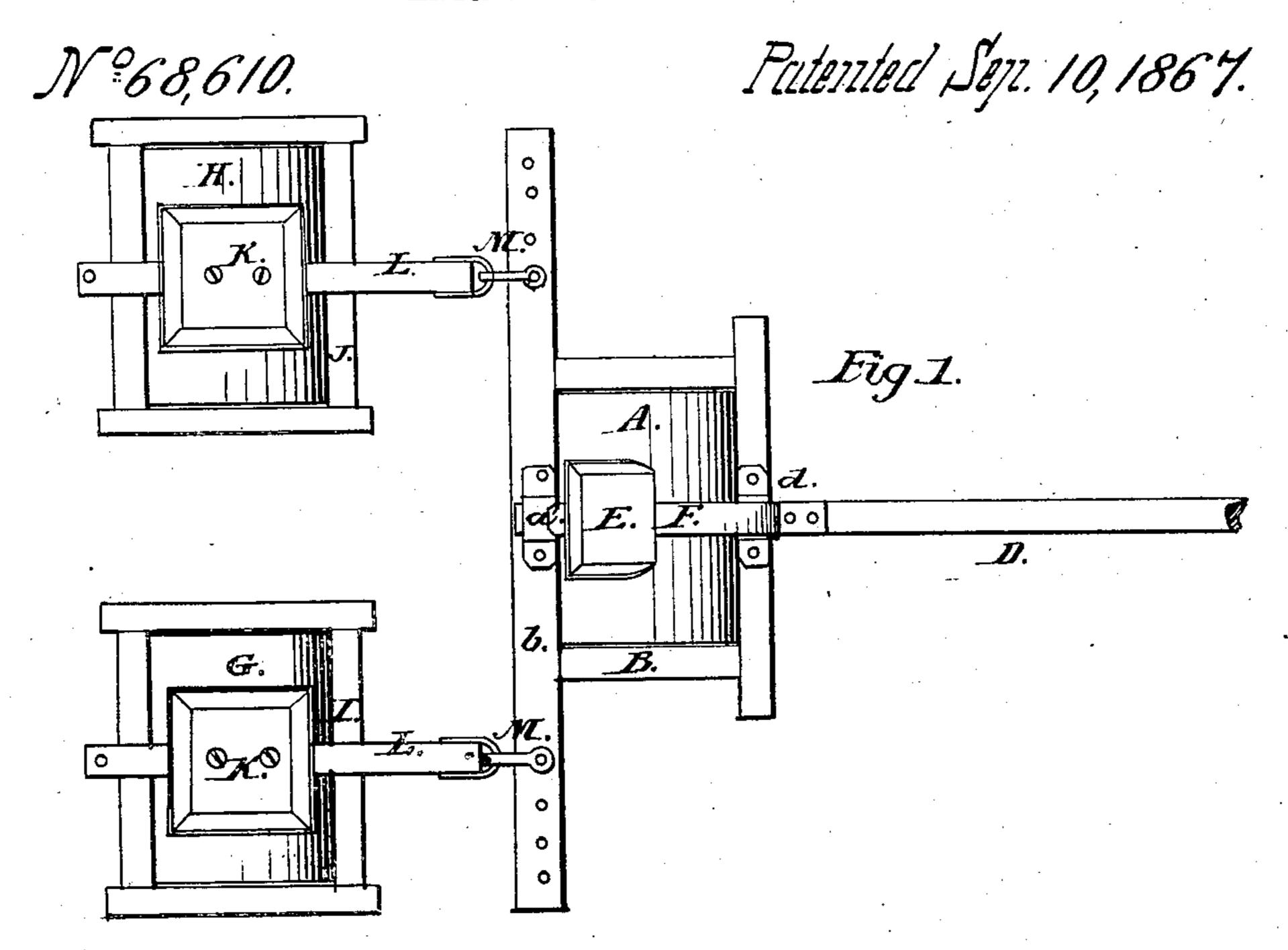
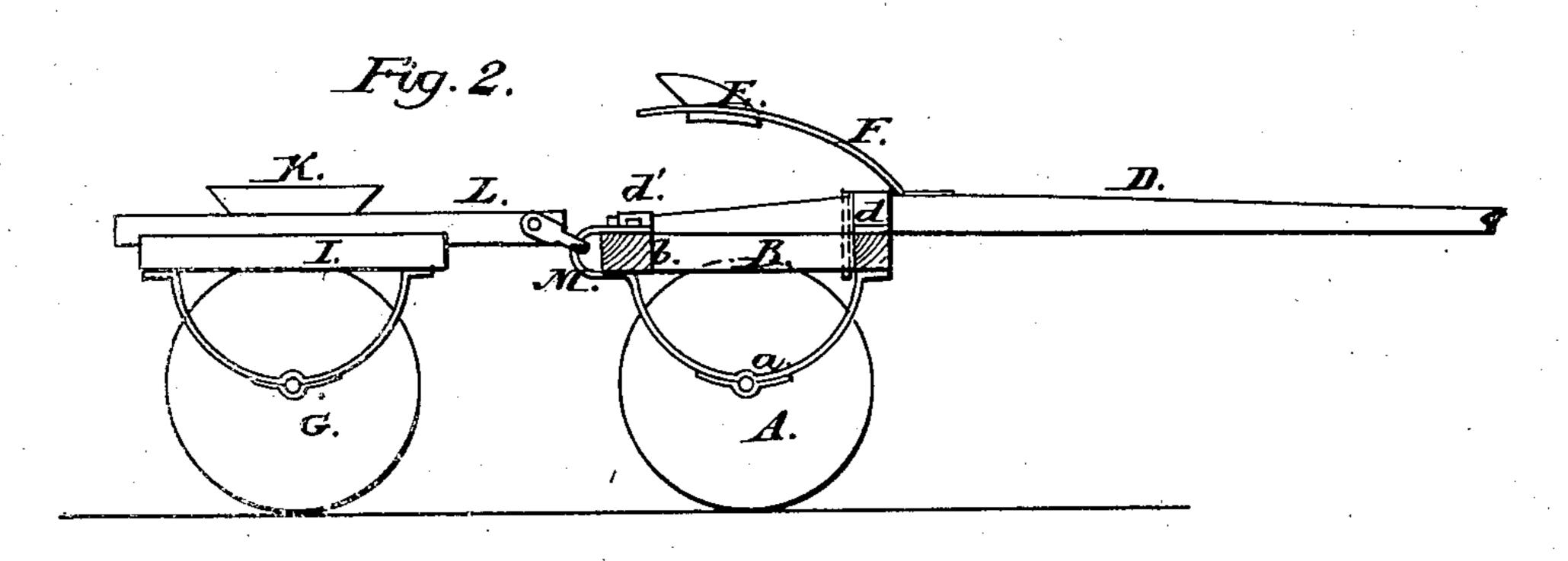
