but the plan in the drawings is the best.

The operation of this coupling is as follows:

If it is desired to lengthen the distance between the axle-trees, for carrying lumber, &c., the bolt a in the forward staple F is withdrawn, and the reach B pushed back, after swinging the staple sideways, so as to liberate the forward reach A from the gripe of the claw on the plate e.

The revolving eye or staple E keeps up the connection of the parts of the bed, but allows of the swing

of the clamp out of the recesses fff, &c.

The axles now being adjusted to the required distance apart, the end of the rear reach, or rather the shoulder or claw on the plate e, is brought opposite the nearest groove or recess f f, and the reaches pushed together and secured by the forward staple F, and secured by the bolt a and nut.

The advantages presented by this coupling will be obvious, especially in the western country. Where the wagon-bed (removing the box) is used to haul lumber, timber, boards, &c., the forward reach has generally to be thrown aside, after removing the king-bolt, and much other labor expended in fitting and adjusting a pole or other extension of the bed.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

- 1. The enclosing-staple F, with its bolt a and nut, or equivalent fastening, whether attached to either the forward or rear reach, but embracing both within it.
- 2. In combination with the above, and working together, the revolving or swivel-staple or eye E, attached to the rear reach, within the recess g, the rear reach B, with the claw-plate e, for adjustment in either of the recesses f in the surface of the contiguous reach, the forward reach A, with its grooves or recesses f, for the reception of the claw-plate e, and the socket i, cut in the rear axle, substantially as described, and for the purposes set forth; and the above devices for coupling wagons, I claim, whether the staples (fixed and rotary) and clamp or hook e are fastened to the forward or to the rear reach, or the staples respectively on a separate reach.

In testimony that I claim the foregoing, I have hereunto set my hand, this 14th day of April, 1869.

JOHN P. ALLENSWORTH.

Witnesses:

H. W. Wells, Brion Williams.