

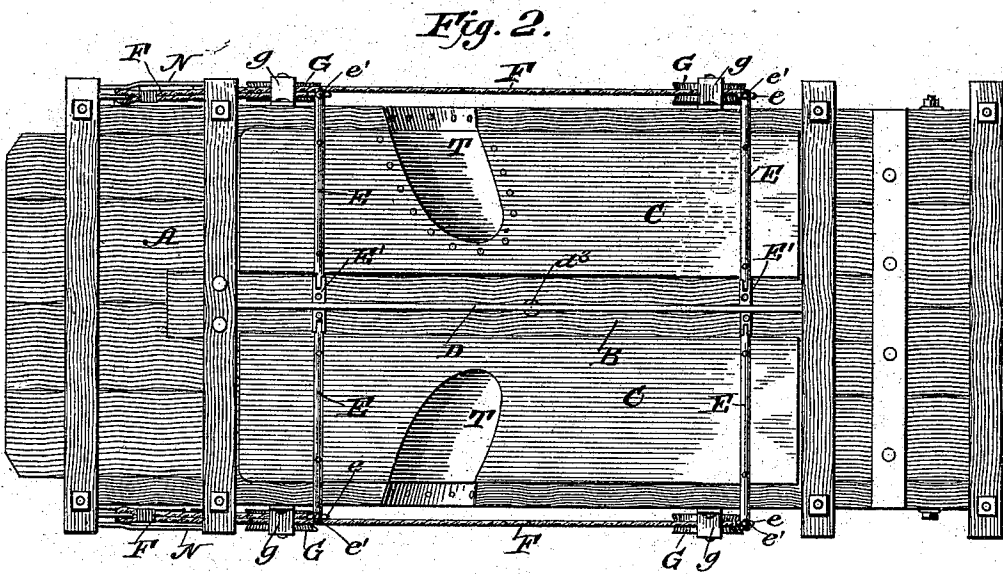
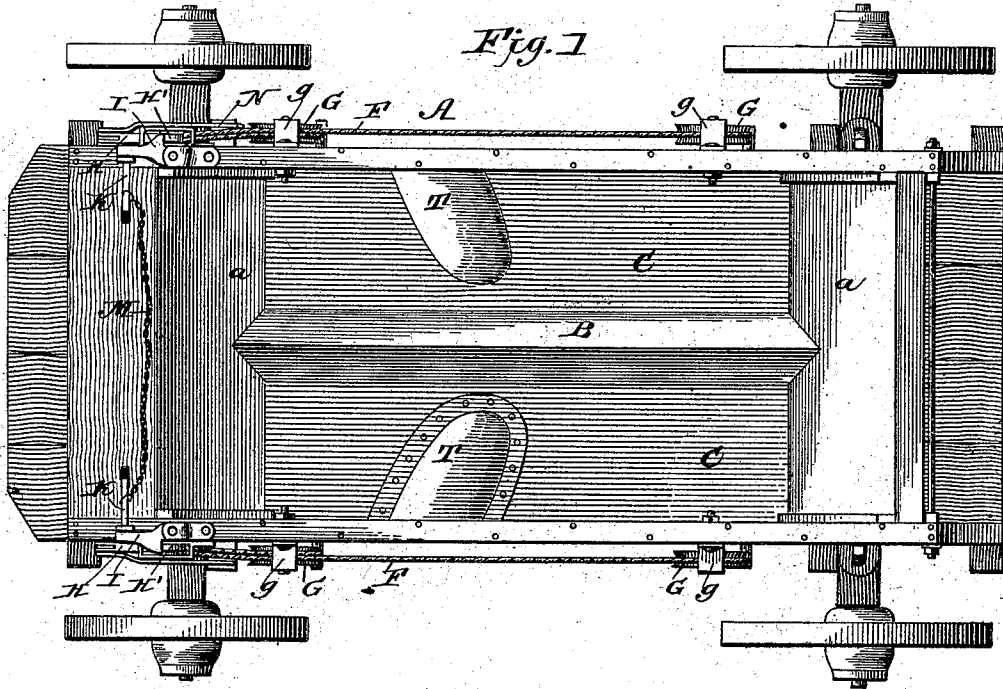
(No Model.)

