

(No Model.)

W. T. ALLEN, Jr.
GRAVE FILLER.

2 Sheets—Sheet 1.

No. 580,358.

Patented Apr. 13, 1897.

FIG. 1.

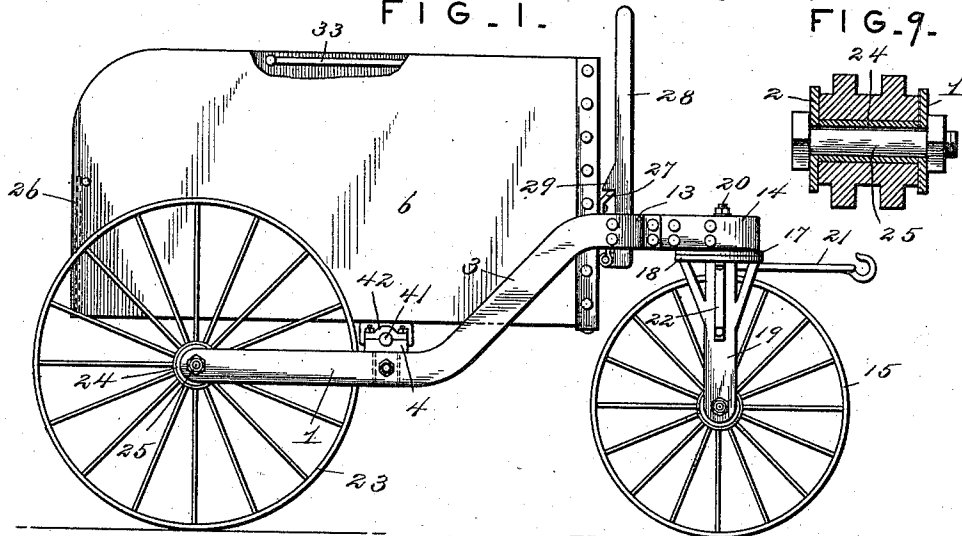


FIG. 2.

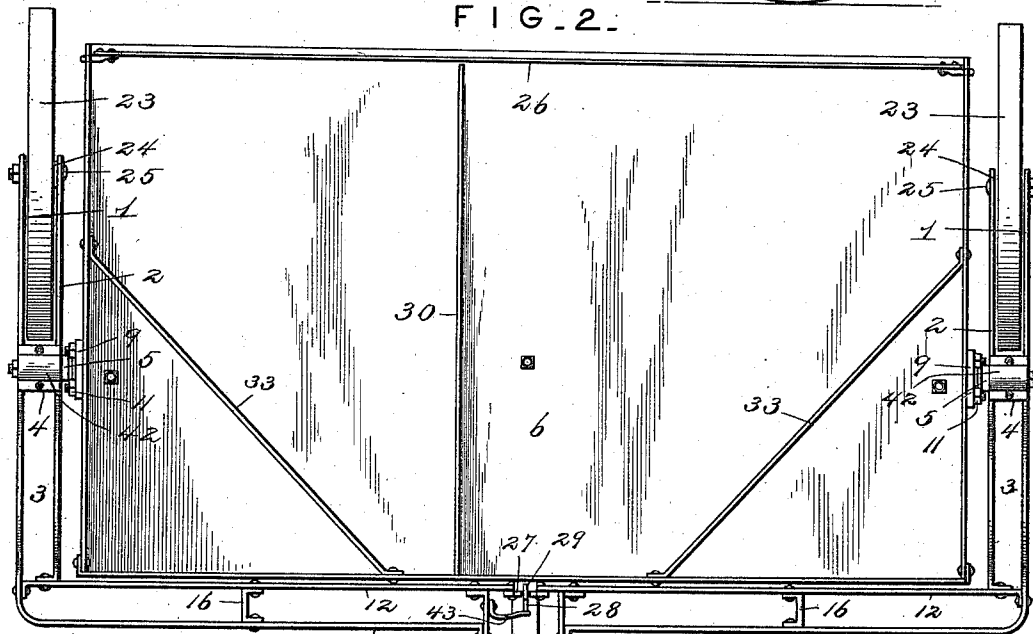


FIG. 5.

