(No Model.) 2 Sheets—Sheet 1.

G. L. GEHRING.

BURIAL APPARATUS.

No. 397,283. Patented Feb. 5, 1889.

Fig. 1.

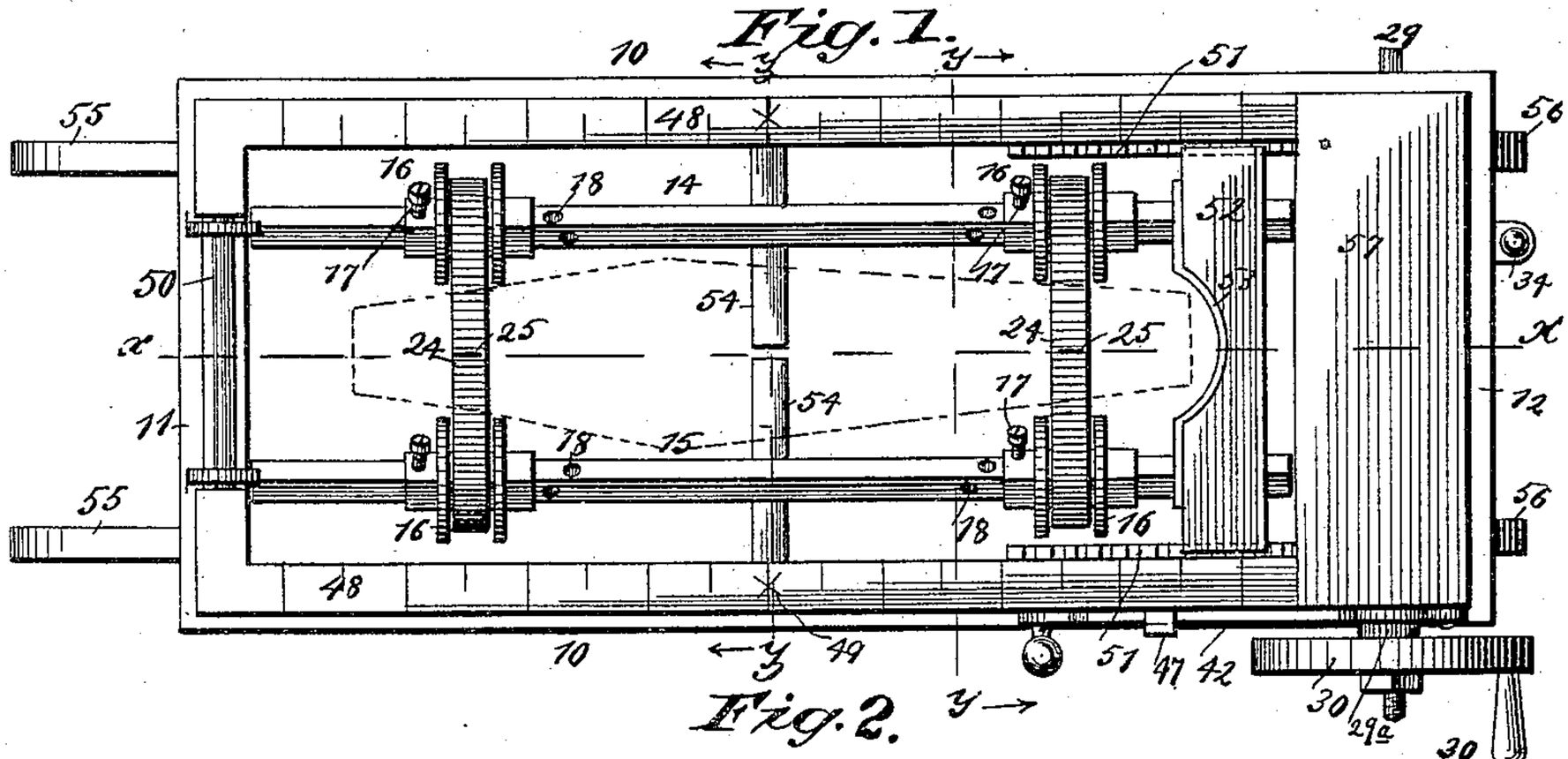


Fig. 2.

