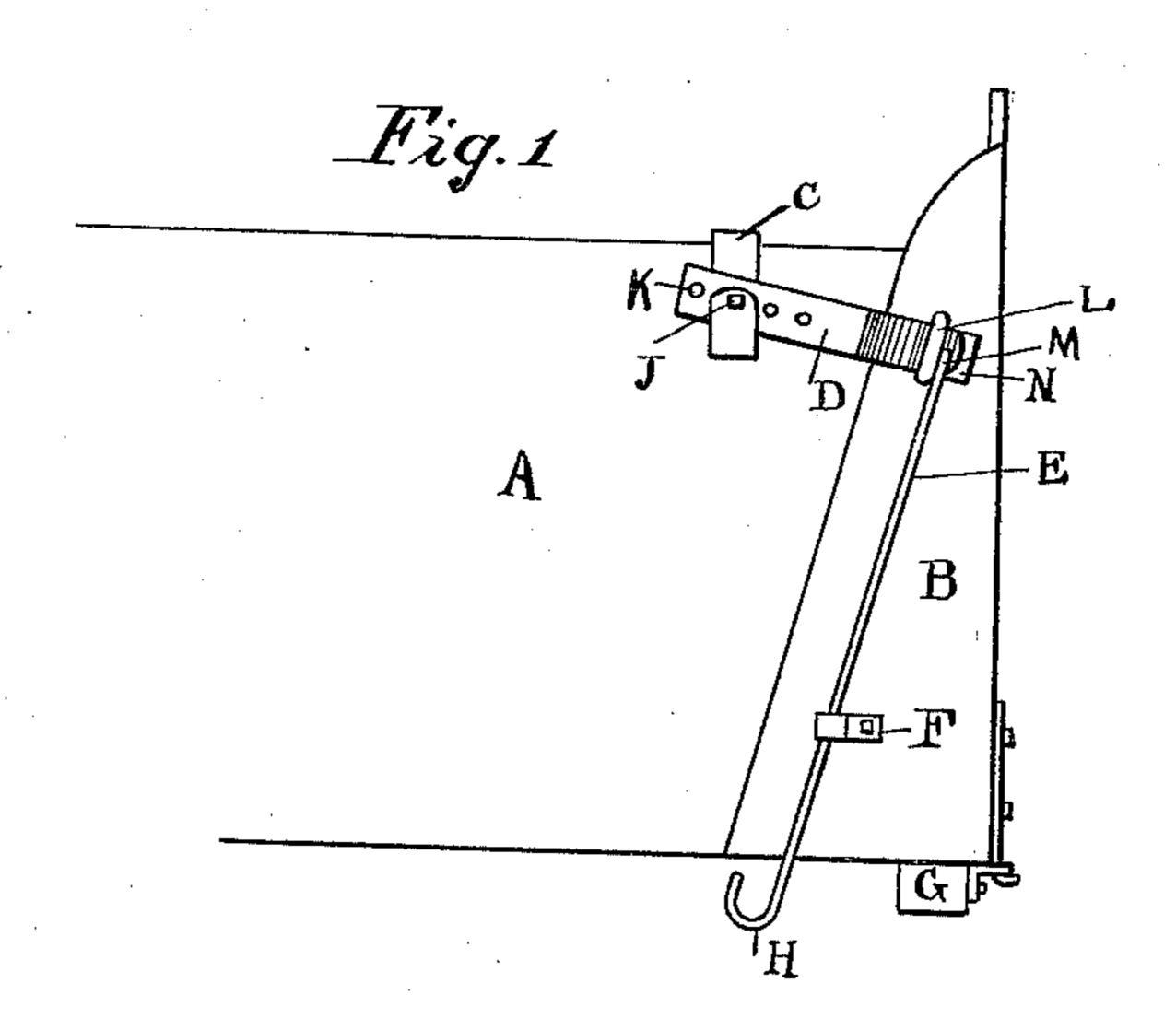