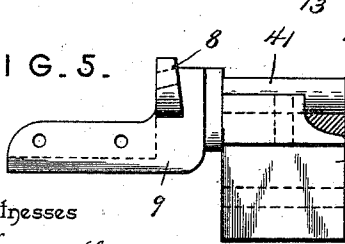
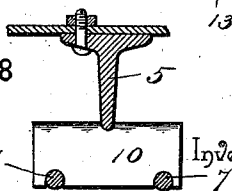


FIG. 8.



Witnesses

Harry L. Amer.
U. B. Willard.

By his Attorneys,

William T. Allen, Jr.

C. A. Snow & Co.

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W. T. ALLEN, Jr.
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FIG. 3.

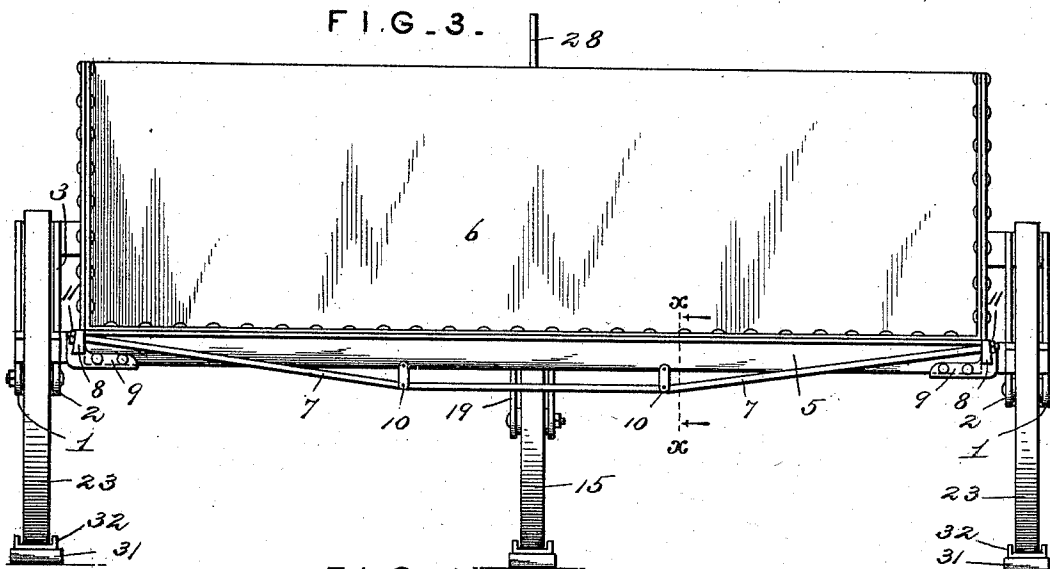


FIG. 4.

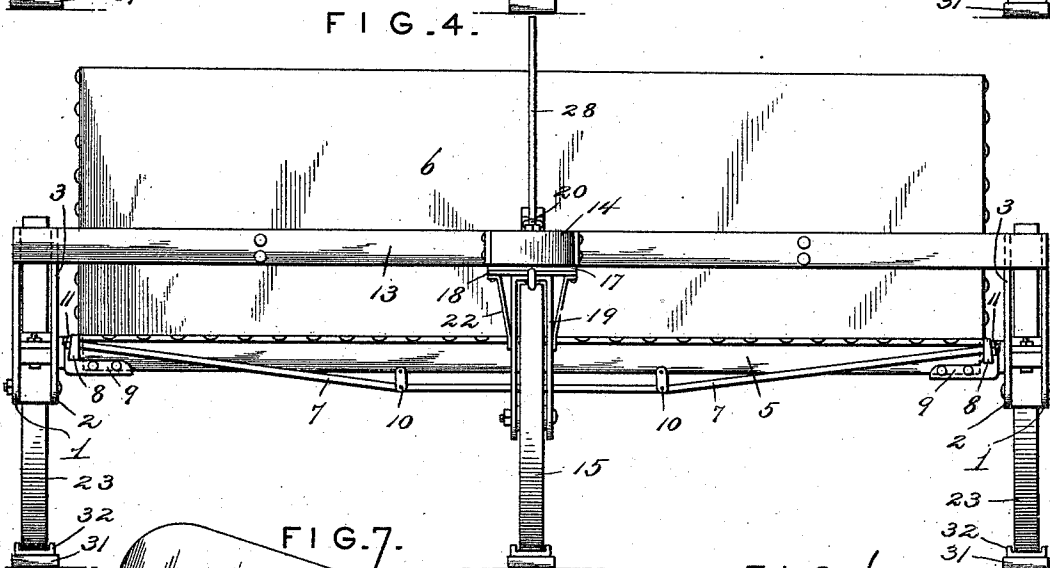


FIG. 7.

