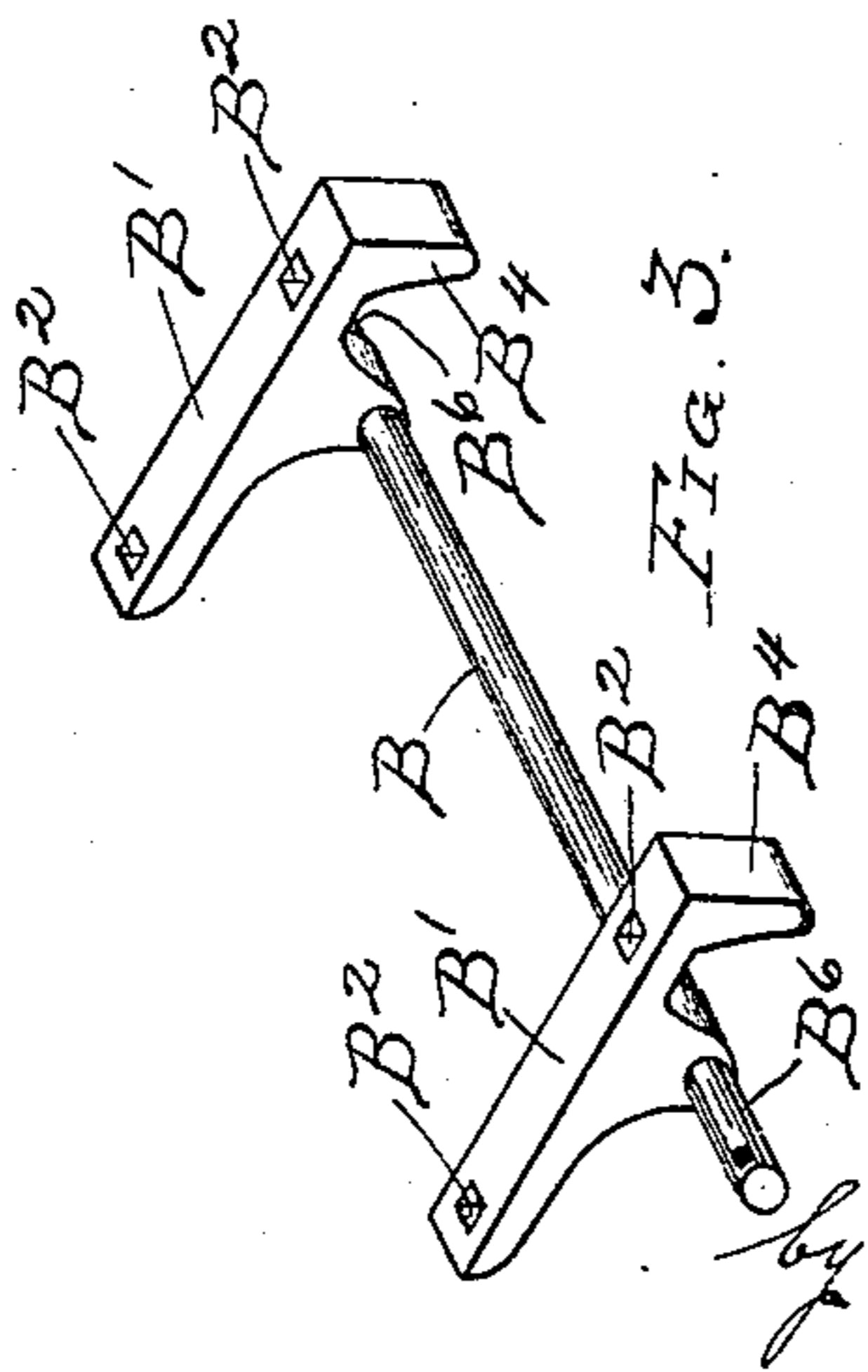
