(No Model.) 2 Sheets—Sheet 1.

G. HUEBNER.

ROAD GRAVELING AND GRADING MACHINE.

No. 466,465. Patented Jan. 5, 1892.

Fig 1

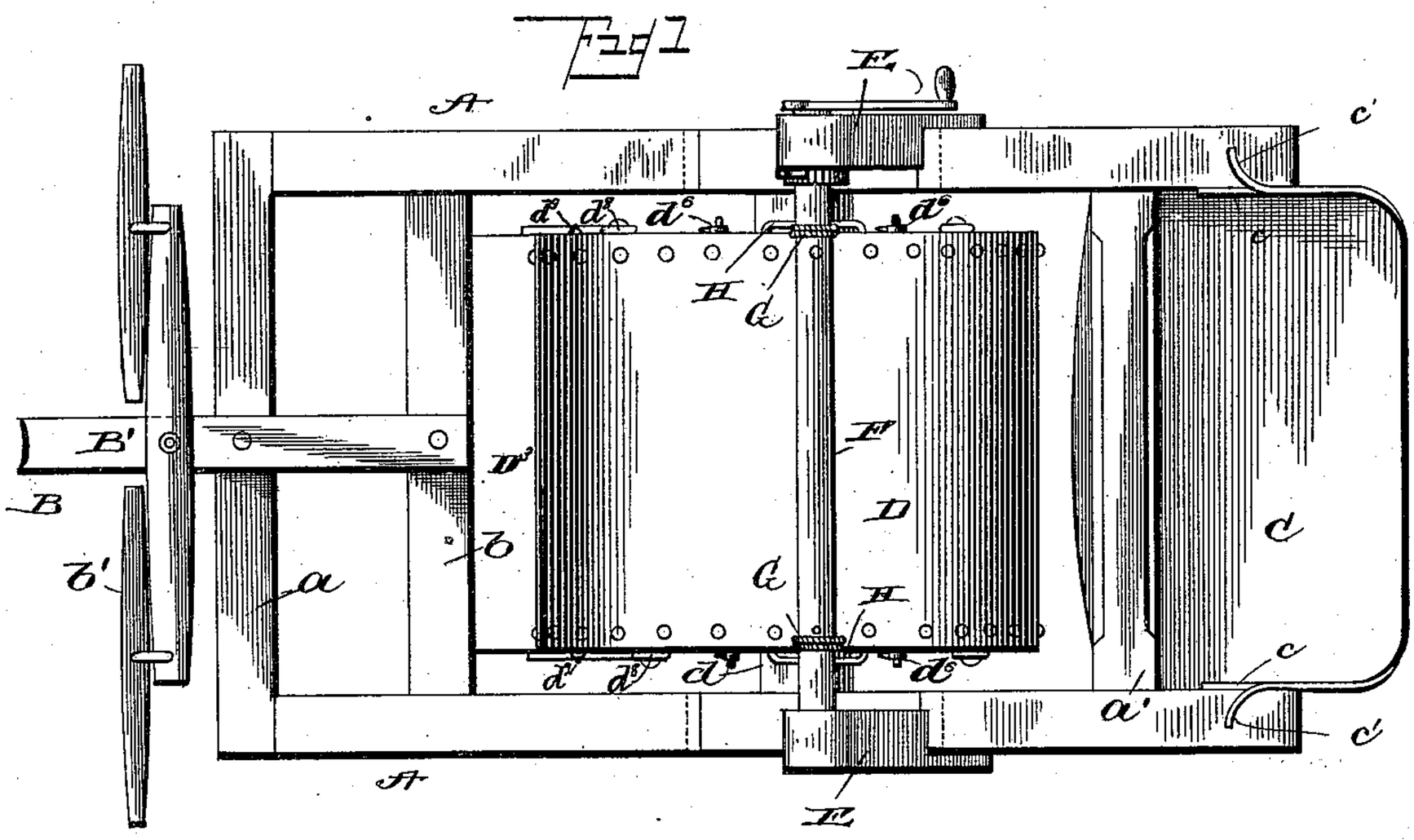
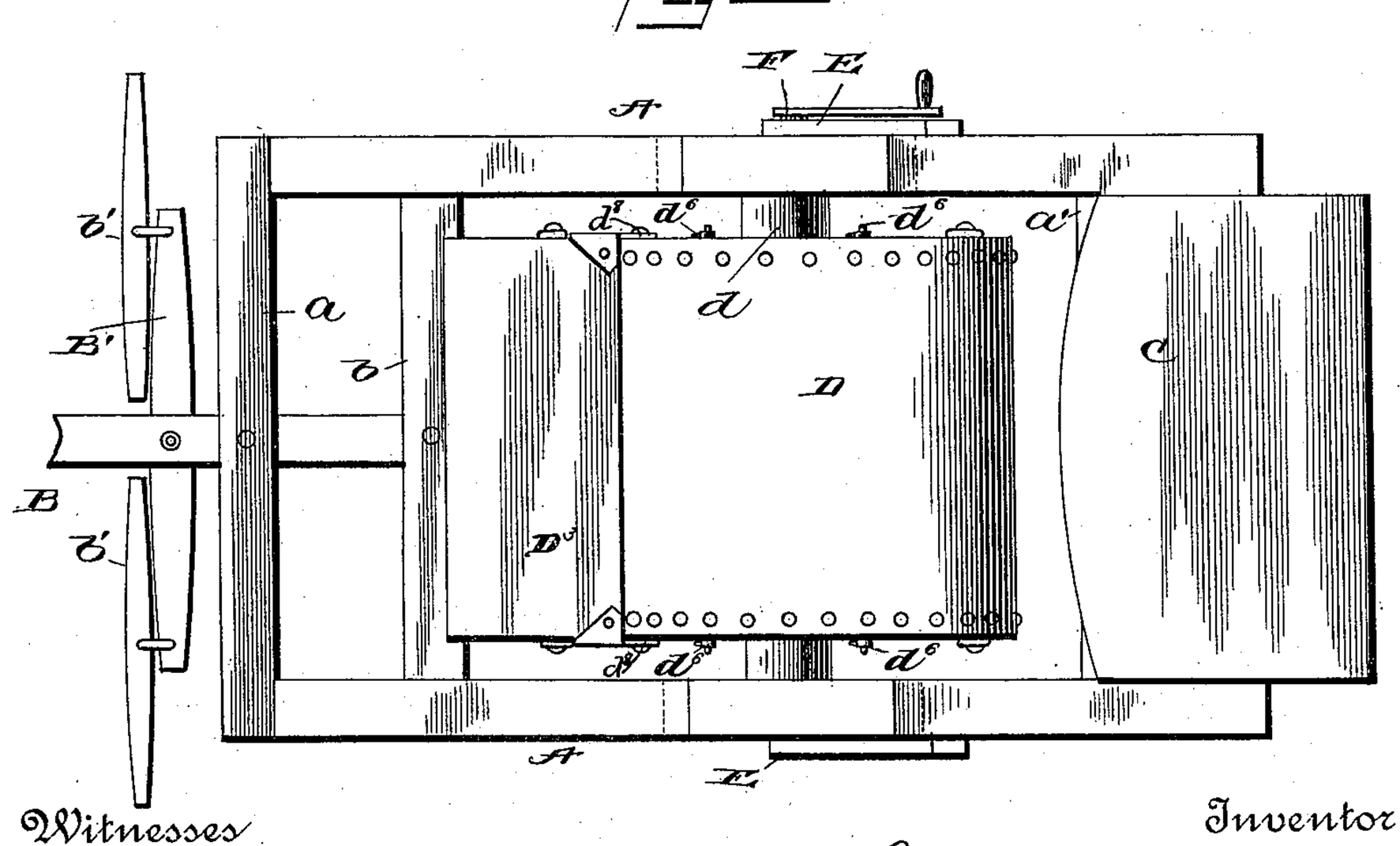


