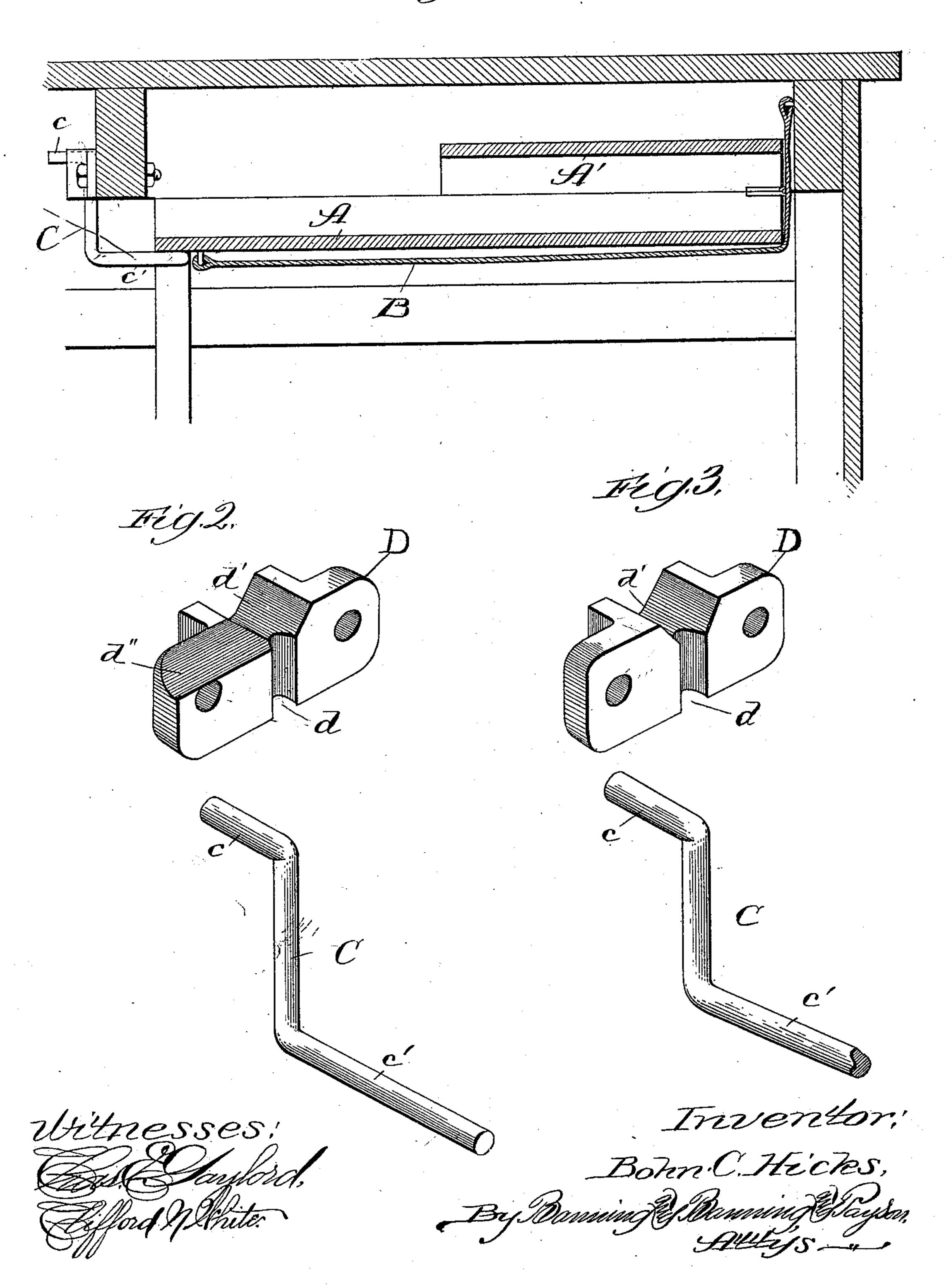
(No Model.)

B. C. HICKS. HOOK FOR STOCK CARS.

No. 491,803.

Patented Feb. 14, 1893.

Hig. 1.



United States Patent Office.

BOHN CHAPIN HICKS, OF CHICAGO, ILLINOIS.

HOOK FOR STOCK-CARS.

SPECIFICATION forming part of Letters Patent No. 491,803, dated February 14, 1893.

Application filed April 16, 1891. Serial No. 389,197. (No model.)

To all whom it may concern:

Be it known that I, Bohn Chapin Hicks, a citizen of the United States, residing at Chicago, Illinois, have invented a new and useful Improvement in Hooks for Stock-Cars and for other Purposes, of which the following is a

specification.

The object of my invention is to provide a hook for supporting the double decks of stock 10 cars, swinging doors or shelves, or any other devices which it may be desired to support. The hook is to be supported and mounted or journaled in a suitable socket so constructed as to "position" the hook, or bring it into po-15 sition to support the device with which it is used; or into such position as to allow such device to be moved away from the hook. I have shown the hook in connection with the double or auxiliary deck of a stock car, but it 20 should be understood that I have shown this merely as illustrating one of the applications of my improved hook, without intending to limit myself to this or any other particular use, since I contemplate employing the hook 25 in any other place for use in which it is adapted.