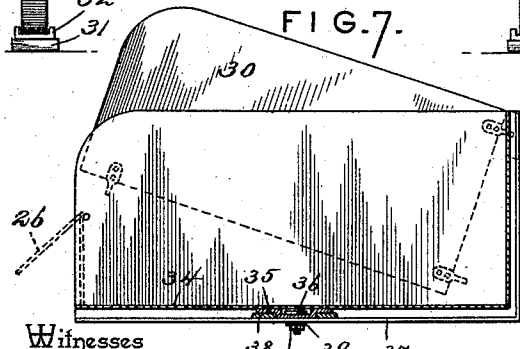
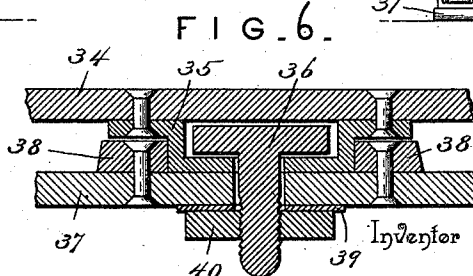


FIG. 6.



Witnesses
Harry L. Amer.
V. B. Hillyard.

By his Attorneys,

William T. Allen, Jr.

C. Snow & Co.

UNITED STATES PATENT OFFICE.

WILLIAM TEMPLE ALLEN, JR., OF FORT SMITH, ARKANSAS, ASSIGNOR
OF ONE-HALF TO M. KOBER, OF SAME PLACE.

GRAVE-FILLER.

SPECIFICATION forming part of Letters Patent No. 580,358, dated April 13, 1897.

Application filed June 8, 1896. Serial No. 594,761. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM TEMPLE ALLEN, Jr., a citizen of the United States, residing at Fort Smith, in the county of Sebastian and State of Arkansas, have invented a new and useful Grave-Filler, of which the following is a specification.

The principal object of this invention is to provide an apparatus for replacing the excavated soil into a grave after the coffin, casket, or other receptacle containing the corpse has been lowered therein, which can be readily adjusted to the size of the grave, so that the soil will be dumped into the excavation upon tilting the earth-box without any lodging or piling upon the ground at the ends of the opening.

A further purpose of the invention is to devise an apparatus for the purpose aforesaid which will be simple, compact in the arrangement of its parts, durable, and easily operated, so as to be moved toward and from a grave and dump the earth therein when required.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a grave-filler for attaining the objects of this invention. Fig. 2 is a top plan view thereof. Fig. 3 is a rear view. Fig. 4 is a front view. Figs. 5 and 6 are detail views. Fig. 7 is a longitudinal section of an earth-box comprising telescoping sections and showing the partition slightly elevated. Fig. 8 is a detail section on the line X X of Fig. 3, looking to the left, as indicated by the arrow. Fig. 9 is a detail view of a ground-wheel support.

Corresponding and like parts are referred to in the following description and indicated in the several views of the accompanying drawings by the same reference-characters.

The device comprises, essentially, a truck

and an earth-box, the truck-frame in plan view being right angular and open at its rear side to admit of the tilting of the earth-box when unloading the same. The side bars of the truck-frame are similarly constructed and comprise parallel members 1 and 2 and have an offset 3, so as to throw the end portions in different horizontal planes. A journal-box 4 is secured between the parallel members in the rear of the offset 3 and serves to connect and maintain the members 1 and 2 at the proper distance apart. The spindles at the ends of the axle 5 obtain bearings in the journal-boxes 4, so as to admit of the earth-box 6 being tilted when required. This axle 5 is a T-iron and is bolted or otherwise secured to the bottom of the earth-box, and its terminal portions are formed with spindles in any desired way, so as to pivotally support the earth-box.