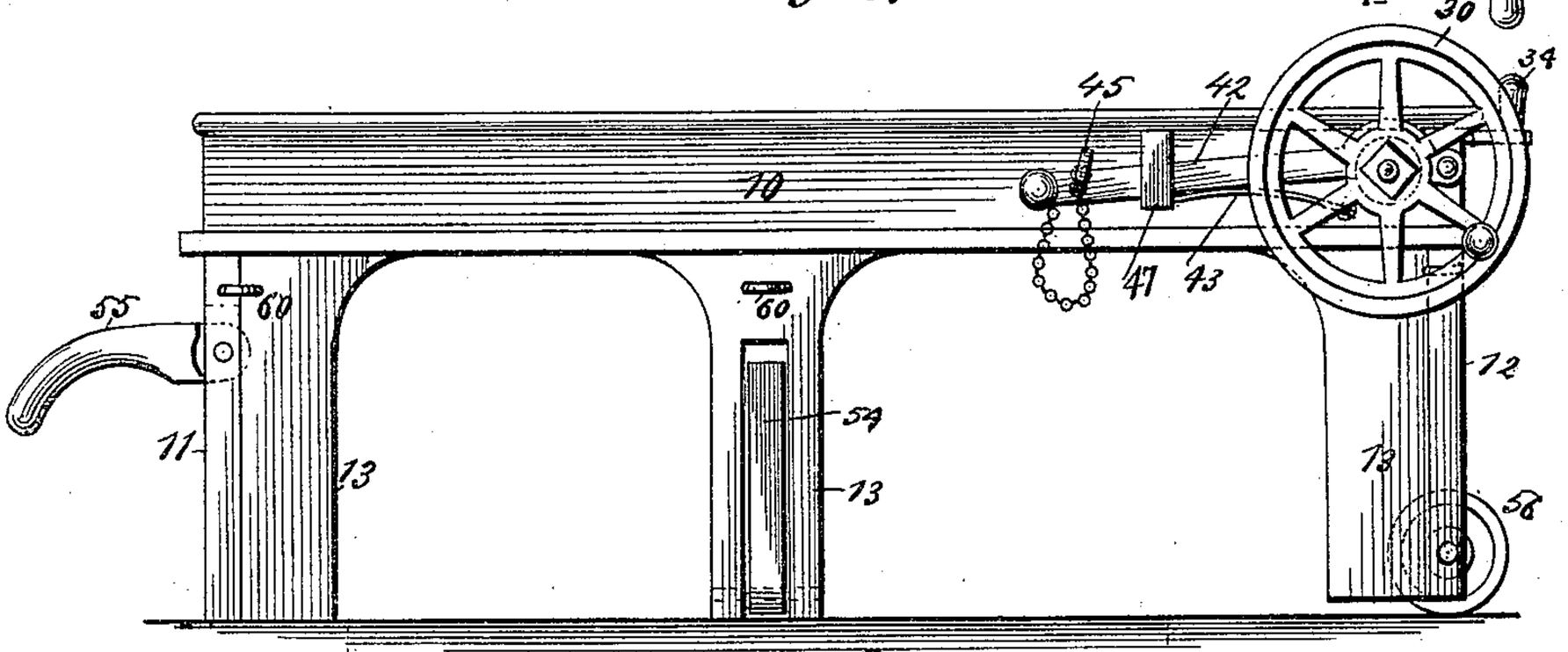