A double deck stock car is one having two floors, the ordinary one, and another interposed at a suitable height above the first and between it and the roof; the purpose of the 30 intermediate or double deck being to increase the capacity of the car. When not in use this double deck, in the preferred construction, is stowed away in the roof of the car, since that space is of less value than the space 35 at the ends; and when the deck is stowed away the car is then open and free for the transportation either of larger animals or other kinds of freight. When down, the deck is supported in some sufficiently firm manner 40 to enable it to perform its functions, and when raised to the roof and stowed away, it is of course necessary that means should be provided for supporting it in its new position. It is also preferable that these means should be such as to be capable of being brought into position to sustain the double deck, and also into such position as to enable the deck to be moved down from the roof into a posi-

tion for use. Such means is provided by us-

ing my improved hooks, and, as above stated, 50 I have illustrated the hooks in connection with such a deck.

My invention consists in the features and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a cross section of a portion of the upper part of a double deck car, showing one section of the deck folded and stowed away in the roof; Fig. 2 is a perspective view of my improved hook or 60 supporting device with its parts separated from each other; and Fig. 3 a similar view illustrating a modification.

The separate sections of the double or auxiliary deck, which, it should be understood 55 forms no part of the present invention, are shown made in two parts A A' adapted to be folded upon each other when it is desired to stow the deck in the roof, and capable of opening to bring the two parts into the same horizontal plane to afford a continuous and unbroken surface to the extent of such section when the section is in position for use.

The section of the deck shown in the drawings is supported at one end or side by means 75 of ropes or cables B, suitably attached to the section and also to one of the carlings. The other end of the section is supported by the hooks C, as shown in Fig. 1. These hooks are made of a rod or bar of malleable iron or 80 other suitable material, preferably in the shape shown more particularly in the last two figures of the drawings. When in use they are supported in sockets or journals D, the preferred form of which is shown in Fig. 2, 85 which are adapted to be secured as shown to one of the carlings, or other convenient place when the hook is used in other connections. The hooks are provided with two substantially horizontal members, one c to rest upon and 90 engage with grooves in the upper surface of the socketor bearing, and the other c' extending out beneath the edge of the section or other device, which the hook is intended to support. The socket is preferably provided 95 with a groove d, adapted to fit over the hook when fastened in place, and also with holes to receive screws, or other means for attaching

it as shown. It is further provided with one or more grooves or depressions d'd''. In Fig. 3 I have shown the socket with a single groove, which is intended to engage with the member 5 c of the revolving hook and lock the same when in a position to support the deck, as shown in Fig. 1; and in Fig. 3 I have shown two depressions—one to engage with the hook when supporting the deck or other device, to and the other to engage with the hook when swung around out of engagement with such deck or device. The sides of these grooves are inclined, in order to assist in positioning the hook, the weight of the latter causing the member c to slide down the side of the groove to the bottom thereof, thus positioning the hook and locking it in place.

The operation of the hook will be obvious from the drawings. In Fig. 1 the hook is 20 shown supporting the deck. When it is desired to lower such deck, the member c is raised out of the groove which holds it, and the hook swung around in one direction or the other until the member c' is disengaged from 25 the deck, after which such deck may be lowered. When the deck is raised again, the hook may be swung back into position underneath the edge thereof, being locked by the groove as already described. The sockets 30 having the two grooves dd' are useful in this; that not only is the hook positioned and locked thereby when in a position to support the deck, but also when swung to one side to allow the deck to be lowered, so that there is 35 no liability of the hooks swinging back into the way of the person lowering the deck.

And similarly when the hook is used in other connections.

I claim:

1. A fixed socket having a vertically-ex- 40 tending groove d, and a transverse horizontal groove d', above said groove d, said transverse groove having an inclined side, in combination with a self righting hook having a holding member c', a vertical member located in 45 said groove d and capable of vertical and rotary movement therein, and a supporting member c co-operating with said transverse groove and riding on the inclined side thereof, whereby when said hook is elevated it 50 drops by gravity and the holding member riding on said inclined side causes the hook to rotate in the groove d until the supporting member s of the hook lies in the bottom of the groove d and thereby maintains the hold- 55ing member c', in its proper holding position, substantially as set forth.

2. The combination of a socket provided with two grooves having inclined sides at an angle to each other, a hook rotatably and ver- 6c tically movable in such socket and provided with a member adapted to engage with and support the device with which it is used, and a member to engage with one or the other of such grooves, whereby the hook is locked in 65 a position to support such device or in a position which allows the device to be moved,

substantially as described.

BOHN CHAPIN HICKS.

Witnesses:

GEORGE S. PAYSON, SAMUEL E. HIBBEN.