Fig 2



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(No Model.) 2 Sheets—Sheet 2.

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Fig 3

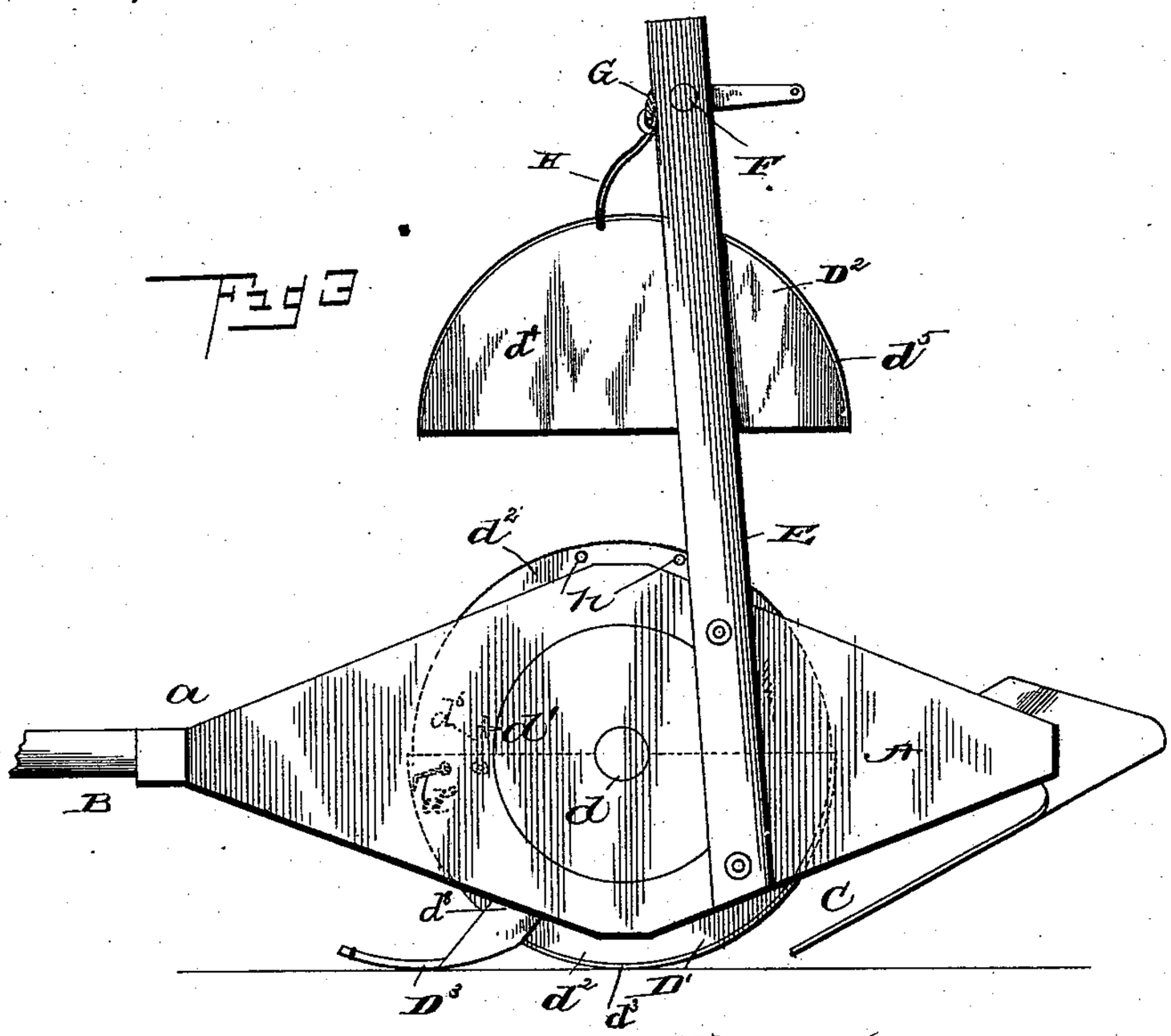

Fig 4

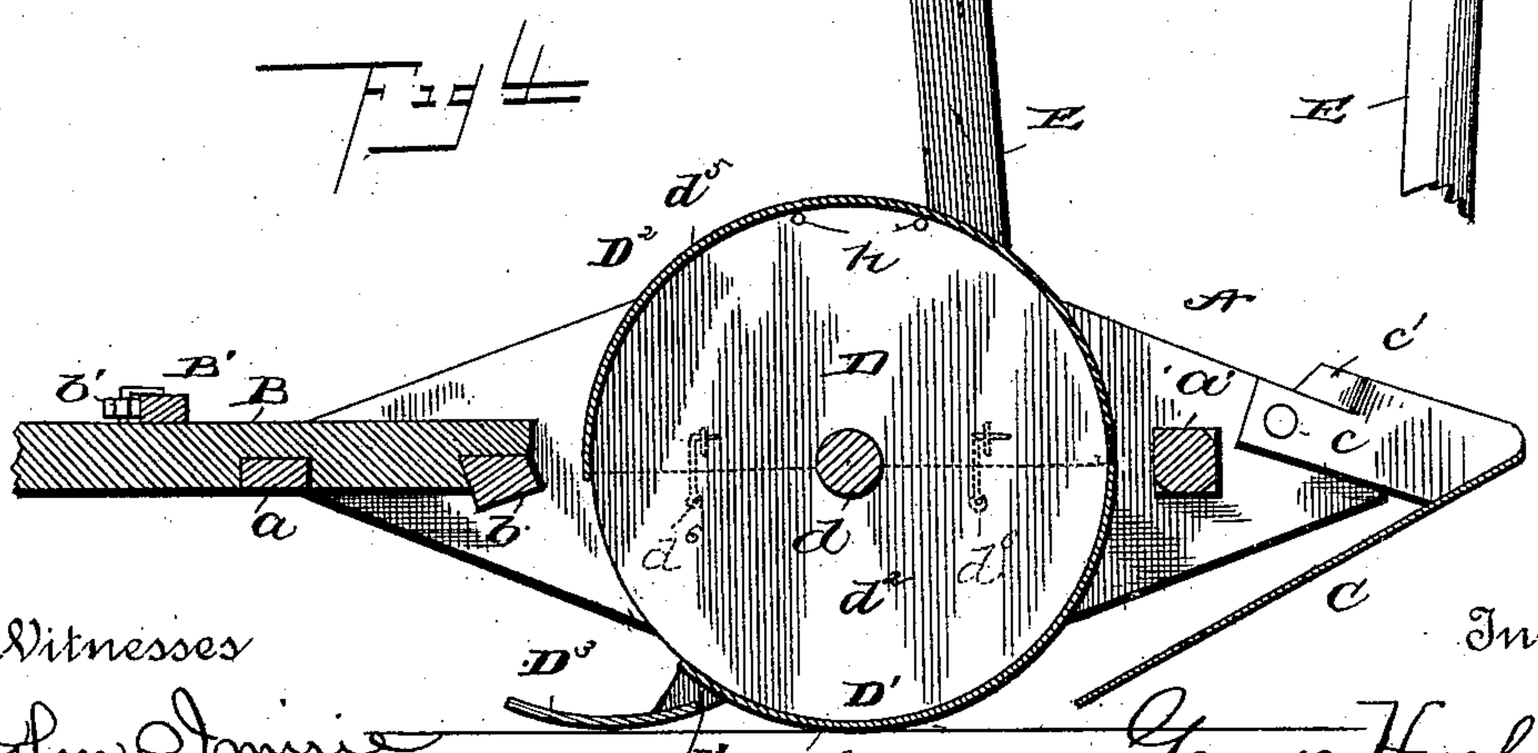

Fig 5

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UNITED STATES PATENT OFFICE.

GEORGE HUEBNER, OF LA GRANGE, ASSIGNOR OF ONE-HALF TO CHARLES L. MELCHER, OF SWISS ALP, TEXAS.

ROAD GRAVELING AND GRADING MACHINE.

SPECIFICATION forming part of Letters Patent No. 466,465, dated January 5, 1892.

Application filed May 25, 1891. Serial No. 394,076. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HUEBNER, residing at La Grange, in the county of Fayette and State of Texas, have invented a new and useful Improvement in Road Graveling and Grading Machines, of which the following is a specification.

The object of my invention is to provide an improved machine which will distribute gravel upon the road and level the same at one time; and with this object in view my invention consists in the peculiar construction of the several parts and their novel combination or arrangement, all of which will be more fully hereinafter described and claimed.

In the drawings forming a part of this specification, Figure 1 is a top plan view. Fig. 2 is a bottom plan view. Fig. 3 is a side view of the device in position for dumping its load. Fig. 4 is a vertical longitudinal section of the device when ready for transportation. Fig. 5 is a side elevation illustrating a modification.