Truss-rods 7 are disposed upon opposite sides of the axle 5 and are secured at their ends by passing through apertured ears 8 of a casting 9 and pass beneath struts 10, obtaining a bearing against the lower side of the axle. The upper edge of the struts 10 is notched to prevent lateral displacement and receives the lower edge of the vertical web or leaf of the axle, and the bottom edge of the struts is notched to receive the truss-rods 7, so as to hold them in place. There will be a casting 9 at each end of the axle 5, and the end portions of the truss-rods 7 are threaded and pass through the openings in the ears 8 and receive nuts 11, by means of which the truss-rods are subjected to the requisite tension to enable them and the axle to sustain the weight of the earth-box when loaded. The front bar of the truck-frame is likewise composed of parallel members 12 and 13, which are connected together by interposed pieces 16, which may be either blocks or short bars having their end portions bent so as to bear against the inner sides of the said members 12 and 13. The members 1 and 13 are formed of a single bar, which is bent into an L shape, and the opposing ends of the members 13 are secured to a bolster 14, which extends forwardly of the truck-frame and supports the caster or pilot wheel 15. The bolster 14 is formed of a bar which is folded in-

intermediate of its ends, the folded members extending parallel and secured at their rear ends to the members 12 and 13 and strengthened by intermediate cross-pieces 15^a, which are similar in construction to the connecting-pieces 16. A ring or plate 17 is secured to the lower side of the bolster 14 and provides a bearing for a corresponding ring or plate 18, secured to the upper end of a frame 19, in which the wheel 15 is journaled. The two parts 17 and 18 form in effect a fifth-wheel, and are connected by means of a king-bolt 20 in the usual manner of securing the complementary parts of a fifth-wheel. A draft-bar 21 is secured to the frame 19, and the draft for drawing the device is applied thereto. The frame 19 comprises side members, between which is located the wheel 15, and which are strengthened by means of braces 22, connecting at their upper ends with the plate 18 at its outer edges and at their lower ends with the members or parts comprising the said frame, at an intermediate point in their length.

The ground-wheels 23 are mounted between the rear ends of the members 1 and 2, and are journaled upon tubular spindles 24, held between the said members and placed upon bolts 25, connecting the said members. By having the spindles 24 coming between the members 1 and 2 the latter are prevented from binding against the ends of the hubs of the ground-wheels, thereby permitting the latter to rotate freely upon their spindles between the members 1 and 2. The tread-surface of the supporting-wheels is broad, so as to obtain an extended bearing upon the ground or the tracks provided for the apparatus to move upon when the invention is in active service.

The earth-box 6 is preferably constructed of sheet metal, and is closed at its rear end by means of a gate 26, which may have pivotal connection with the sides of the earth-box, so as to swing upwardly and rearwardly from its lower end, or which may be adapted to slide between cleats or in vertical guides, provided on the sides of the earth-box near their rear ends. The axle 5 is located forward of a central point in the length of the box, thereby causing the rear portion of the earth-box to be of superior weight to the front portion, whereby the normal tendency of the box when empty or loaded is to gravitate at its rear end, thereby enabling it to tilt automatically to dump the load when released. The earth-box is maintained in an approximately horizontal or normal position by means of a stop 27 at its front end and a lever 28, pivoted to the truck-frame and having a stop 29 to extend over and engage with the stop 27, thereby preventing the front end of the box from moving upward, as will be readily comprehended. A longitudinal partition 30 divides the earth-box, thereby enabling the capacity of the latter to be regulated according to the size of the grave to be prepared. The width of the

earth-box corresponds to the length of the largest size grave to be dug, and the partition 30 is movable between the side pieces of the box to reduce the width of the latter corresponding to the length of the grave. In lieu of the partition 30 the earth-box may be constructed of sections which are adapted to telescope or slide the one upon the other, so as to regulate the width of the box for the purpose herein stated.

By having the width of the earth-box correspond to the length of the grave the earth can be filled into the latter upon tilting the box without the objectionable feature of having the earth lodge and pile upon the surface of the ground at the ends of the grave, as will be readily understood.

