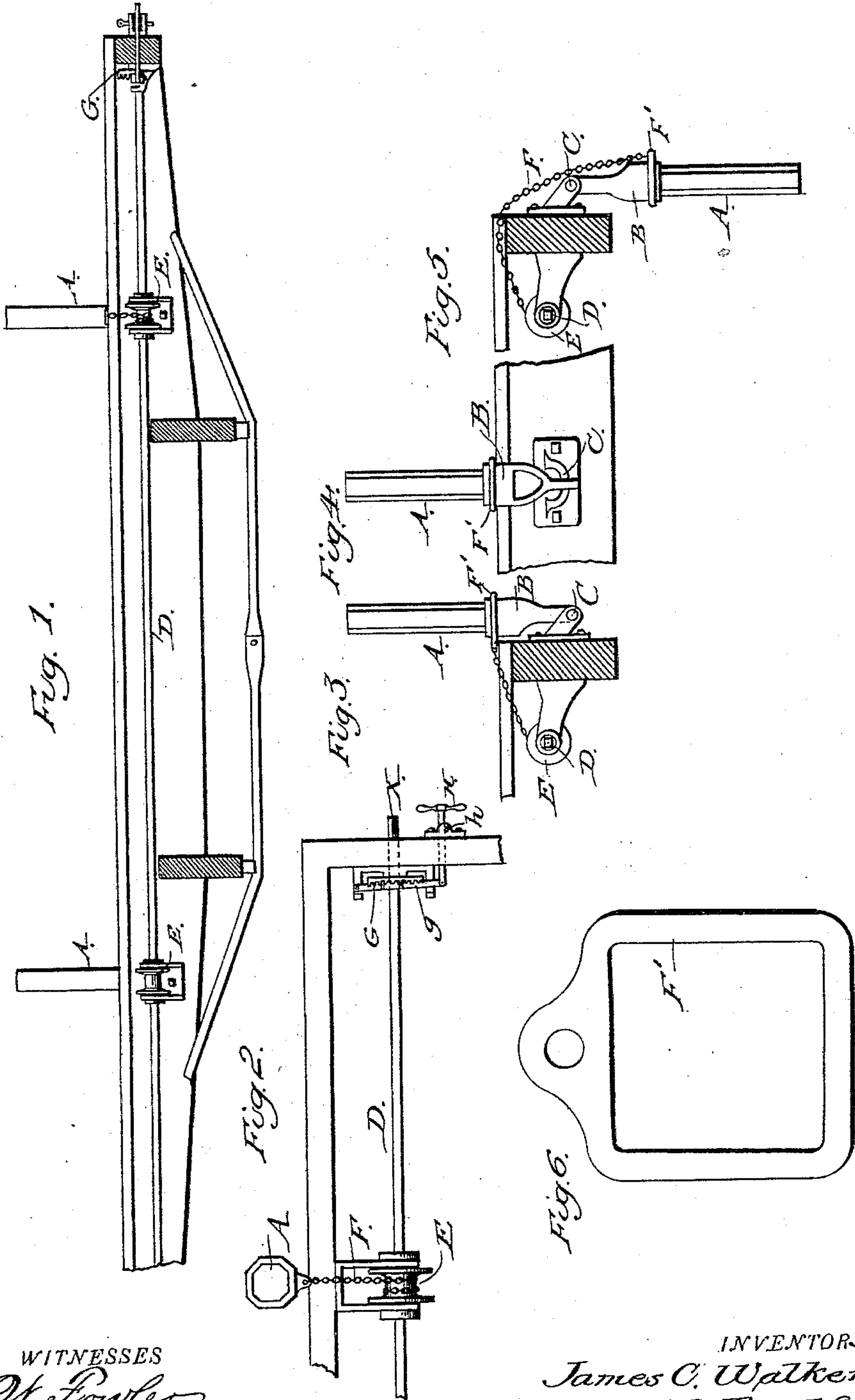


(No Model.)

J. C. WALKER & G. D. BRADFORD.
CAR STAKE.

No. 414,613.

Patented Nov. 5, 1889.



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JAMES C. WALKER AND GEORGE D. BRADFORD, OF ALPENA, MICHIGAN.

CAR-STAKE.

SPECIFICATION forming part of Letters Patent No. 414,613, dated November 5, 1889.

Application filed September 12, 1889. Serial No. 323,716. (No model.)

To all whom it may concern:

Be it known that we, JAMES C. WALKER and GEORGE D. BRADFORD, citizens of the United States, residing at Alpena, in the county of Alpena and State of Michigan, have made certain new and useful Improvements in Car-Stakes, of which the following is a full and clear description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal section through the car. Fig. 2 is a plan view of a portion of the car with top of car removed. Fig. 3 shows a part of the end view of the car. Fig. 4 shows side view of the same part. Fig. 5 shows same end view with the stake down. Fig. 6 is a detail of the wrought-iron band at the top of the stake-socket.

Our present invention has for its object to provide a car-stake for holding logs on platform-cars or Russel trucks, which may be easily and securely fastened to the car, simple in construction and operation, and effective in use.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and indicate the manner in which it is carried out.

Referring to the drawings, A represents a wooden stake, and B a metal socket into which the stake fits, as shown in Figs. 4 and 5. The stake, with its metal socket, swings on a rod C, attached securely to the side of the car. This rod C may be so formed that should the train move while the stakes are hanging down, and the stakes should meet with any obstacle on the ground, they will yield laterally and avoid breaking.

On each side of the car, and just inside of the outside girder, and directly under the plank forming the platform, we secure two iron shafts D, so that they may be readily turned by the application of a wrench at the end X of the rod. These rods or shafts we prefer to make square, and provide them with sleeves to turn in the bearings. On each of these rods we secure pulleys E, there being four rods to a car, and two or more pulleys on each rod, and these pulleys turn as the rod turns. When the chain F, which is fastened to the wrought-iron stirrup F at the top of the stake-socket B, and also to the pulley E, begins to wind up on the pulley, it begins

also to raise the stake from its position in Fig. 5 to its upright position. (Shown in the other figures.) When the stake has been drawn to an upright position, it is necessary to hold it there against the pressure of the logs. To prevent its coming down, we lock it in position by an arrangement shown in Figs. 1 and 2. On the shaft D we rigidly secure a toothed wheel G, and when the stake is drawn up a flat piece of iron g, moving on a pivot, is made to pass between the teeth on the disk, thereby securing the shaft from turning and preventing the stake from going down. The flat bar of iron g is thrown in and out of the toothed wheel by means of the handle H. The handle is held in place when the pulleys are locked by means of the key h.

We do not confine ourselves to this exact mode for locking the bars and pulleys, as it is evident the same result may be secured in a variety of simple ways. Our object is to show one way in which it can be done.

It is evident from this description of our car-stake that a person standing between the cars can in a moment, by means of a wrench, let the stakes down to unload the logs, and in a short time draw them up again without danger of being injured by the rolling logs, as is the case under the present process of cutting out the stakes—a very slow and dangerous operation.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In combination with a platform-car, the pivoted stake A, metal socket B, chain F, and the rod C, substantially as and for the purpose herein described.

2. The pivoted stake A, metal socket B, and rod C, in combination with the shaft D, pulleys E, and chain F, all constructed and arranged to operate substantially as and for the purpose set forth.

3. The stake A, socket B, and rod C, in combination with the shaft D, pulleys E, chains F, toothed wheel G, pivoted bar g, and handle H, all constructed and arranged substantially as and for the purpose herein set forth.

JAMES C. WALKER.

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Witnesses:

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