In carrying out my invention I preferably employ two approximately diamond-shaped side pieces A A, which are connected at their forward and rear ends by the front and rear cross-pieces *a* and *a'*, respectively. The tongue B is attached to the front cross-beam *a*, the rear end of said tongue being braced by a cross-piece *b*. The doubletree B' is attached to the tongue, and to said doubletree are attached the singletrees *b'*.

C designates a scoop or grader constructed of heavy sheet metal or other suitable material. The scoop or grader is provided at its upper ends with inturned arms *c c*, pivotally secured to the inner faces of the sides A at their rear ends. The arms *c* are bifurcated, as shown, the upper member *c' c'* of each being bent out over the sides A and resting thereon. When in secured position, the scoop or grader is inclined forwardly and downwardly and is adapted to distribute and level a pile of gravel which has been deposited in front thereof upon the road-bed.

For transporting and depositing the gravel upon the road-bed I employ a drum D, which is mounted upon a shaft *d*, journaled in the side pieces A, said side pieces having circular apertures made therein, and in which the heads *d'* of the shaft *d* turn. The heads *d'* are preferably of the same thickness as the side pieces A, as shown in dotted lines, Figs. 1 and 2. By thus constructing the bearings for the drum the jar incident to heavy machines of this character is reduced to a minimum.

The drum D is formed in two sections D' D^2, the latter being removable. The section D' comprises two circular heads d^2 d^2, through the center of which the axle *d* passes. These heads are connected by a covering d^3, extending approximately half-way around the same. The section D^2 comprises two semicircular heads d^4, connected by a covering d^5. The removable section of the drum is adapted to receive the uncovered portions of the heads d^2, and to form, in conjunction with the section D', the completed cylindrical drum, the sections being secured together by hooks d^6. A door D^3 is provided at the periphery of the section D', through which the drum is filled, said door being hinged to the heads d^2 at d^8 and provided with hooks d^9. Upright standards E E are secured to the outer sides of the side pieces, partially covering the heads *d'* and preventing any lateral movement of the same. A cross-shaft F is journaled in the upper ends of the standards E E, said shaft having a crank attached thereto or a gearing mechanism similar to that shown in Fig. 5. Ropes G G are attached to the cross-shaft near the opposite ends of the same, and upon the lower ends of said ropes are secured the hooks H H, said hooks being adapted to engage apertures *h h* made in the heads of the removable section of the drum.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains. The drum is first filled with gravel through the door D^3, the drum having been previously revolved upon its axle to bring said door at the top. After filling, the door is tightly closed and the machine transported to the place where the gravel is to be deposited, the drums rolling upon the ground. The section D^2 of the drum is then elevated by the hoisting means described, (after the hooks d^6 have been unfastened,) when the machine is moved forward to partially turn the drum-section D'

upon the axle and thus deposit the desired quantity of gravel upon the road. The drum-section D^2 is then lowered and secured in its normal position, when the scoop or scraper C will act to level the gravel as the machine is drawn forward.

It will be understood that the hoisting mechanism is normally disengaged from the section D^2 of the drum, and the drum, when the machine is in operation, rolls upon the ground, the office of said hoisting mechanism being to effect the elevation of the drum-section D^2 at the time gravel is to be discharged from the drum.

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

1. The combination, with the frame, of the drum journaled therein and provided with a removable section, the hooks adapted to engage said section, and the ropes attached to said hooks, substantially as and for the purpose described.

2. The combination, with the frame, of the drum journaled therein and provided with a removable section, uprights projecting from the frame at the sides of the drum, a shaft carried by said uprights, hooks engaging said removable section, and ropes connected with the hooks and with said shaft, substantially as and for the purpose set forth.

3. The combination, with the frame, of the drum provided with a removable section, means for elevating the latter for the purpose described, and a scraper arranged in rear of the drum, substantially as and for the purpose set forth.

4. The combination, with the frame, of the drum, the shaft upon which the drum is mounted, the heads of the shaft turning in the sides of the frame, the upright shafts, cross-shaft, ropes, and hooks, all arranged substantially as set forth.

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

GEORGE HUEBNER.

Witnesses:

C. E. LANE,

E. MIKULENKA.