When it is required to utilize the filler, tracks 31 are provided and disposed at right angles to the length of the grave, and are positioned for the ground-wheels to travel upon, so that the device can be moved easily when required to dump the earth into the grave. These tracks are formed of wooden beams and rails 32, the latter being plates with their longitudinal edges bent upwardly about at right angles, so as to retain the ground-wheels in place. Any style of channeled iron may be substituted for the flanged plates, so as to form the rails.

The earth-box is strengthened by braces 33, which are interposed between the front and sides of the said box, and which are riveted or otherwise secured thereto. When the box is composed of telescoping sections, as shown in Fig. 7, the parts will be connected and guided in their movements by suitable means, and, as illustrated most clearly in Fig. 6, the bottom 34 of one section has strips 35 secured to the under side thereof in parallel relation and having their opposing longitudinal edges spaced apart, forming a guideway, in which operates the fastening or connecting bolt 36. The strips 35 have their inner or opposing edge portions deflected, so as to provide a space for the reception of the head of the fastening-bolt 36. The bottom 37 of the other section has strips 38 affixed to its top side, and these strips act jointly with the strips 35, so as to guide the two sections in their sliding movements. Wear-strips 39 are secured to the lower side of the bottom 37 to strengthen and stiffen the same and receive the wear incident to the sliding of the sections when adjusting them to vary the width of the earth-box. A nut 40 is placed upon the lower end of the fastening 36, and serves to connect the two sections when the device has its parts assembled and is in condition for effective service.

The castings 9 are channeled in their top sides to receive the vertical web of the axle 5, to which the said castings are bolted or riveted by having the fastenings pass through openings formed in coincident relation in the castings and axle. The spindles 41 are formed with the castings 9, and, as previously inti-

4, which latter are supplied with the usual cap-plates 42, which are bolted in place, thereby admitting of the earth-box being removed from the truck when required. The lever 28 is held in engagement with the stop 27 at all times by means of a spring 43, which latter is secured at one end to a portion of the bolster 14, and has its opposite end constructed to bear against the said lever, so as to cause the stop 29 thereof to project across the stop 27 and hold the earth-box in working position.

Having thus described the invention, what is claimed as new is—

1. In a grave-filler, an earth-box composed of relatively-movable sections for varying the effective length of the box, strips secured in parallel relation to the lower side of the bottom of the inner section and having their inner longitudinal edge portions deflected, other strips secured to the top side of the outer section and engaging with the deflected edge portions of the first-mentioned strips, and a headed fastening operating in the space formed by the deflected edge portions of the first-mentioned strips for securing the sections in an adjusted position, substantially as set forth.

2. In a grave-filler, the combination of a truck-frame, a bolster extending forwardly of the truck-frame and formed of a folded bar having interposed filling-pieces, a plate secured to the lower side of the bolster, a frame bearing a caster-wheel and comprising side members, a plate secured to the top of the frame, side braces between the frame and plate, a king-bolt connecting the two plates, ground-wheels at the rear end of the truck-frame, and an earth-box mounted upon the truck so as to tilt, substantially in the manner set forth for the purpose described.

3. In a grave-filler, the combination of a truck having its side bars composed of parallel members, journal-boxes secured between the parallel members, an earth-box mounted in the journal-boxes so as to tilt rearwardly, and means for holding the earth-box in a normal position, substantially as set forth.

4. In a grave-filler, the combination of parallel members forming the front bar of a truck-frame, filling-pieces interposed between and connecting the parallel members, a bolster formed of a bar folded intermediate of its ends and having its folded members secured to the parallel members of the said front bar, and filling-pieces interposed between and connecting the side members of the bolster, substantially as set forth.

5. In a grave-filler, the combination of an earth-box, an axle of T form in cross-section secured to the bottom side of the earth-box, castings fitted to the ends of the axle and channeled in their top sides to receive the vertical web of the said axle, and having oppositely-extending apertured ears and formed with spindles, truss-rods extending upon opposite sides of a plane passing perpendicularly through the vertical web of the axle and having their ends extending through the apertured ears of the castings, and struts interposed between the vertical web of the axle and the truss-rods and notched in their edges to receive the web of the axle and the truss-rods, substantially as shown and described.

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

WILLIAM TEMPLE ALLEN, JR.

Witnesses:

GEO. H. LYMAN,
R. S. WILLIE.