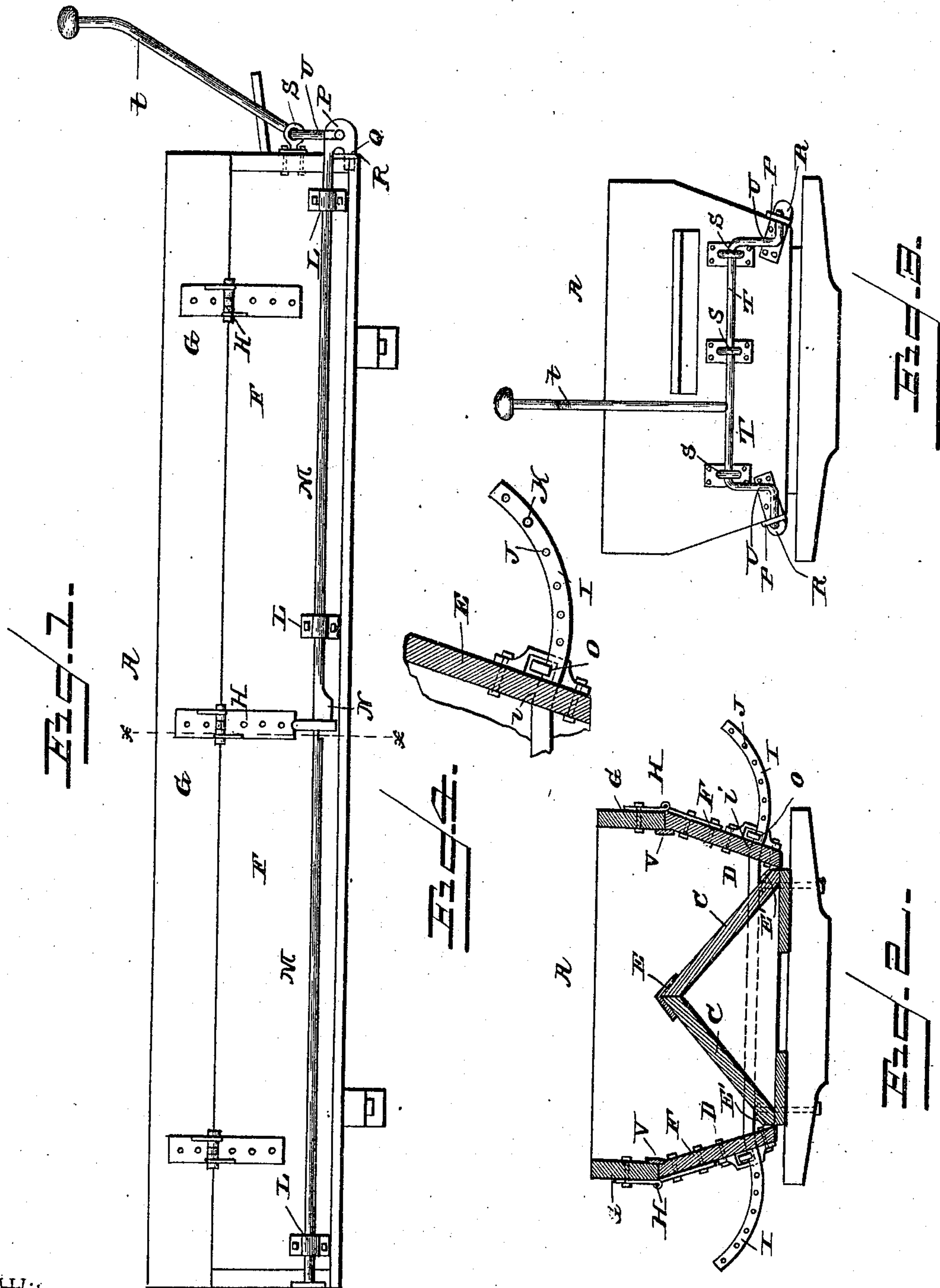


(No Model.)

F. BOUKER.
DUMPING WAGON.

No. 502,698.

Patented Aug. 8, 1893.



Witnesses

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UNITED STATES PATENT OFFICE.

FRANKLIN BOUKER, OF FAR ROCKAWAY, NEW YORK.

DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 502,698, dated August 8, 1893.

Application filed March 9, 1893. Serial No. 465,288. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN BOUKER, a citizen of the United States, residing at Far Rockaway, in the county of Queens and State of New York, have invented a new and useful Dumping-Wagon, of which the following is a specification.

This invention relates to dumping wagons; and it has for its object to provide certain improvements in self-dumping wagons whereby the same will be rendered especially useful for carrying and dumping stone, dirt, coal, sand and any other material which it is desirable to conveniently dump from a wagon.

To this end the main and primary object of the invention is to provide an improved construction of wagon body whereby the contents thereof can be quickly and easily dumped, and also dumped in any quantities desired.

With these and many other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a side elevation of a dumping wagon body constructed in accordance with this invention. Fig. 2 is a central transverse sectional view on the line $x-x$ of Fig. 1. Fig. 3 is a front end view of the wagon body. Fig. 4 is an enlarged detail sectional view at one side of one of the curved guide arms.

Referring to the accompanying drawings:—A represents a wagon body supported on the ordinary transverse bolsters B attached to the wheel axles which support and carry said body, such wheel axles not being shown.