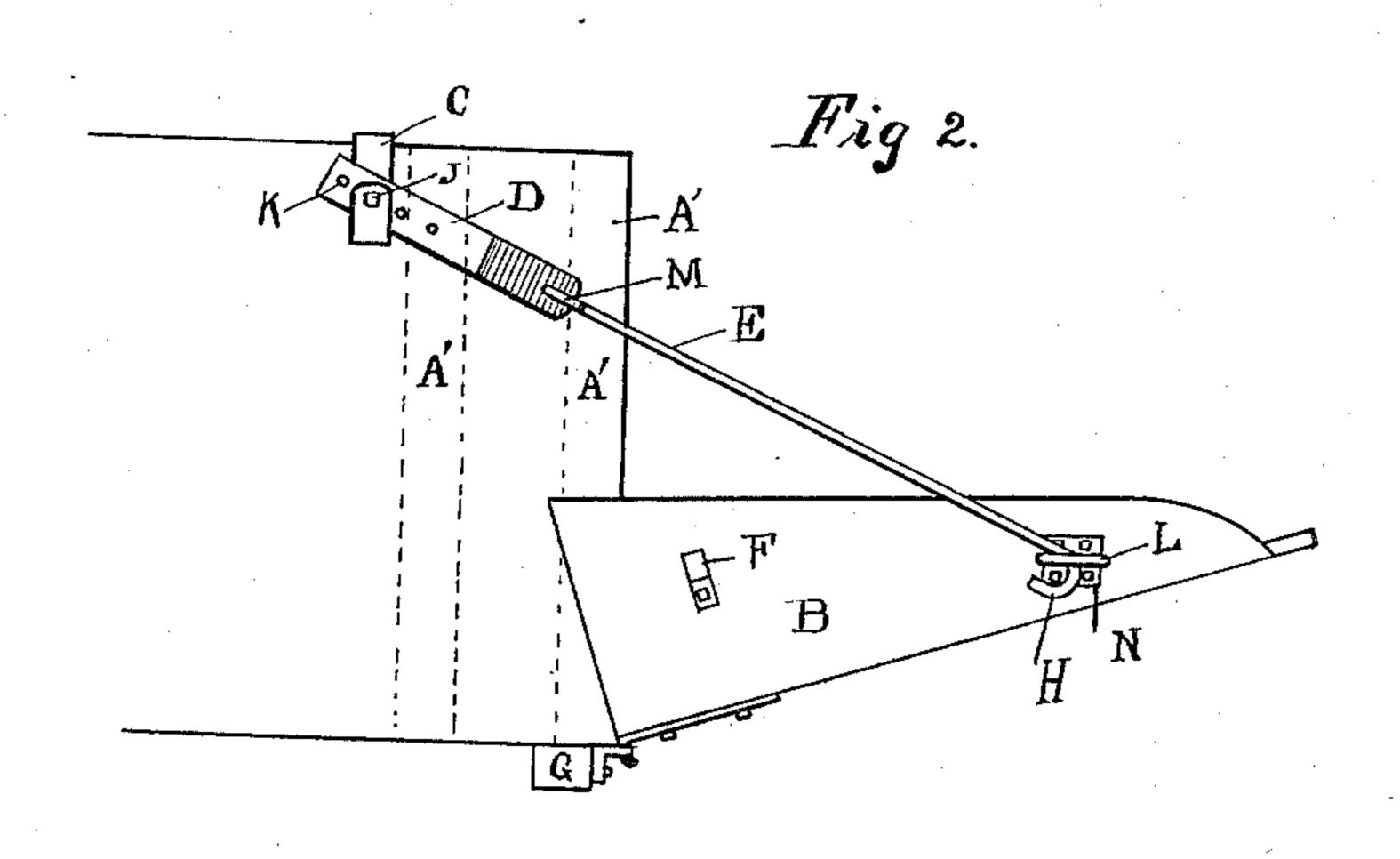
