(No Model.)

B. SCHRODER.

DUMPING WAGON.

No. 413,566. Patented Oct. 22, 1889.

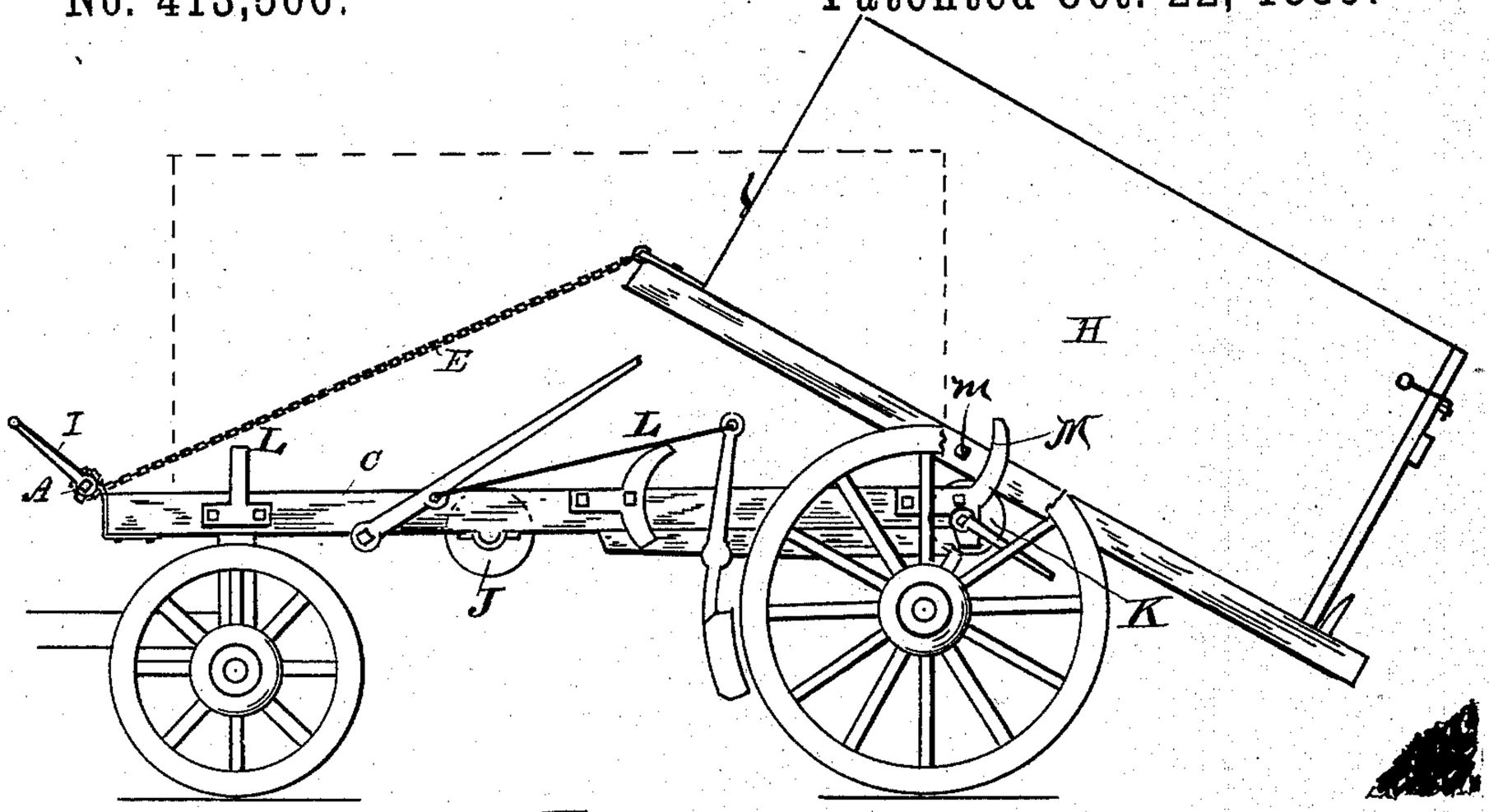

Fig. I.