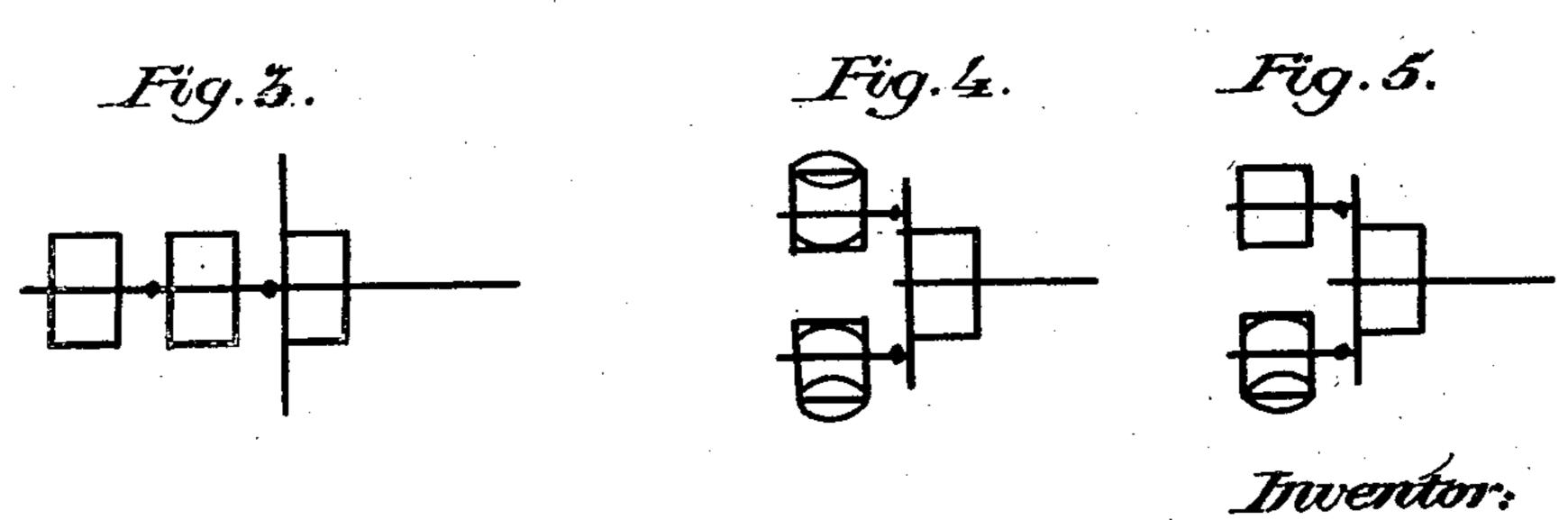
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Luzul Roller.