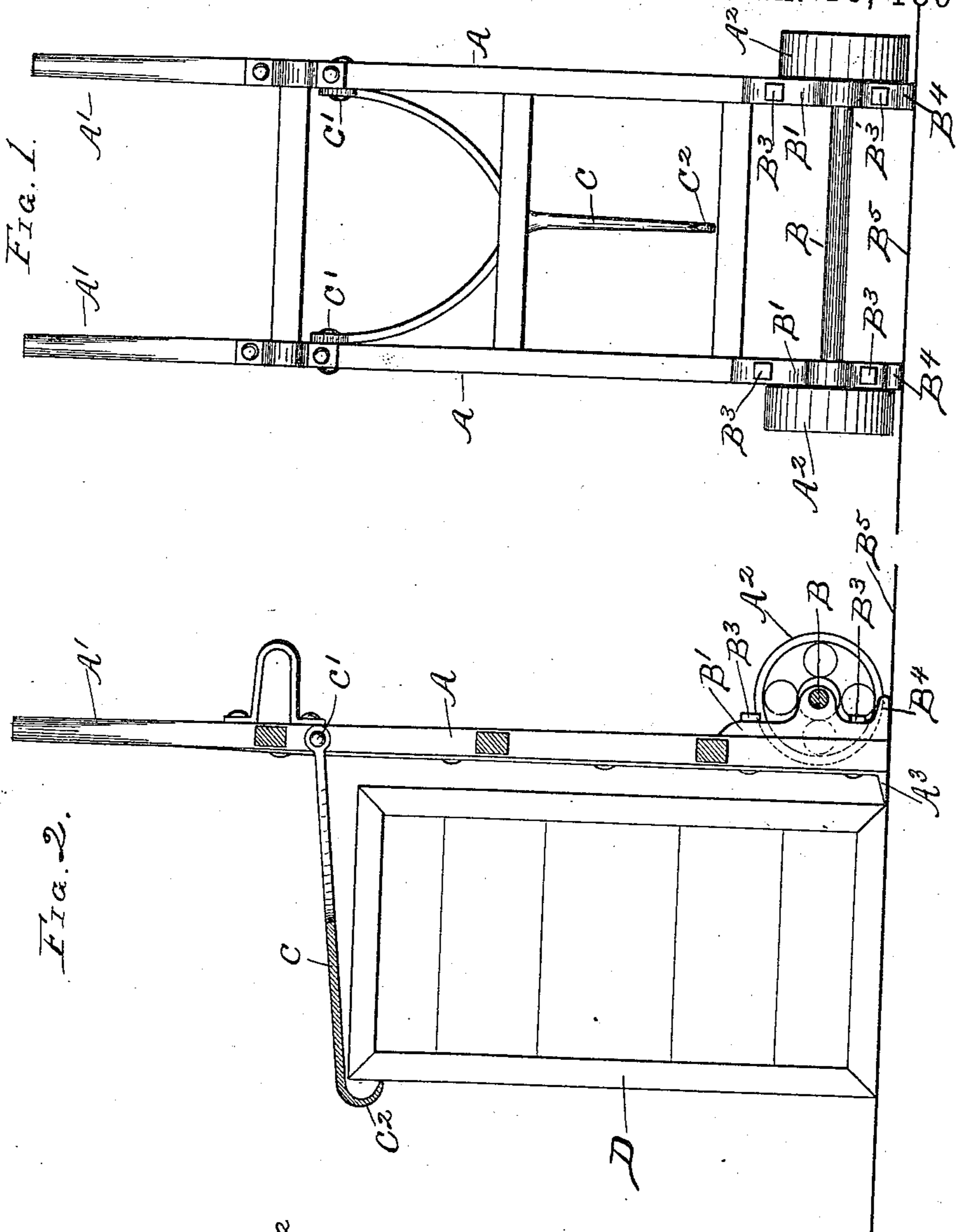