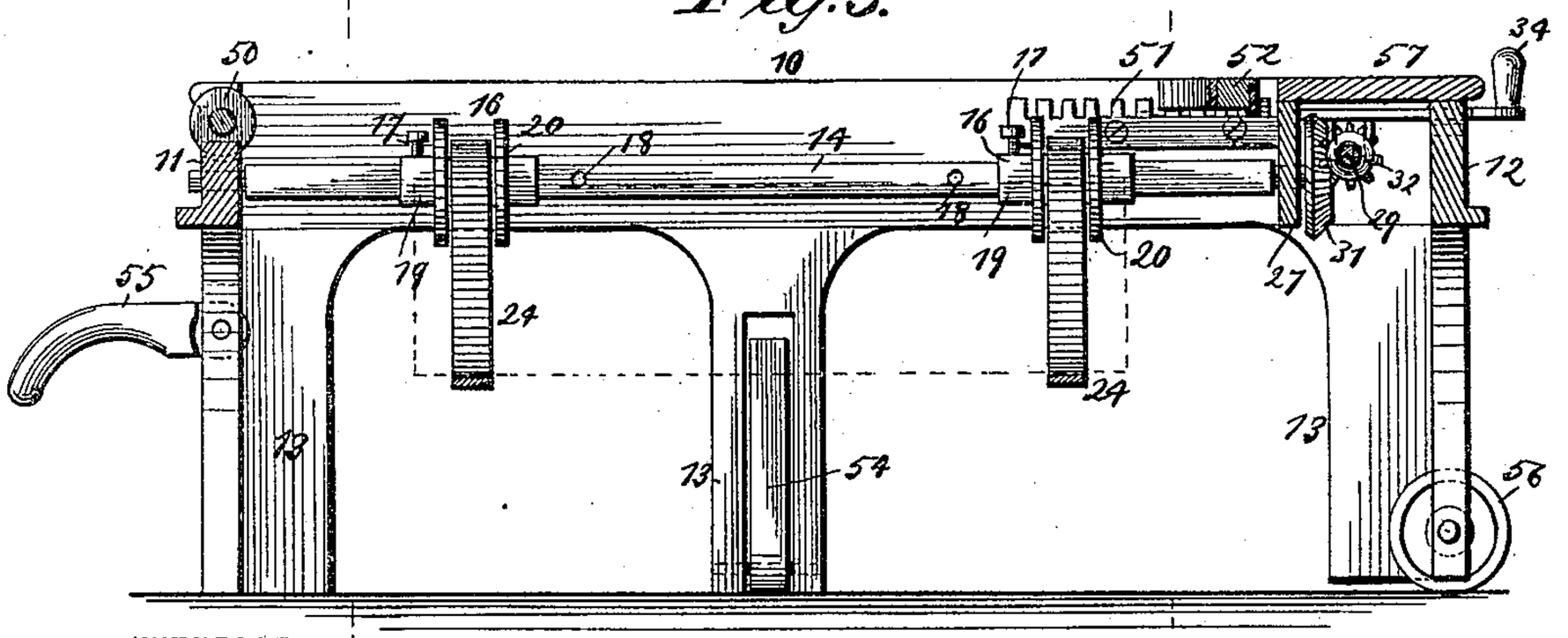