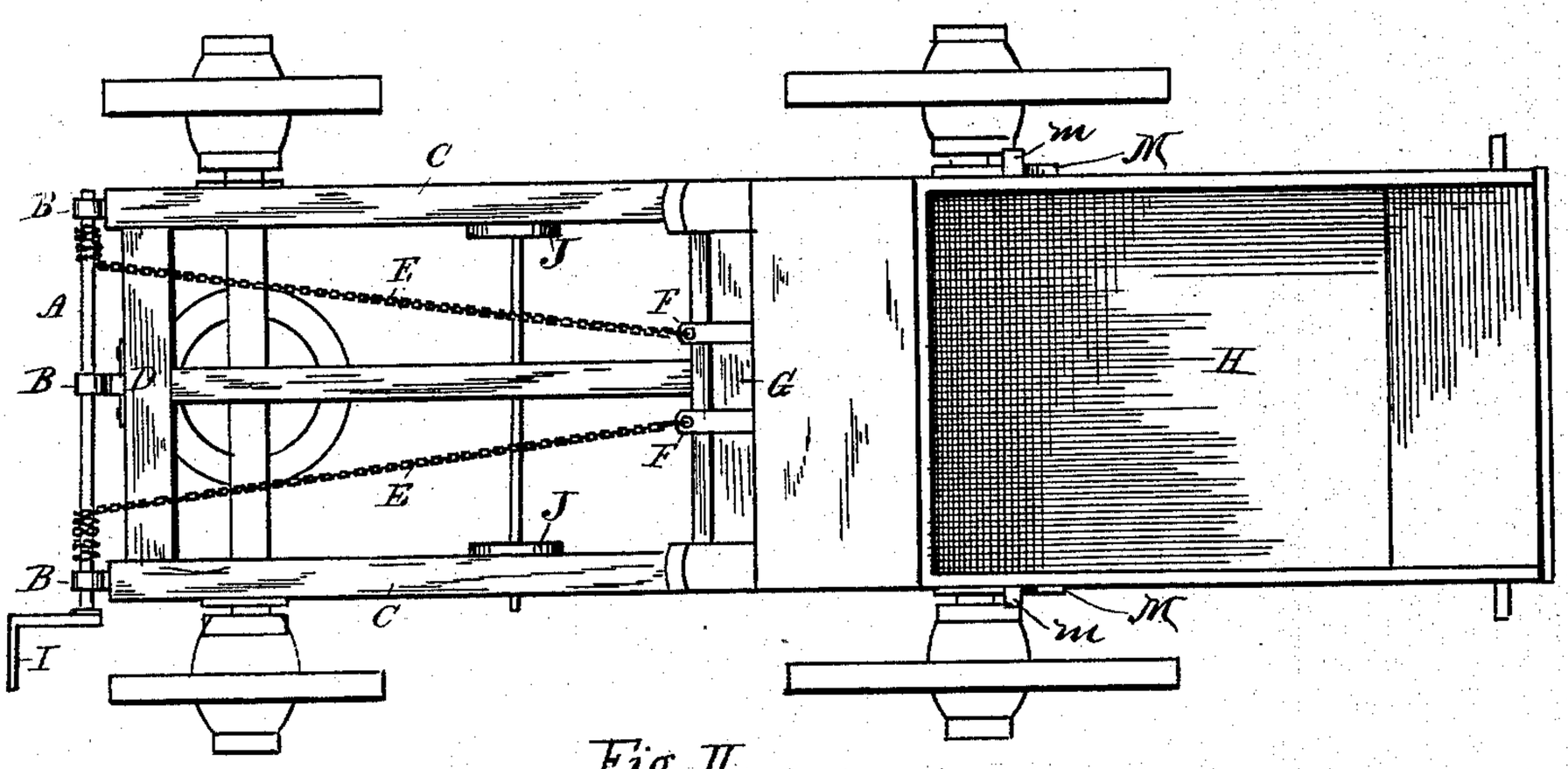

Fig. II.

