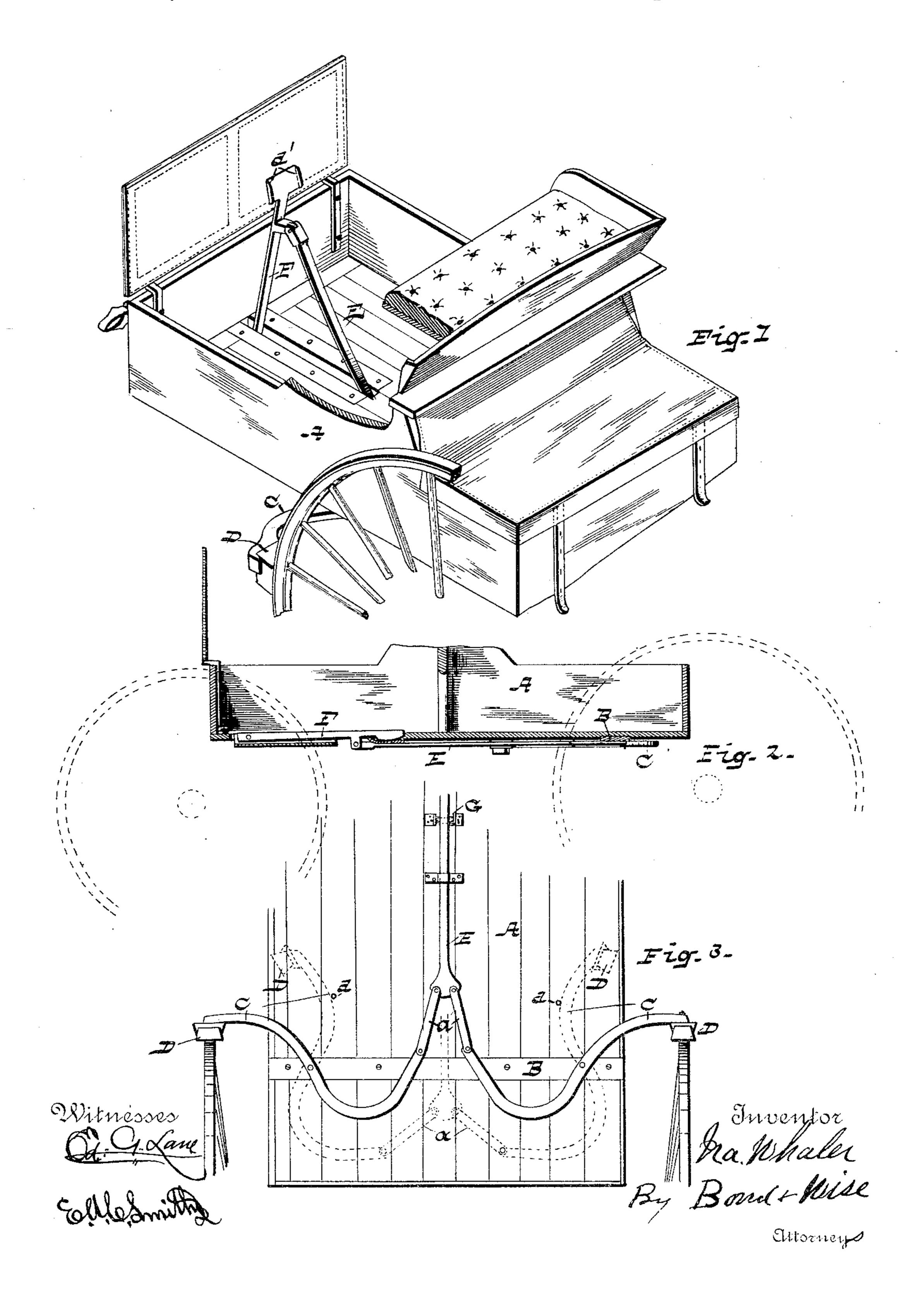
## I. WHALER. CARRIAGE BRAKE.

No. 410,721.