2 Sheets—Sheet 1.

W. H. KAUFMAN.
DUMPING WAGON.

No. 550,621.

Patented Dec. 3, 1895.



WITNESSES:

W. S. Blodgett
Chas. Brock

INVENTOR

W. H. Kaufman

BY

R. A. Lacey
ATTORNEYS

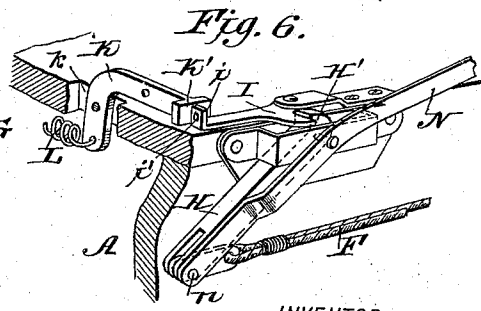
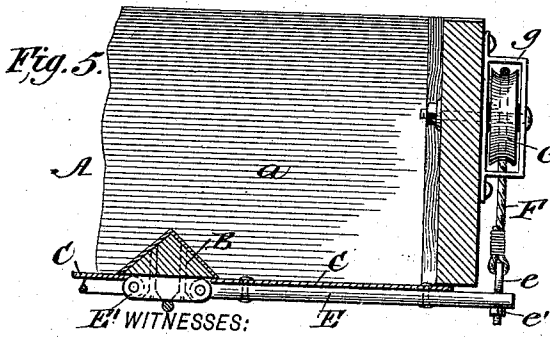
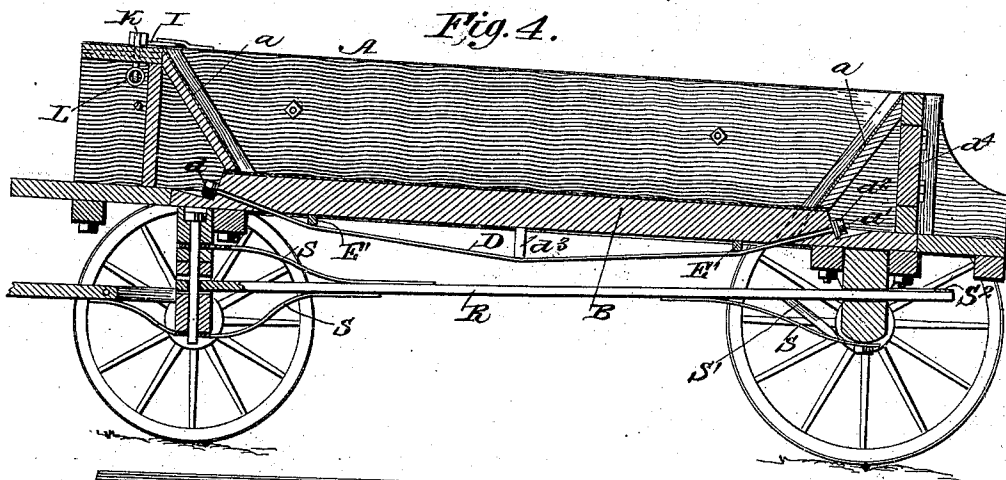
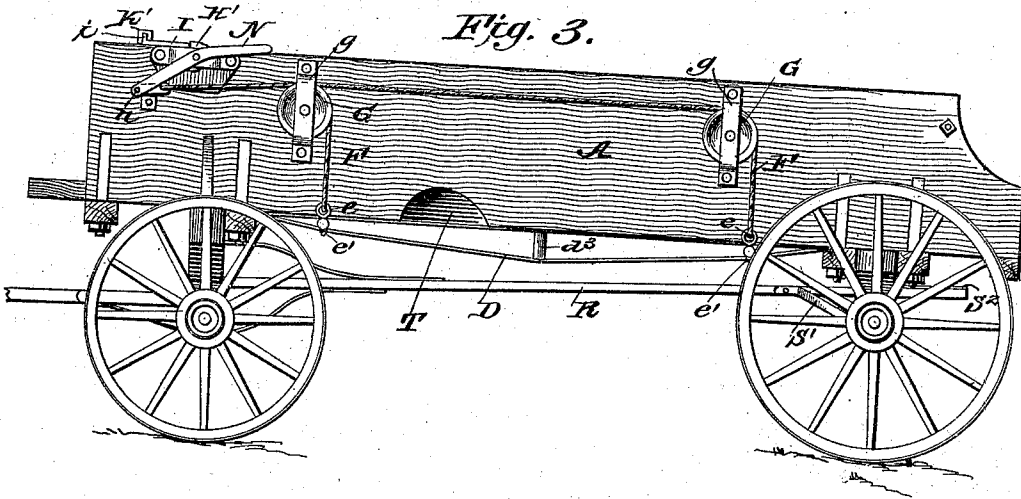
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UNITED STATES PATENT OFFICE.