Fig. 3.



WITNESSES:

Phil. C. Dieterich.

C. Sedgwick

INVENTOR:

G. L. Gehring

BY Munn & Co.

ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2.

G. L. GEHRING.

BURIAL APPARATUS.

No. 397,283. Patented Feb. 5, 1889.

Fig. 4.

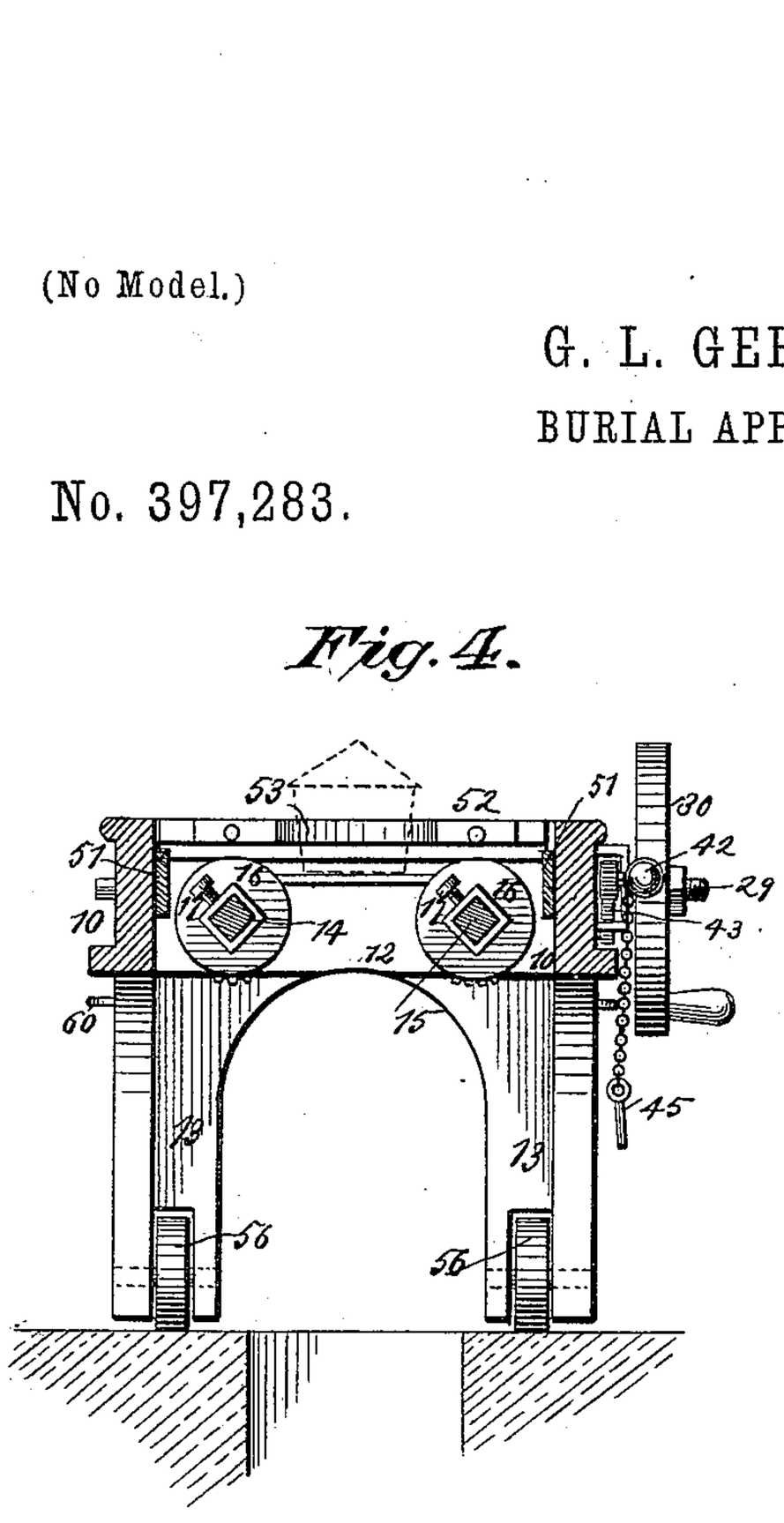


Fig. 5.

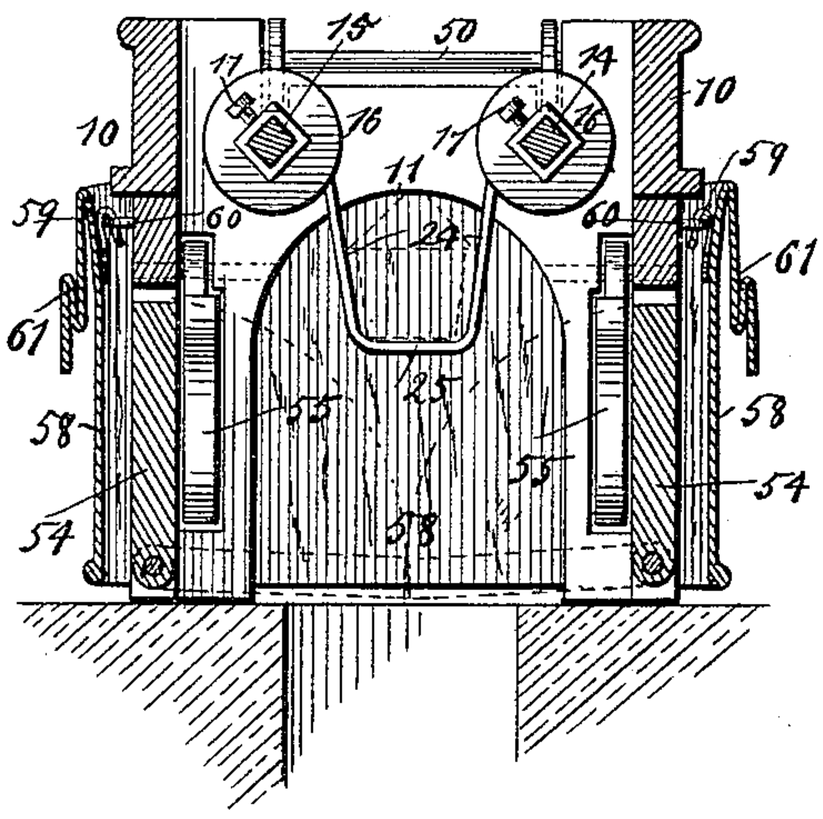


Fig. 6.