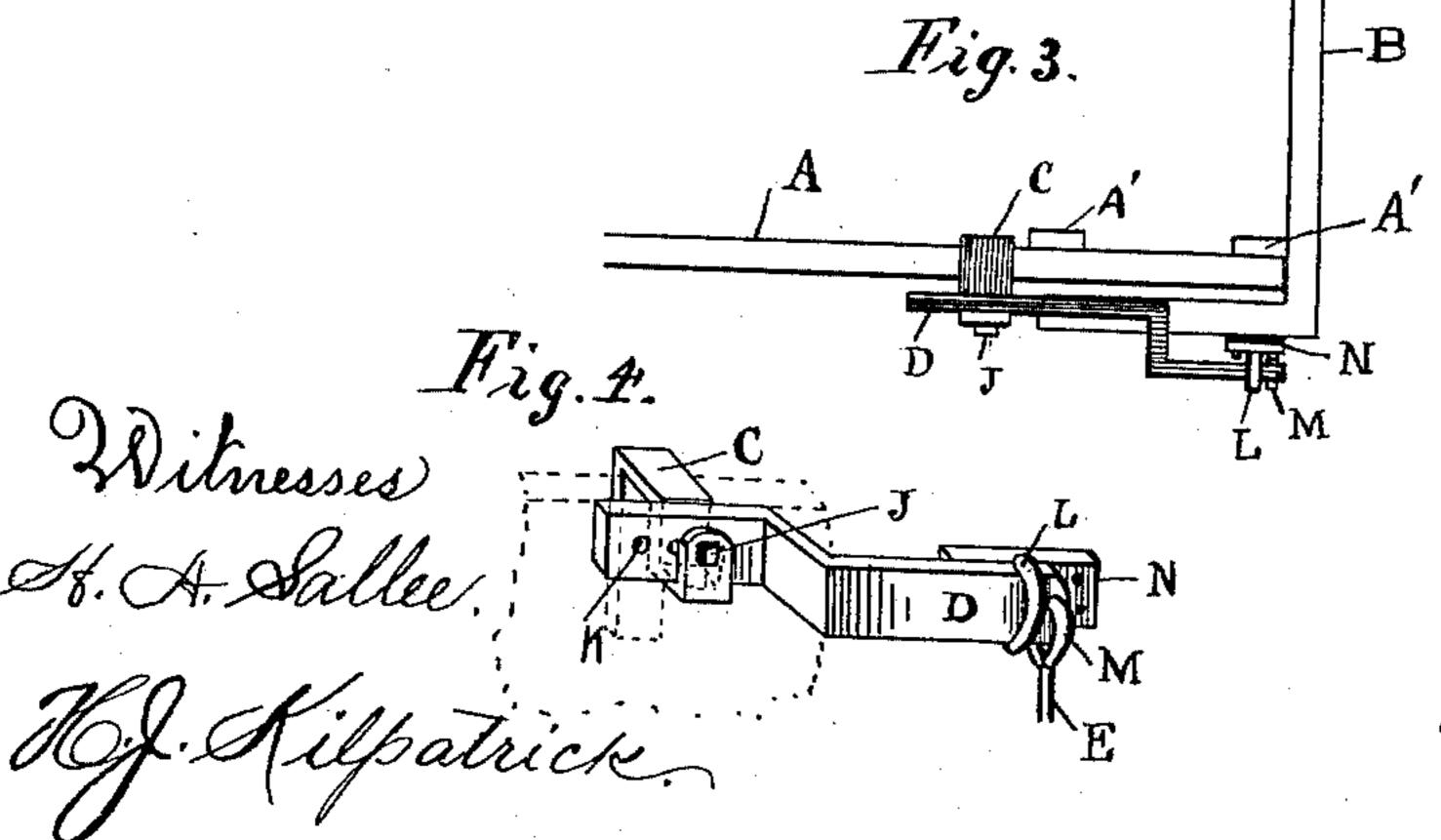
## W. N. DE VAULT. END GATE.