WILLIAM H. KAUFMAN, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-HALF TO
M. SPELLACY, OF SAME PLACE.

DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 550,621, dated December 3, 1895.

Application filed March 1, 1895. Serial No. 540,250. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. KAUFMAN, a citizen of the United States, residing at Columbus, in the county of Franklin, State of Ohio, have invented certain new and useful Improvements in Dumping-Wagons; 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.

This invention is an improved dumping-wagon, and pertains to the construction and arrangement of all the parts, including the running-gear.

The object of my invention is to provide in combination an improved means for raising and lowering the dumping-section and the means for holding said sections locked in a raised position; and with this object in view my invention consists in the peculiar construction of the various parts and their novel combination or arrangement, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings hereto annexed and constituting a part of this specification, Figure 1 is a top plan view of my improved wagon. Fig. 2 is a bottom plan view. Fig. 3 is a side view of the body and its various attachments, and Fig. 4 is a vertical longitudinal section of the wagon and its running-gear. Fig. 5 is a cross-sectional view showing the connection of rod and casting, and also the adjustable screw eyes and nut. Fig. 6 is a detail view of the lever, catch, and spring-actuated locking-lever for holding said catch into engagement with the pawl-lever.

In constructing a dumping-wagon according to my invention I provide a body A, rectangular in shape, and having sloping ends *a*, preferably covered with sheet metal. The bottom of the body is made with an opening between the bolsters of the running-gear and is provided with central longitudinal beam B, to the under side of which the dumping-bottom sections C C are hinged. This beam B is ridged upon its upper face and covered with sheet metal for protection; and in order to brace the beam and wagon-body I provide a truss-rod D, having a head *d* at one end and a thread *d'* at the other, adapted to re-

ceive an adjustable tension-nut *d*². The ends of the truss-bar extend upward through the beam and end of body, and between the rod and beam is arranged a bridge-piece *d*³. In order to tighten the rod the tension-nut is turned, drawing the rod up and bracing the beam and wagon-body from end to end, access being had to the nut through a door *d*⁴, provided at the rear end of the body. This door opens into a chest between the inclined and vertical end pieces of the body and in which a wrench and other tools may be carried.

The bottom sections C C are supported upon the iron bars E E, to which said sections are connected, said bars being hinged or pivotally connected at the inner ends to a casting-piece E' E', bolted to the bottom of the beam, as clearly shown. The truss-rod also passes beneath these pieces and aids in holding them against displacement. The outer ends of these bars E E are connected with cables F F by means of an adjustable screw-eye *e* and nut *e'*, the shank of the screw-eye passing through the end of the bar E and carrying the nut thereon below the bar. The cable is connected with the eye, the object in making said eye with a threaded shank being to permit a limited vertical adjustment to take up any slack that may occur in the cables, so that all of the parts will maintain their normal positions.

