

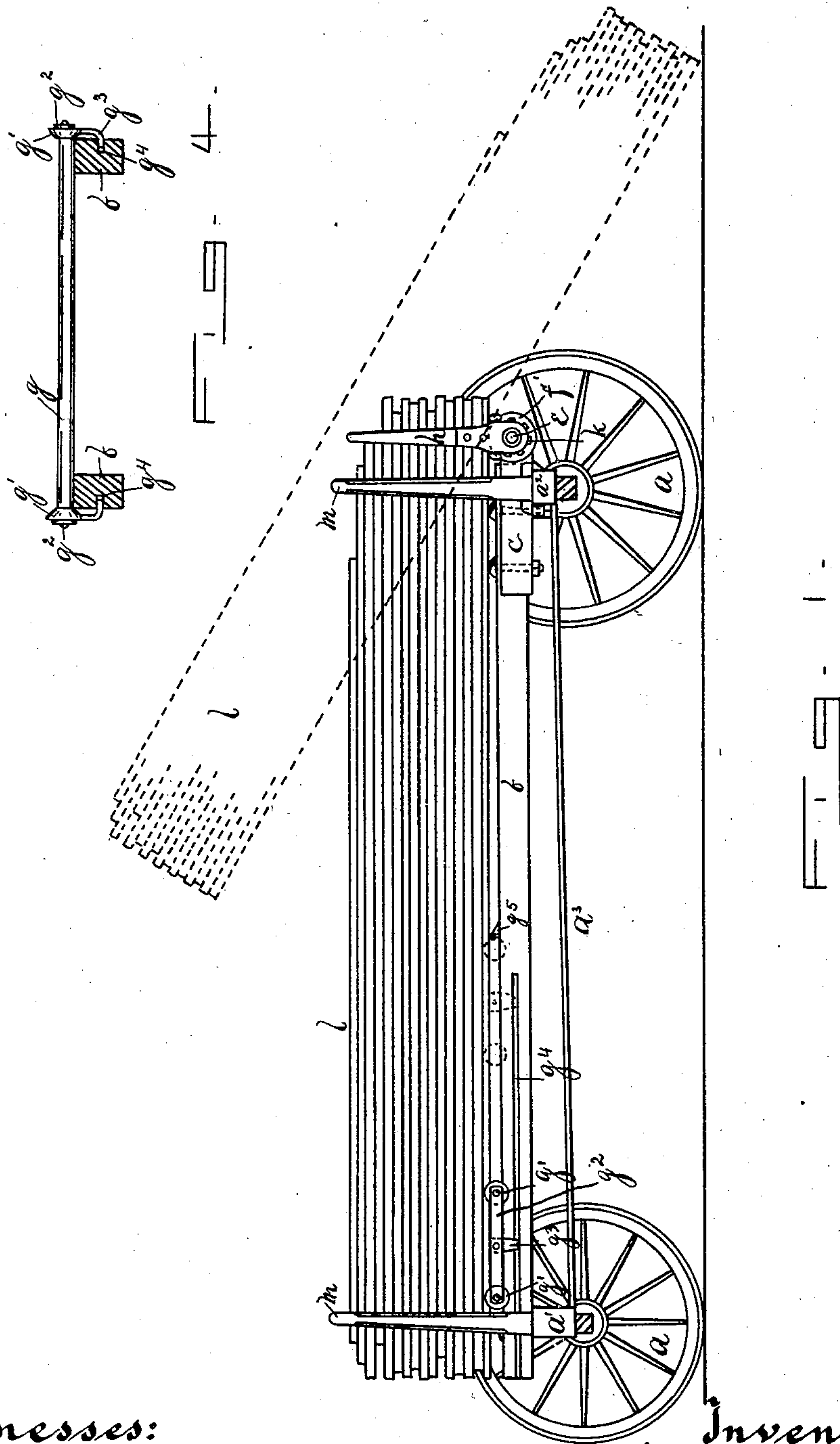
(No Model.)

2 Sheets—Sheet 1.

J. M. BLAKE.
LUMBER WAGON.

No. 365,569.

Patented June 28, 1887.



Witnesses:

Otto Hoddick

Albert C. Schaaf

Inventor.

By Joseph M. Blake

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Attorney.

(No Model.)