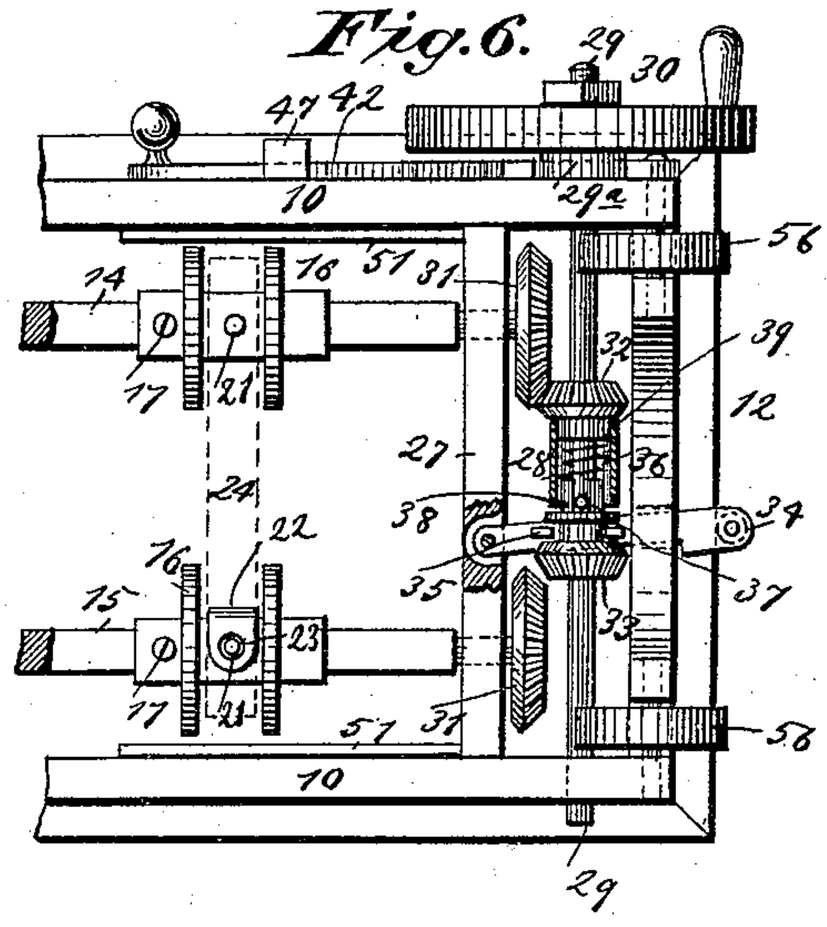


Fig. 7.

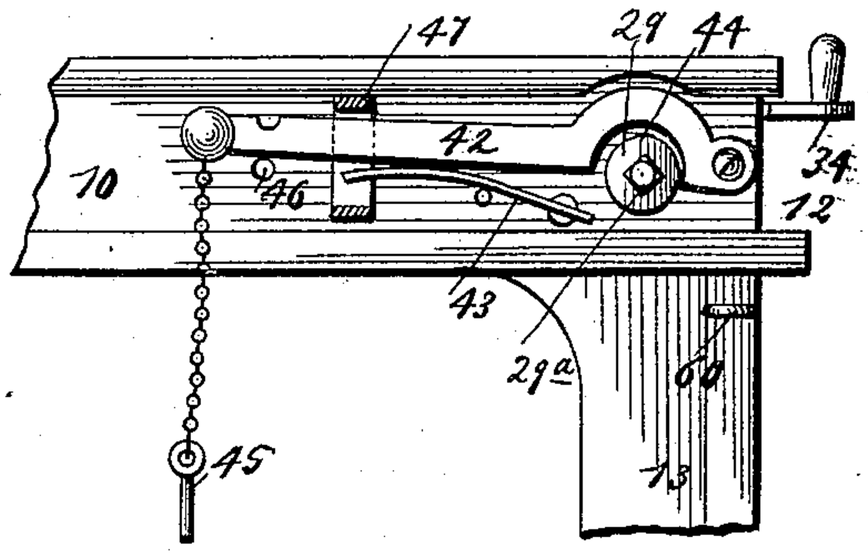


Fig. 8.

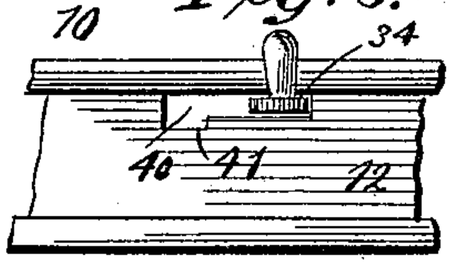


Fig. 9.