The cables F F pass over sheaves or pulleys G G, mounted in brackets *g g* upon the outside of the wagon-body, the forward ends of said cable being connected to the lower ends of the levers H H, pivoted upon the sides of the body near the forward end, said levers carrying each a pawl or dog H', which is adapted for engagement with a catch I, pivoted upon the top edges of the body, so that when said catch and pawl are in engagement the cable will be held in the foremost position and the bottom sections held closed. In order to hold the catch I in engagement with the pawl H', I provide the elbow-levers K K, which I pivot in openings K at each end of the seat and construct them with heads K' at their upper ends, which bear against the catches I, said levers being normally held in this position by means of a coiled spring

L, which connects the lower ends of said levers beneath the seat, the tendency of said spring being to throw the upper ends of the lever outward, thus throwing the catch I outward into engagement with the pawl H' of the levers H. A loose chain or cord M connects the upper ends of the levers K, so that by drawing upon the chain either or both levers can be pulled back against the tension of the spring, and as soon as the levers K are withdrawn the weight of the load will cause the bottom sections to drop, pulling the cables backward and likewise the lever H. The pawl H' is thus moved forward and the catch I thrown to one side, so that the bottom sections can drop the full length allowed by the cables, and the advantages of making the bottom in two longitudinal sections, which drop transversely, will be apparent to every one having knowledge of dumping-wagons. The ridged beam forms a division, divides the load, and prevents dirt clogging at the juncture of sections.

In order to raise the bottom sections to their closed positions, I employ the hand-levers N N, which are pivoted near the forward ends of the body, preferably upon the same bolts as the levers H, and the levers N are connected at their lower ends with their respective levers H, as shown at *n*, the upper end of said levers N projecting above the side of the body and so arranged that by throwing the hand-levers back the pawls of the levers H will be carried back, the cables drawn forward, and the bottom sections raised. The catches I are then thrown outward to engage the pawls H', and the levers K, dropping back of said catches, hold them in place and thus secure the bottom sections, the tension of the spring L being sufficient to prevent any disengagement being caused by the jarring of the wagon. The forward ends of the catch I are turned up, as shown at *i*, and perforated at *i'* for the insertion of a stick to facilitate adjusting said catch.

The running-gear for this improved dumping-wagon is very simple and so constructed as to be exceedingly durable and still not impede the discharge of the load. It therefore consists of the front and rear axletrees and bolsters, the front bolster being movable upon the king-bolt. A reach or pole R connects the front and rear axletrees, said reach being pivoted upon the king-bolt at its forward end and at its rear end passes between the axle-

tree and bolster. Strap-irons S are secured upon the top and bottom faces of the reach or pole and connect at the forward ends with the king-bolt, and at the rear ends with the axletree. Lateral brace-irons S' S' extend from the reach rearward to the under side of the axletree, and additional brace-irons S² S² extend from the end of reach forward to the rear bolster. By this construction a very simple form of gear is provided, and the strap-iron will prevent the rapid wearing of the same.

It is also desirable to make short turns with this class of wagons, and to accomplish this I construct the bottom with arched portions T, and cut away the side of the body at T' to permit the front wheels to pass beneath said body. When the bottom sections are made of sheet metal, as preferred, these arched portions T are struck up integral with said bottom; but when the bottom is made of wood, openings are made therein and a sheet-metal arched portion riveted thereon, as shown at one end in Fig. 1, said arched portions being provided with laterally-projecting flanges through which the rivets are driven. By means of these arched portions the front wheels are allowed to turn under the body of wagon without contact therewith, and thus enable the driver to make a short turn, which is a very desirable feature in this class of dump-wagons.

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

In a dumping wagon, the combination, with the body and dumping bottom sections, the ropes and levers for raising said sections said levers having each a dog or pawl, a catch pivoted to the top of body at each side and adapted to engage said dog or pawl on the levers, said catch having an upturned end, the elbow levers having heads at their upper ends to engage said upturned ends, the spring connecting the lower ends of said levers, and a rope or chain attached to the upper members for releasing the catch, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. KAUFMAN.

Witnesses:

E. BRAGUNIER,
C. M. MORROW.