(No Model.)

H. E. SPAULDING.
HAND TRUCK.

No. 512,915.

Patented Jan. 16, 1894.



Witnesses:
H. E. Delaney
Geo. Gibson

Inventor:
Harlow E. Spaulding
by Mosher & Curtis
attys.

UNITED STATES PATENT OFFICE.

HARLOW E. SPAULDING, OF SARATOGA SPRINGS, NEW YORK, ASSIGNOR TO
SIDNEY A. RICKARD, OF SAME PLACE.

HAND-TRUCK.

SPECIFICATION forming part of Letters Patent No. 512,915, dated January 16, 1894.

Application filed September 21, 1893. Serial No. 486,063. (No model.)

To all whom it may concern:

Be it known that I, HARLOW E. SPAULDING, a citizen of the United States, residing at Saratoga Springs, county of Saratoga, and State of New York, have invented certain new and useful Improvements in Hand-Trucks, of which the following is a specification.

My invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a rear elevation of my improved hand-truck with the handles and body-part in an approximately vertical position. Fig. 2 is a central vertical cross-section of the same in the position shown in Fig. 1, except that the truck-hook is shown in engagement with a box in position to be loaded upon the truck. Fig. 3 is an isometrical perspective view of a casting comprising the axle and supporting brackets.

The body-part, A—, handles A'—, wheels A²— and spurs A³— may be of any known form.

The axle B— which supports the wheels is cast integral with the supporting brackets B'— which are provided with the bolt-holes B²—adapted to receive the bolts B³— by which the brackets are secured to the body-part of the truck, as shown. The lower end of each bracket is provided with a fulcrum-foot B⁴— which projects from the body part of the truck. Assuming that the parts occupy the position shown in Figs. 1 and 2, in which the body part of the truck stands vertically with the handles uppermost, the fulcrum-foot B⁴— on the lower end of each bracket projects horizontally from the body-part of the truck approximately to the vertical plane which passes through the axial line of the wheels, and a short distance below the wheels so that the feet rest on the floor B⁵— and support the truck with its wheels a short distance above the floor.

The handle end of the body of the truck is provided with a grappling-hook C— pivoted

at C'— upon the body-part and having its hooked end C²— adapted to swing out over a box D— or other object, to be loaded upon the truck. To load a box or other article, the truck is pushed up to one side of the article and the handles are thrown up to a vertical position, or until the hook can be made to grapple the article. Such movement throws the truck off from its wheels and causes it to stand upon the fulcrum-feet, as shown in Fig. 2. The spurs A³— engage the lower part of the box and the hook is then brought into engagement with the upper part of the box as shown in Fig. 2. If the spurs A³— are not quite in engagement with the box when the box is hooked, a horizontal pull upon the handles will force the spurs against the box and swing the box over onto the truck. If the wheels rested upon the floor, the box could not be swung upon the truck by horizontally pulling upon the handles, because the wheels would only afford an unstable fulcrum or prop which would recede as soon as the box was lifted from the floor and before it could be swung over onto the truck. The feet resting upon the floor and sustaining the weight of the box until the box is swung to a position where its center of gravity is over the truck, form a stable fulcrum for tipping the box and swinging it over onto the truck. As the box is swung onto the truck, the handles and truck-frame assume an inclined position which brings the wheels into engagement with the floor and swings the feet up off from the floor, whereupon the loaded truck can be freely moved upon its wheels in the usual manner. By having the fulcrum-feet rigid upon the truck-frame, they are always in place and ready for use and cannot get out of order.

I am aware that it has been proposed to use fulcrum-feet pivoted upon the truck-frame, but such a form of construction is expensive, uncertain of operation and easily disorganized.

By casting the axle for the wheels, the fulcrum-feet and the supporting brackets all in one piece of metal, I am able to provide a new article of manufacture for trucks that combines cheapness, stability and strength. The wheels fit loosely and turn on the journals B⁶—. The feet can be made short and ar-

ranged to engage the floor at a short distance from the box, thereby securing an advantageous leverage which enables the operator to easily and quickly load a heavy box or other article unaided.

I am aware that it has been proposed to extend the body-part of a common truck forwardly of the wheels to form fulcrum points whereby the load may be tipped or swung well over the wheels without lifting the load from the floor, and while the wheels are supported above the floor by such points; but such a form of construction precludes the common method of supporting a truck when not in use, that is upon the wheels and forward end with the body in an approximately vertical position. In a crowded store-house, floor-space is valuable and a vertically supported truck not only occupies a comparatively small space, but the elevated handles are within easy reach.

In my improved truck, the fulcrum-feet project downwardly from the body-part in a plane at right angles to such part and forwardly of the wheels, while the spurs project upwardly from the body approximately in the same plane, thereby affording a base extending the length of the spurs and feet for supporting the truck in a vertical position, as shown in Fig. 2.

It is obvious from an inspection of such figure that the feet would alone suffice to support the truck in such vertical position independently of the spurs, but the spurs serve to extend the base when located in the same plane with the feet.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a hand-truck, the combination with a body-part having at its forward end a transverse supporting base, projecting downwardly in front of the wheels, of a grappling-hook secured to the body-part, and a pair of spurs projecting upwardly from the body-part, substantially as described.

2. In a hand-truck, the combination with the truck-body and a grappling-hook secured thereon, of fulcrum-feet projecting downwardly from the body and forwardly of the wheels, and a pair of spurs projecting oppositely to the feet, the plane of the feet and spurs being approximately at right angles to the body, substantially as described.

In testimony whereof I have hereunto set my hand this 15th day of September, 1893.

HARLOW E. SPAULDING.

Witnesses:

JOHN H. BENEDICT,
AMOS H. BROWNER.