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H. L. CURRIER, OF OREGON, ILLINOIS.

Letters Patent No. 68,610, dated September 10, 1867.

YEMENT IN LAND-ROLLER.

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, H. L. CURRIER, of Oregon, in the county of Ogle, and State of Illinois, have invented a new and useful Improvement in Land-Rollers; of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which make part of this specification, and in which--

Figure 1 represents a plan or top view of my improved roller.

Figure 2 represents a view in elevation of one side of the same; and

Figures 3, 4, and 5 are diagrams showing the roller in different positions.

My invention relates to that class of rollers in which a series of rollers is united in a single machine for joint operation; and the improvement herein claimed consists in certain novel devices for increasing the capa-

bilities and effectiveness of the machine, as hereinafter more fully described.

In the accompanying drawings, the front roller A is shown as mounted in bearings a, projecting underneath a rectangular frame, B, the rear cross-bar b of which projects laterally on each side of the frame a distance about equal to the width of the frame. A tongue, D, projects centrally in front of the frame, to which it is secured by being inserted into loops or sockets d d' on the frame, and held by a pin inserted into it behind the loop. By this means the tongue is securely fastened, and yet can quickly be removed or replaced. A seat, E, for the driver rests upon a curved spring, F, one end of which is fastened to the tongue in front of the loop, which arrangement allows both the tongue and seat to be removed together. The seat has a socket, which slides on the spring, in order that the seat may be moved backward or forward to balance the weight of the tongue. The seat may be fastened to the spring by a pin passing through both, or by a slot and set-screw. A box to contain weights (to increase the pressure of the roller) may also be placed on the frame. Two rollers, G II, are each mounted in an independent frame, I J, in a manner similar to the front one. They are also furnished with boxes K to contain weights, and with centrally-projecting tongues L, which are connected by clevises or loops M to the projecting rear cross-bar of the front frame, which mode of coupling leaves each frame free to play independently of the others. The rear frames may be adjusted nearer to or farther from each other by means of holes in the cross-bar, as shown in the drawings, or by slots and set-screws in the usual well-known way.

This independent and flexible arrangement of my improved rollers affords many advantages in practical operation not possessed by others. For instance, in moving from field to field, the rollers can be arranged one behind the other, as in fig. 3, which is a great convenience in passing through gates. Again, in rolling walks or roads, they can be rolled three times by drawing the machine once over them, and with different degrees of

pressure, if desired, by varying the weights in the boxes.

In fig. 4 the front roller is represented as running on level ground, while the rear ones are inclined towards each other as if running on the sides of a furrow. In fig. 5 the front and one hind roller are level, and one only is tipped.

These illustrations might be multiplied, but the instances given are sufficient to show the capabilities of my invention. In rolling down corn-stalks, previous to ploughing, my roller would travel on three rows at once, and the ease with which it could turn round is obvious.

What I claim as my invention, and desire to secure by Letters Patent, is-

1. The combination of the front roller with the independent and loosely-hinged hind rollers, arranged and operating as described.

2. The combination, with the front roller, of the driver's seat and detachable tongue, all arranged and

operating as described.

3. The arrangement of the series of rollers one behind the other, as described, for the purpose of successively rolling the same surface by a single passage of the machine.

In testimony whereof I have hereunto subscribed my name.

H. L. CURRIER.

Witnesses:

M. W. SMITH,

J. I. PEYTON.