Patented Sept. 10, 1889.



## United States Patent Office.

IRA WHALER, OF CANTON, OHIO.

## CARRIAGE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 410,721, dated September 10, 1889.

Application filed December 24, 1888. Serial No. 294,539. (No model.)

To all whom it may concern:

Be it known that I, Ira Whaler, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have 5 invented certain new and useful Improvements in Carriage-Brakes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part 10 of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is an isometrical view. Fig. 2 is a longitudinal section showing brake-lever closed and the brake-bars moved away from 15 the wheels. Fig. 3 is an under side view show-

ing location of the brake-bars.

The present invention has relation to carriage-brakes; and its nature consists in the different parts and combination of parts herein-20 after described, and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the draw-

ings.

In the accompanying drawings, A represents the body, which is constructed in the ordinary manner, reference being had to properly attaching the different parts of the brake. To the bar B, or its equivalent, are pivotally 30 attached the S-shaped bars C, which bars are located substantially as illustrated in Fig. 3. To the outer ends of the brake-bars C are securely attached the blocks D, which blocks may be of any desired size or style. To the 35 inner ends of the S-shaped bars C are pivotally attached the link-bars a. The opposite ends of said link-bars are pivotally attached to the rear end of the spring-bar E, substantially as illustrated in the drawings. The 40 spring-bar E is located substantially as illustrated in the drawings, and to the front or forward end of this spring-bar E is pivotally attached the operating-lever F. The lever F is pivotally attached at its bottom or lower end | claim as new, and desire to secure by Letters 45 to the front or forward end or portion of the body A. The spring-bar E is formed of springsteel for the purpose of permitting the bar to bend, as illustrated in Fig. 1, when the opererating-lever F is elevated, as shown in said 50 Fig. 1. It will be seen that as the operating-

lever F is elevated the S-shaped bars C will assume the positions shown in Fig. 1 and when the operating-lever is placed in the position shown in Fig. 2 said S-shaped bars will assume the positions indicated by the dotted 55 lines in Fig. 3. It will be seen that when the S-shaped bars C are placed in the positions shown by the dotted lines, Fig. 3, they will be out of the way and substantially out of sight.

For the purpose of stopping the bars C at 60 certain points, the pins d, or their equivalents, are provided, said pins being securely attached

to the body A.

In case side-bar springs are used, which come below the bottom of the body A, the S- 65 shaped bars should be so formed and adjusted that they will not interfere with the springs in their movements.

The roller G is located substantially as illustrated in Fig. 3, and is for the purpose of lessen-70

ing the friction of the spring-bar E.

In use, when it is desired to apply the brake, the operating-lever F is elevated, as shown in Fig. 1, and pressed forward by the foot of the driver.

It will be understood that a catch may be provided to hold the operating-lever F forward.

For the purpose of preventing the foot from slipping off from the lever, the ribs d' are pro- 80 vided and located substantially as shown.

In case it is desired, the operating-lever F may be located at the side of the body A, instead of the center, as shown, the different parts being properly adjusted to make the 85 connections to the bars C. An opening is provided in the bottom of the body A for the passage of the spring-bar E.

For the purpose of preventing the S-shaped bars C from trembling when the brake-blocks 90 are applied to the wheels, a bar or staples

may be placed under said bars C.

Having fully described my invention, what I

Patent, is— 1. The combination of a vehicle-body having pivotally attached thereto the S-shaped bars C, provided with suitable brake-blocks, the link-bars a, pivotally attached to the Sshaped bars C and to the spring-bar E, and the 100 spring-bar E, formed of spring metal and having pivotally attached thereto the operating-lever F, substantially as and for the purpose

specified.

5 2. The combination of a vehicle-body having pivotally attached thereto the S-shaped bars C, the links a, pivotally attached to the S-shaped bars C and to the spring-bar E, the spring-bar E, formed of spring metal, the operating-lever F, the roller G, and the pins or

stops d, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

IRA WHALER.

Witnesses:

JOHN T. HAYS, CHAS. SEEMANN.