The wagon body A, is provided with the opposite declining or downwardly diverging bottom portions C, which meet in an apex at the center of the body within the same, and slope to the opposite bottom edges thereof, forming slides down which the material carried by the wagon body will quickly discharge through the side openings D, when uncovered. The upper meeting edges of the bottom portions C, are capped by the angular wear plate E, while their lower bottom edges over which the material falls, are also protected by corresponding longitudinal metallic wear strips or

plates E', the utility of which will be readily apparent. The opposite side openings D, which are formed in the opposite sides of the wagon body above the outer lower edges of the inclines C, are normally inclosed by the longitudinal spring closed side doors F. The spring closed side doors F, are hinged at their upper edges to the lower edges of the wagon sides G, on the spring hinges H, the tension of which hinges is to normally hold the doors closed over the openings D, with their lower edges bearing against the lower outer edges of the inclines C. The said doors when relieved from their fastenings, will of course under the weight of the material in the wagon readily open or swing out, so as to allow the contents of the wagon to be dumped, and in their outward swing are guided over the off-standing curved guide arms I. The off-standing curved guide arms I, are secured fast at their inner ends to the inclines or bottom portions C, and project through perforations i , in the side doors at a central point near their lower edges. The said guide arms are further provided with a series of perforations J, which are adapted to receive the limiting pins K, which may be set in any one of the series of perforations, in order to limit the opening of the doors, and therefore limit the quantity of material discharged from both sides of the wagon body.

Secured to the outer sides of the opposite side doors F, near their lower edges is an aligned series of guide brackets L, through which are arranged to slide the opposite longitudinal locking bars M. The opposite longitudinal slide locking bars which are thus mounted to slide on the side doors near their front lower edges, are provided at an intermediate point with the locking lugs N, which stand off from the body thereof and which are adapted to be thrown in and out of engagement with the locking notches O, which are cut in the guide arms I, so that the said lugs can only engage and disengage the same when the side doors are closed. The front ends of the opposite slide bars M, are perforated as at P, and are further provided at such ends with the intumed locking tongues Q, which are adapted to be thrown in and out of engagement with the catch plate R, at one end of the wagon body, simultaneous with

the engagement and disengagement of the locking lugs with the guide arm notches.

Arranged at one end of the wagon body is a series of bearing eyes S, in which is journaled a horizontal rock shaft T. The horizontal rock shaft T, is provided with an upwardly extending handle lever *t*, arranged convenient to the driver and with the opposite crank ends U, which when the side doors are closed, are adapted to project through the perforations P, at one end of the lock bars M. Having first adjusted the pins K, to limit the outward swing of the side doors, it is only necessary for the driver to draw or pull the handle lever T, toward him. This motion simultaneously draws the locking lugs N, out of engagement with the arms I, and the tongues Q, out of the catch plates R. This leaves the side doors free to be swung out by the weight of the material sliding down the inclines C. After the wagon has been relieved of its load, the spring hinges H, throw the opposite swinging side doors back into their closed positions, at the same time returning the perforated ends of the lock bars into engagement with the crank ends U, of the rock shaft T. By moving the lever *t*, away from the end of the wagon body, the slide lock bars are shoved back into their locked position to hold the side doors locked as will be readily apparent.

It may be noted that the inside joint of the swinging side doors F, with the body sides G, is shielded by the wear plate V, which serves the same function as the other plates hereinbefore referred to.

Changes in the form, proportion and the minor details of construction as embraced within the scope of the appended claims may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a dumping wagon, the wagon body having opposite bottom inclines and side openings, swinging spring-closed doors arranged to normally inclose said side openings, and locking devices for said doors, substantially as set forth.

2. The combination of a wagon body having opposite diverging bottom inclines, and side openings, an angular wear plate capping the meeting edges of said inclines, corresponding wear strips or plates at the lower bottom edges of said inclines, stationary guides arranged at opposite sides of the body, spring closed doors arranged to move over said guides and to inclose said openings, and locking devices for said doors, substantially as set forth.

3. A wagon body having opposite longitudinal side openings, off-standing curved guide arms projecting outwardly from oppo-

site bottom sides of the body, and opposite swinging spring closed side doors arranged to work over said guide arms, substantially as set forth.

4. In a dumping wagon, the wagon body having opposite side openings, opposite off-standing curved guide arms having a series of perforations therein, opposite longitudinal side doors hinged at their upper edges on spring hinges to the bottom edges of the body sides and normally closed by said hinges, said doors having perforations embracing the guide arms over which they swing, limiting pins adapted to be inserted in the perforations of said guide arms, and locking devices for said doors, substantially as set forth.

5. In a dumping wagon, the combination of the body having opposite side openings, opposite off-standing curved guide arms having locking notches in their upper edges and adjustable limiting pins, opposite swinging spring-closed side doors inclosing the opposite side openings of the body and having perforations loosely embracing the curved guide arms over which they swing, a series of aligned guide brackets attached to the doors, opposite longitudinal sliding locking bars moving in said guide brackets and having intermediate locking lugs adapted to engage and disengage the locking notches in said guide arms, and a locking device for one end of said locking bars, substantially as set forth.

6. In a dumping wagon, the combination of the opposite off-standing guide arms having locking notches, the swinging side doors arranged to swing over said arms and carrying a series of guide brackets, a catch plate arranged at one end of the wagon body, and opposite longitudinal sliding locking bars having intermediate locking lugs and end inturned locking tongues adapted to engage and disengage the notch in said guide arms and said locking plates respectively, substantially as set forth.

7. In a dumping wagon, the combination of the opposite swinging side doors carrying guide brackets, opposite longitudinally sliding locking bars arranged to move in said brackets and having suitable locking devices and perforations at one end, and a suitably journaled rock shaft arranged at one end of the wagon body and having an upwardly extending handle lever and opposite crank ends adapted to engage the perforated ends of said locking bars when the side doors are closed, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANKLIN BOUKER.

Witnesses:

CHARLES A. SCHILLING,
DEWITT C. BOUKER.