2 Sheets—Sheet 2.

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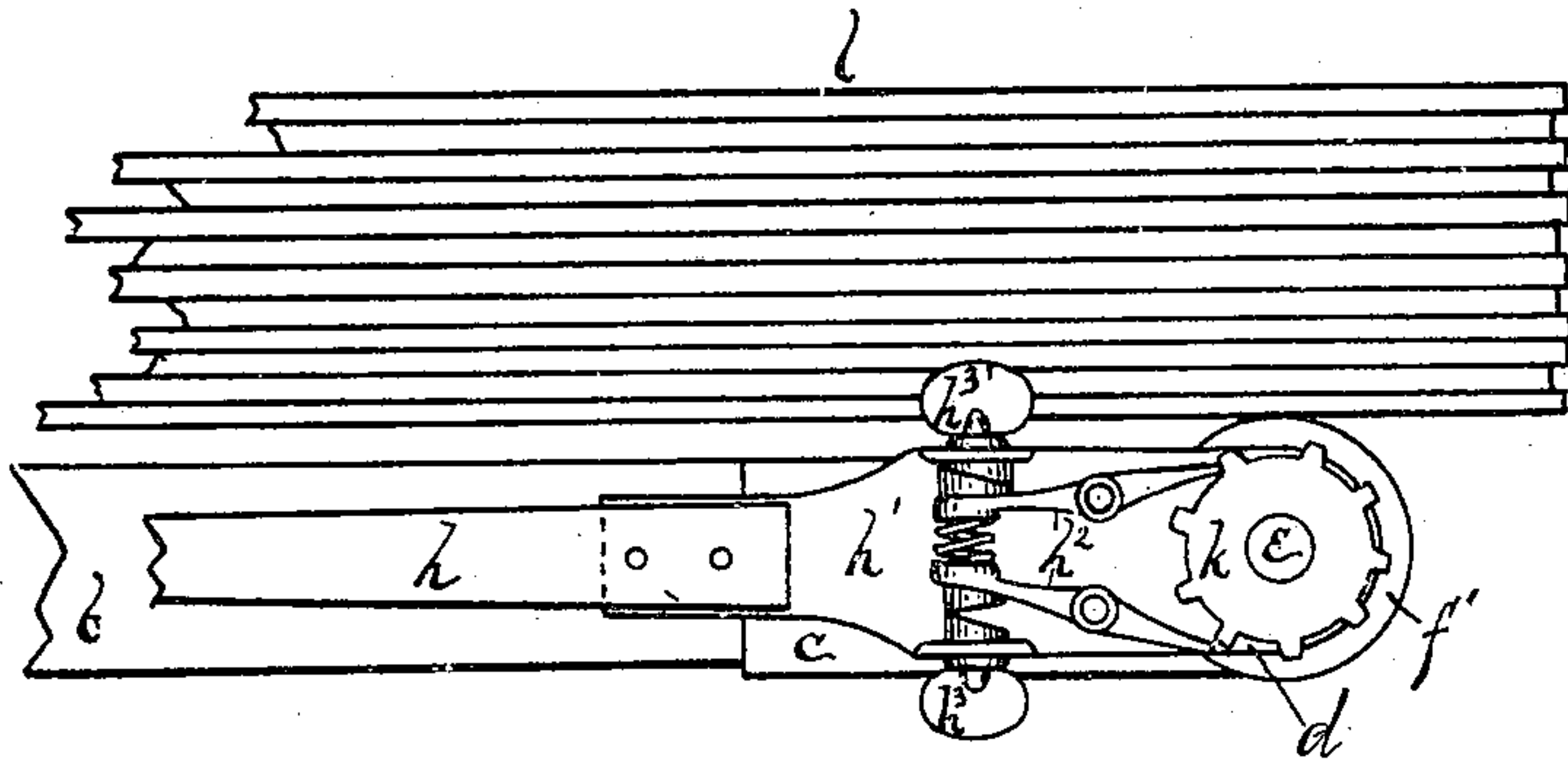


Fig. 3.

