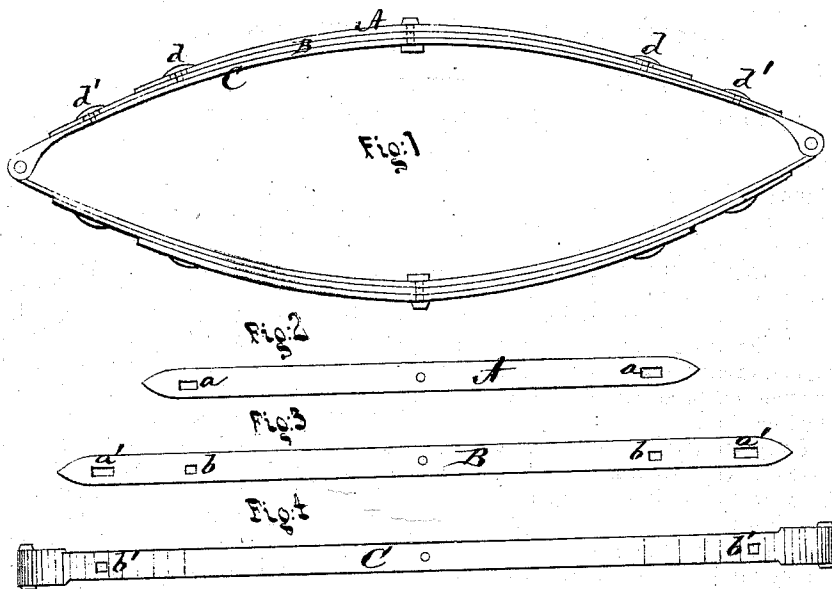


David D. Wisell's Carriage Spring.

No. 119,907.

Patented Oct. 10, 1871.



Witnesses.

L. L. Ewert.
A. Yeatman

Inventor.

David D. Wisell
per
Alexander Massey
Attys.

UNITED STATES PATENT OFFICE.

DAVID D. WISELL, OF ZANESVILLE, INDIANA.

IMPROVEMENT IN CARRIAGE-SPRINGS.

Specification forming part of Letters Patent No. 119,907, dated October 10, 1871.

To all whom it may concern:

Be it known that I, DAVID D. WISELL, of Zanesville, in the county of Allen and in the State of Indiana, have invented certain new and useful Improvements in Carriage-Springs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The object of my invention is to so bind or fasten the leaves of the spring together as to prevent breakage from "flying upward," irregular loading, twisting by turning the carriage, or by one wheel dropping in ruts, &c.

In the ordinary mode of construction, in the above movements the shorter leaves separate from the longer or bed-leaf, throwing all the strain, and in this way is caused the greatest number of all the springs broken.

The nature of my invention, hence, consists in the mode of binding or fastening the leaves together, whereby breakage is prevented, the leaves being so bound together that all must break or none.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view of my entire spring, and Figs. 2, 3, and 4 are plan views of the top leaves separate.

A, B, and C represent the three top leaves in a three-leaved carriage-spring. In the tapering ends of the top leaf A are made elongated slots *a a*, and in the leaf B are punched holes *b b* for the reception of the ends of the headed rivets *d d*. Now place the leaf A on the leaf B, and through the slots *a a* and holes *b b* insert the headed rivets *d d*, and rivet the same on the under side of the leaf B. In the same manner the two leaves thus connected are riveted to the third or bed-leaf C by rivets *d' d'* through the slots *a' a'* and holes *b' b'*. It will then be seen that the slotted ends of the leaves slide readily under the heads of the rivets, while the rivets secure the leaves all together, and the result aimed at is effectually accomplished. The bottom part of the spring is constructed in the same manner.

This mode of connecting the leaves is applicable to any number of leaves.

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

The spring-leaves A B C provided with elongated slots *a a'* and holes *b b'*, and connected together by means of headed rivets *d d'* covering the slots, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of May, 1871.

D. D. WISELL.

Witnesses:

C. L. EVERT,
WM. E. ANGEVINE.

(31)