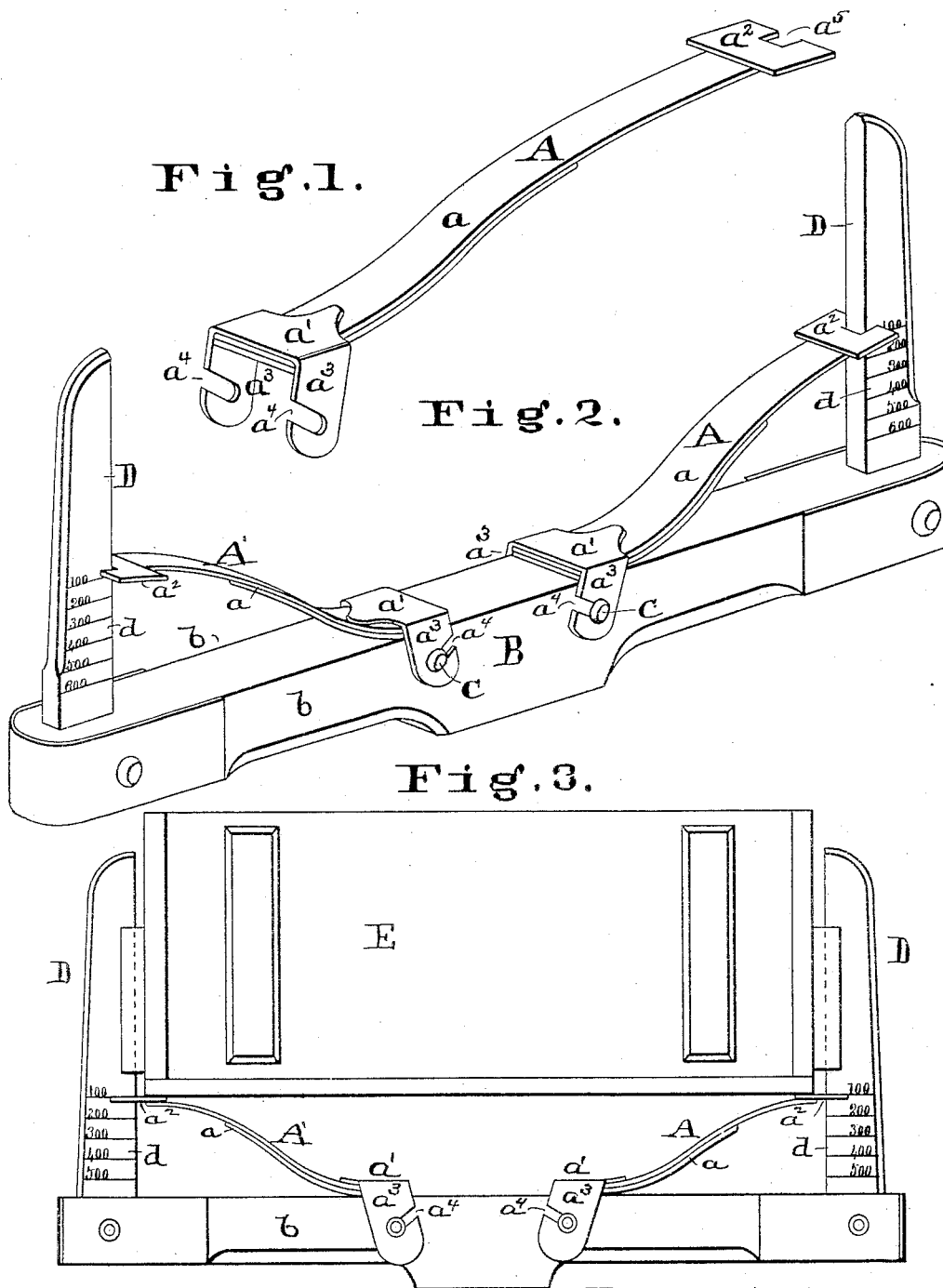


L. PULLIAM.  
Wagon-Spring.

No. 214,584.

Patented April 22, 1879.



Attest,

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*att.*

# UNITED STATES PATENT OFFICE.

LUTHER PULLIAM, OF MIAMI, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAMES B. AUSTIN, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN WAGON-SPRINGS.

Specification forming part of Letters Patent No. **214,584**, dated April 22, 1879; application filed February 26, 1879.

*To all whom it may concern:*

Be it known that I, LUTHER PULLIAM, of Miami, Saline county, Missouri, have made a new and useful Improvement in Wagon-Springs, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a view, in perspective, of the spring; Fig. 2, a perspective, showing the springs in position upon the bolster, and Fig. 3 an elevation, showing the invention in position, with the wagon-bed resting upon the springs.

The same letters denote the same parts.

The present invention is especially adapted to farm-wagons. It is simple in its construction, easily made, and readily operated. It is detachable, so that the wagon can be used either with or without the spring, and it is so shaped and attached as to enable it to support the wagon-bed when an ordinary load is being carried, but when an unusually heavy load is being carried to yield sufficiently, and so that the wagon-bed is sustained, practically, by the bolster.

A further advantage is, that the weight is sustained by the bolster at or near the center of the latter, instead of at the ends thereof.

Referring to the drawings, A represents the improved spring. It consists, mainly, of the spring proper, *a*, and a clip, *a'*, for attaching the spring to the bolster B. It is also preferably provided with a plate, *a''*, upon which the wagon-bed immediately rests, and which, to prevent the bed from chafing the spring *a*, is raised slightly above the top of the latter.

The clip *a'* is shaped to fit upon the bolster B, the flanges *a'' a''* extending downward against the front and rear faces *b b* of the bolster.

C represents a pin or other projection with

which the bolster is furnished, and extending outward from the bolster, so as to engage in the slots *a' a'* in the flanges *a'' a''*, for the spring is fastened in position by turning it so that the pin C enters the slots *a' a'*, and then into the position shown.

The plate *a''* is notched at *a'''* to receive the standard D.

The springs are used in pairs A A', as shown in Figs. 1 and 2.

E represents the wagon-bed. The standards D D are provided with a scale, *d d*, suitably graduated, to indicate the weight of the load being carried. The plate *a''* acts, also, as a pointer upon these scales, enabling the weight to be more readily and accurately indicated. As the load is increased the springs yield, and the pointer *a''* moves down upon the scale.

By attaching scales to all the standards, the load can be accurately determined by averaging the weights indicated on the various scales.

I claim—

1. The herein-described wagon-spring A, consisting of the spring *a* and clip *a'*, in combination with the bolster B and pin C, substantially as described.

2. The combination of the spring A, having the spring *a*, clip *a'*, and plate *a''*, the bolster B, pin C, and bed E, substantially as described.

3. The springs A A', having the clips *a' a'* and springs *a a*, the bolster B, and pins C C, substantially as described.

4. The combination of the springs A A', bolster B, pins C C, standards D D, scales *d d*, and bed E, substantially as described.

L. PULLIAM.

Witnesses:

PAUL BAKEWELL,  
JAS. B. AUSTIN.