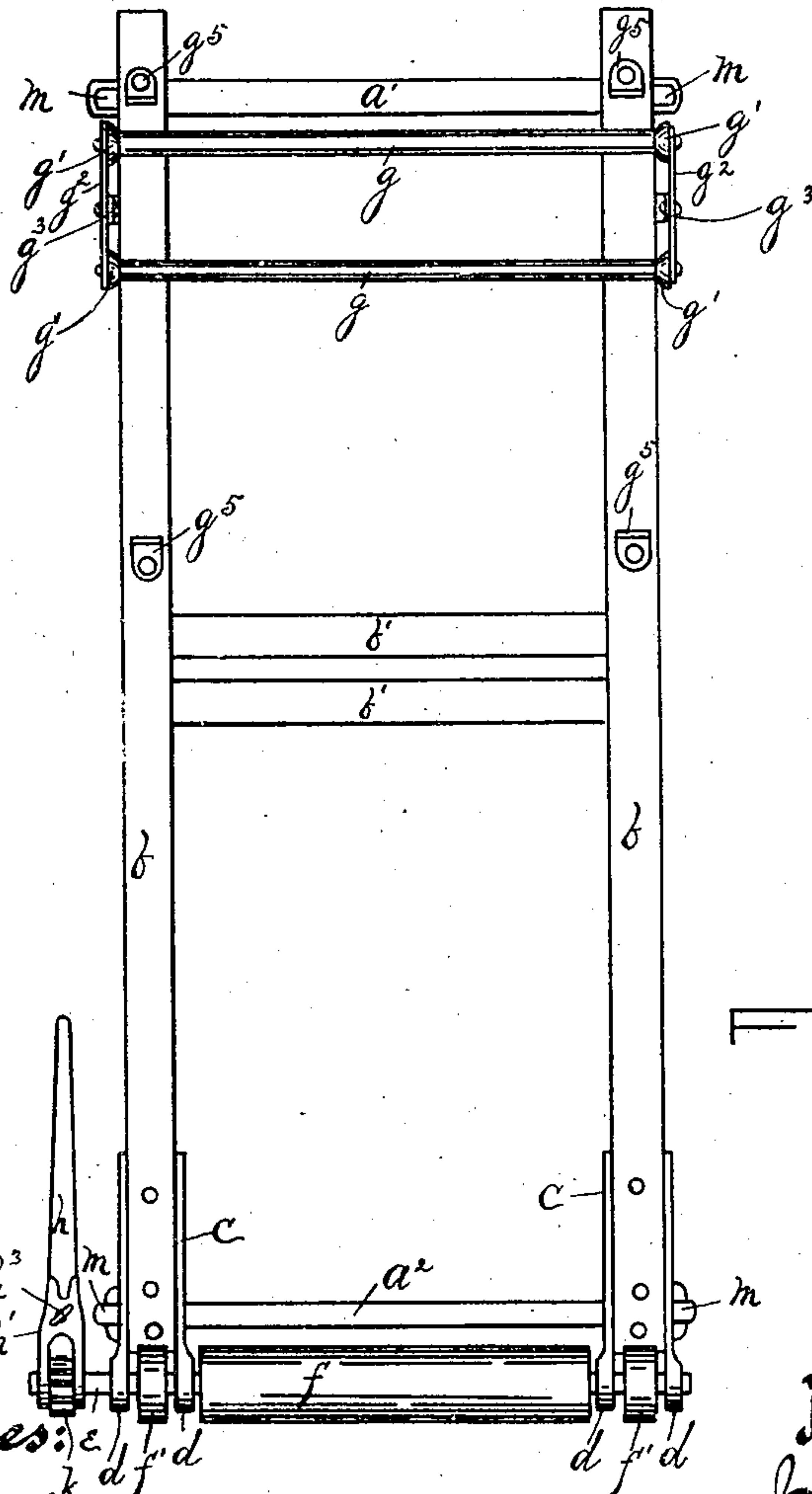


Fig. 2.

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UNITED STATES PATENT OFFICE.

JOSEPH M. BLAKE, OF BUFFALO, NEW YORK.

LUMBER-WAGON.

SPECIFICATION forming part of Letters Patent No. 365,569, dated June 28, 1887.

Application filed October 27, 1886. Serial No. 217,303. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH M. BLAKE, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Dumping-Wagons for Lumber; 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 to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates, particularly, to that class of dumping-wagons which are especially adapted for carrying lumber.

In my application, filed simultaneously with this, for a dumping-wagon for coal, &c., the serial number of which is 217,302, I have shown and claimed a frame adapted to be attached to the bolsters of a wagon and provided with special attachments adapted for operation with the box in the operation of dumping same. In my present application I employ, broadly, the same frame; but, as I do not employ a box, the operative parts attached to the frame are essentially different, and it is for these differences in construction and operation that I seek protection.

I will now proceed to describe the manner in which I have carried out my invention.

In the drawings, Figure 1 shows a side elevation of a lumber-wagon with my improved construction attached. Fig. 2 is a top plan view of the frame detached, and Figs. 3 and 4 are detached detail views.