WITNESSES:
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UNITED STATES PATENT OFFICE.

BERNARD SCHRODER, OF CINCINNATI, OHIO.

DUMPING WAGON.

SPECIFICATION forming part of Letters Patent No. 413,566, dated October 22, 1889.

Application filed June 22, 1889. Serial No. 315,158. (No model.)

To all whom it may concern:

Be it known that I, BERNARD SCHRODER, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Dumping Wagons, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure I is a side elevation of my improved dumping wagon, and Fig. II a top or plan view of the same.

My invention relates to improvements in dumping wagons and carts; and its object is to provide a simple, inexpensive and efficient device whereby the sliding box of a wagon, after discharging its load, may be easily raised and replaced on the platform.

My improvement is especially adaptable to wagons designed for carrying coal and similar freight. Being made suitably strong and substantial, they are consequently heavy and difficult to handle by the methods hitherto employed for the purpose.

The utility of my invention will be acknowledged by all who are familiar with the fact that when the ordinary appliances are used the tail-board of the wagon, by reason of its additional weight, is not replaced immediately after the load is dumped, but remains unattached until the box or body of the wagon is restored to its place on the platform. It must then be lifted and attached by hand—an operation which overtaxes the ability of any but an exceptionally strong man.

By the aid of my device the tail-board is attached before the rear end of the box is raised from the ground, and the extra labor is avoided.

Referring to the accompanying drawings, A designates a transverse shaft journaled in brackets B, which are securely bolted to the front ends of the side rails C and also to the front cross-beam D of the platform or bed-frame of the wagon. The forward ends of two chains E are attached to the shaft and extend convergently and rearwardly to eye-plates F, which are bolted to the front bar G of the sliding box H.

The object of employing two chains, attached as described, will be apparent. If but one were used, the line of draft would necessarily vary as the chain is wound on the shaft, and the box would be drawn more and more sidewise at every revolution of the crank and possibly become locked between the side rails of the platform. In this device the chains are of equal length, and when the shaft is turned the successive coils of the chains approach each other. The line of draft is thus made direct and cannot tend to either side. The shaft is operated by a crank I, which may be detached when not in use and hung in a convenient position in front of the box.

J J and K K are anti-friction wheels turning with shafts that are journaled in bearings secured to the side rails C and into the upper parts of their peripheries, about flush with the upper side of said rails, and serving to facilitate the motion of the sliding box H.

L L are guard-arms secured to the side rails and preventing the box from shifting laterally when in place.

M are curved arms that project upward from the rear ends of the side rails to engage against the lateral studs *m* on the box and prevent the latter from slipping off the body. The upper parts of the peripheries of the anti-friction wheels are about flush with the upper sides of the rails C.

The various advantages of this device are obvious. It will be observed that it is complete in itself and may be readily applied to dumping wagons made in the ordinary form.

Any desired method of shifting the box into the dumping position may be used.

What I claim as new is—

The combination, with the bed-frame of a dumping wagon having the guard-arms L and the rear curved arms M secured to its side rails, the anti-friction wheels J K, turning with transverse shafts journaled in bearings secured to the side rails and with the upper parts of their peripheries about flush with the upper sides of said rails, and the shaft A, journaled in bearings secured to the front of the wagon-body, of the sliding box

having lateral studs *m* and the eye-plates F, secured at the front of the box at equal distances from the sides of the body, and the rearward converging chains E, of equal length, secured at their rear ends to said eye-plates and with their front ends secured to the shaft A at equal distances from the center thereof, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand, this 15th day of June, 1889, in the presence of witnesses

BERNARD SCHRODER.

Witnesses:
PAUL WAGNER,
R. S. MILLAI.