No. 466,845.

Patented Jan. 12, 1892,







Inventor. William N. DeVaule by L. M. Thurlow, atty.

## United States Patent Office.

WILLIAM N. DE VAULT, OF PEORIA, ILLINOIS, ASSIGNOR OF ONE-HALF TO GEORGE N. SPANGLER, OF SAME PLACE.

## END-GATE.

SPECIFICATION forming part of Letters Patent No. 466,845, dated January 12, 1892.

Application filed March 31, 1890. Serial No. 345,983. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. DE VAULT, a citizen of the United States, residing at Peoria, in the county of Peoria and State of 5 Illinois, have invented certain new and useful Improvements in Shoveling-Boards; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art 10 to which it appertains to make and use the same.

This invention relates to improvements in

shoveling-boards for wagons.

The object of the invention is to provide 15 means whereby the board may be handled with the greatest possible ease to accomplish the desired result.

In the accompanying drawings, Figure 1 represents a side view of the wagon with the 20 shoveling board attached and which is shown as closed. Fig. 2 also represents a side view of the wagon with the shoveling-board shown open. Fig. 3 is a plan view of part of the wagon-box and shoveling-board, showing the 25 parts by which the board is held. Fig. 4 is a perspective view of the several parts used in the operation of my invention.

A, Figs. 1, 2, and 3, represents the wagonbox, and B represents the shoveling-board.

30 In Figs. 2 and 3 are seen two wooden cleats A' A', which are bolted or otherwise attached to the inside of wagon-box and extend upward so as to be flush with the top of the said wagon-box, and back of the hindmost of said 35 cleats is hung an iron or steel hanger C, which rests on the top of wagon-box, as shown. The said hanger C commences at a point several inches below the top of wagon-box, passes upward and over the top, and down on the 40 other side to the required distance. Then it turns again at right angles in a horizontal direction, and then upward, forming on the outside of box a bracket in the form of a letter U. Of course when the hanger C is placed 45 on the wagon-box in the manner described no holes are needed in the wagon-box. This hanger C is clearly shown in perspective at Fig. 4 in connection with the other parts of my invention. The portion of the hanger on 50 the outside of wagon-box, as described, in shape of letter U, carries an arm D, of iron

or steel, of the construction shown, by means of a bolt J. The free end of said arm D is adapted to pass through a ring or eye L, which is cast with a plate N, and which is 55 bolted to the cheek of the shoveling-board B. The arm D carries at its free end, by means

of an eye M, a steel or iron rod E.

The operation of my device is as follows: When an ordinary wagon is to receive a 60 shoveling-board, the hanger C is placed in position on the top of wagon-box A back of the cleats A' A'. The arm D is placed in the bracket designed for it. The rod E, being already attached to the arm D by means of eye 65 M, is thrust through the eye L of plate N and the shoveling-board hung in suitable manner to the bottom of wagon-box. When closed, the board B rests on the wooden beam G, usually placed on wagons, and pushed up 70 squarely against the end of wagon-box. The rod E is forced downward, so that it binds on the eye L, and the board is secured in place by springing the said rod E behind the hook F, placed on said board for the purpose. Thus 75 it will be seen the board is held in a very secure manner. The holes K in arm D are intended to be used to adjust the said arm D the right length to conform with the operation of the device. When the board B is 80 thrown open, the rod E is unsprung from its position behind hook F and the board forced open. By thus doing, the eye L on shovelingboard B presses against the rod E, throwing the said rod E out, so that it may pass through 85 the said eye L. When the board has reached its lowest point, the hook H comes into use by the eye L hanging in it.

1. In a shoveling-board for wagons, the 90 wagon-body having a hanger C hung on the top edge thereof and near the rear end of said wagon-body, and the strap D, adjustably pivoted in the said hanger, the rod E, with its hook II loosely attached to the free end of 95 said strap D, in combination with the eye L, placed on the side of shoveling-board near the top of same, and the hook F, placed near the bottom of said board, and all working to-

I claim--

gether in the manner and for the purposes 100 set forth and described.

2. In a shoveling-board for wagons, the com-

bination of the hanger C, of the form shown and described, hung on the top edge of wagon-body near the rear end thereof, a strap D, provided with a series of holes for adjustment and which strap is pivoted to the said hanger C by the pin or pivot J, as shown and described, and a rod E, with its hook H loosely attached by the eye M on one end of said rod

to the free end of said strap D, substantially as herein set forth and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM N. DE VAULT.

Witnesses:

H. A. SALLEE, LEWIS R. OWEN.