Referring to the drawings, aa are the wheels, a' the front bolster, a^2 the rear bolster, and a^3 the reach, of a wagon of ordinary construction, to which my improved construction is to be applied. As in my other application above referred to, I employ a frame containing the operative parts, which frame is adapted to be directly applied to the front and rear bolsters, a' and a^2 , of the form of wagon shown, or any other well-known form. Of this frame, $b b$ are the side sills, and $b' b'$ cross-braces. The front ends of these sills are securely bolted to the front bolster, a' , and the rear ends of the sills are secured to the bearing-plates hav-

ing sides, open ends and top, and closed bottom. These bearing-plates $c c$, with their contained sills, are securely bolted to the rear bolster, a^2 . Projecting from these bearing-plates $c c$ are the journal-boxes $d d$, through which passes the shaft e , adapted to turn loosely therein. Upon this shaft e is the long central driving-roller, f , and the small side rollers, $f' f'$, rigidly secured to or integral with the shaft, the small rollers $f' f'$ being between the sides of the journal-boxes $d d$.

At the forward ends of the sills $b b$ are the two friction-rollers $g g$, extending entirely across the frame and having their ends flanged, as at g' . These friction or carrier rollers are kept apart and supported in their proper working position by the cross-pieces $g^2 g^2$, and arranged centrally upon these cross-pieces $g^2 g^2$ are the keepers $g^3 g^3$, extending downwardly and inwardly, their ends riding in the side grooves, $g^4 g^4$, in the outer faces of the sills. The stops $g^5 g^5$ upon the sills b limit the movement of the rollers $g g$.

Upon the outer end of the shaft e is arranged a double ratchet and pawl lever, similar to the one shown in my other application before referred to, which operates to turn the shaft e , and with it the rollers f and $f' f'$, in either direction. Of this lever, h is the handle secured to the casing h' , within which are the pivoted dogs or pawls $h^2 h^2$, having their inner ends adapted for engagement with the ratchet-wheel k , and having their outer ends provided with cam-faces for engagement with the cam-faces of the thumb-nuts $h^3 h^3$, which operate to throw the inner ends of the pawls in and out of engagement with the ratchet-wheel k , so that the shaft e can be turned in either direction or held rigidly by the handle h .

The operation of my improved apparatus just described is as follows: The lumber shown at l is piled upon the wagon so that it will lie at the forward end of the wagon upon the friction rods or rollers $g g$ and at its rear end upon the larger rollers, f and $f' f'$, the usual side stakes, m , keeping the load from falling off at the sides. When it is desired to dump the load, the double ratchet and pawl lever is adjusted as shown in Fig. 3, and by working the handle h up and down, the shaft e and its rollers are caused to turn in positive rotation.

As they turn, the lumber is moved backward by its friction thereon until it will tip by reason of its own gravity into the position shown in dotted lines in Fig. 1, and the wagon being
 5 pulled forward from under the tipped load such load falls to the ground. The forward friction-rollers, *g g*, operating with the rear moving rollers as explained, make it an easy and simple matter to rapidly move the load
 10 so that it can be dumped.

It will be remembered that while my improved lumber-dump herein described and my improved coal-dump described in the application before referred to are somewhat
 15 similar in certain particulars, notably in the operating-lever and the frame for attachment to the bolsters, and to a smaller degree in the forward friction devices, yet the differences in details of construction and operation
 20 adapt each form of dump for separate and independent functions.

I claim—

1. In a dumping-wagon for lumber, a frame adapted to be secured directly to the front and
 25 rear bolsters of the wagon, friction-rollers resting upon the top face of and extending transversely across the sills, and adapted to reciprocate therealong for the purpose of supporting the front of the load while at rest and during

its movements rearwardly, metal bearing-plates secured to and embracing the rear sides
 30 and bottom of the sills and extending rearwardly beyond the same, and forming journal boxes or bearings at a point rearwardly of the axle and between the rear ends of the sills, a
 35 shaft journaled within the rearwardly-extending ends of said side plates, one or more rollers mounted upon said shaft, and means, substantially as described, for rotating said shaft and roller.

2. In a dumping-wagon for lumber, a frame consisting of the side sills, *b b*, with suitable strengthening cross-pieces, such frame being adapted for direct attachment to the bolsters
 40 of the wagon, the friction-rollers *g g'*, with their guiding-frames *g² g³*, controlled in their movement by the grooves *g'* in the sills *b b*, and the rear moving rollers, *f* and *f' f'*, turned in bearings in the frame by the lever *h* to move
 50 the load of lumber backward, substantially as shown, and for the purpose stated.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH M. BLAKE.

Witnesses:

JAMES STEWART, Jr.,
 W. T. MILLER.