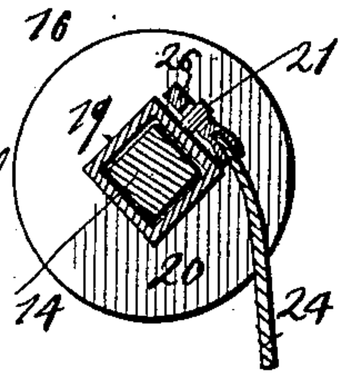
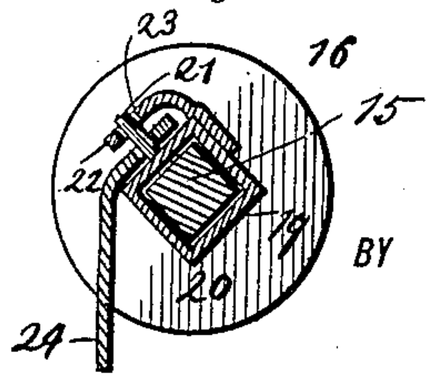


Fig. 10.



WITNESSES:

Phil. C. Dieterich

C. Sedgwick

INVENTOR:

G. L. Gehring

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE L. GEHRING, OF RAPID CITY, DAKOTA TERRITORY.

BURIAL APPARATUS.

SPECIFICATION forming part of Letters Patent No. 397,283, dated February 5, 1889.

Application filed October 9, 1888. Serial No. 287,670. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. GEHRING, of Rapid City, in the county of Pennington and Territory of Dakota, have invented a new and Improved Device for Lowering Coffins, of which the following is a full, clear, and exact description.

My invention relates to an improvement in devices for lowering coffins, and has for its object to produce a catafalque or bier of simple construction, adapted to receive a coffin; and the further object of the invention is to provide a device capable of propulsion by a suitable person, and wherein when the device is located over the grave, the coffin may be lowered into the same by the undertaker, assistant, or other designated person.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the device. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical longitudinal section taken partially on line *x x* of Fig. 1. Fig. 4 is a transverse section taken partially on line *y y* of Fig. 1. Fig. 5 is a similar section taken on the central line *z z* of Fig. 1. Fig. 6 is a partial plan view of the under side of the device, showing the driving shaft and gear. Fig. 7 is a partial enlarged side elevation illustrating the application of the brake to the drive-shaft. Fig. 8 is a front elevation of the shifting-lever, illustrating the position thereof; and Figs. 9 and 10 are detail sections through the winding-shafts, illustrating the attachment of the slings.

In carrying out the invention the frame or body of the device consists of parallel side pieces, 10, connected by the respective front and end pieces, 11 and 12. The said front and side pieces constituting the main portion of the frame are preferably supported by six legs, 13, one leg being attached at each corner and one at the center upon each side. Within the frame two opposing winding-shafts, 14 and 15, are journaled—one being located adjacent to each side—and each shaft preferably provided with two drums, 16, which drums are adjustable upon the said shafts, being fastened thereto at any predetermined point in their length through the medium of set-screws 17, as best illustrated in Fig. 1. The shafts 14 and 15 are preferably rectangular in cross-section and provided with a series of apertures, 18, adapted for the reception of the set-screws 17.

The drums 16 consist of a sleeve, 19, sliding upon the shafts and adapted to the contour thereof, and two spaced disks, 20, integral with or attached to the sleeve in any approved manner. Between the disks of the drums located upon the left-hand shaft 15 a pin, 21, is secured, which pin is, essentially, covered by a spring-hood, 22, as best illustrated in Fig. 10. The hood 22 is likewise attached to the sleeve of the drum upon the side opposite that upon which the pin 21 is secured, and in the said hood an aperture, 23, is produced, through which the pin 21 projects. The drums upon the right-hand shaft, 14, are simply provided with a pin, 21, as illustrated in Fig. 9.

The opposing-drums of the shafts 14 and 15 are adapted to carry, respectively, one end of a sling, 24. The sling 24 is provided at the center with an indicator, 25, usually consisting of a staple of approximately the width of the sling and attached thereto in any desired manner. One end of the sling 24 is rigidly attached to the drums located upon the left-hand shaft, 15, the same being effected by producing an aperture in the said end of the sling, causing the pin 21 to pass through the said aperture and clamping the spring-hood 22 essentially in contact with the upper face of the sling, as is best illustrated in Fig. 10. The opposite end of the sling 24 is provided with an apertured metal tip or ferrule, 26, which ferrule is detachably engaged with the pin 21, located upon the sleeve of the drum sliding upon the right-hand shaft, 14, as fully illustrated in Fig. 9. It will be observed by this construction that as the shafts 14 and 15 revolve to lower the slings, when the said slings have become fully unwound from the

several drums 16, as the pin of the drum located upon the shaft 15 is carried downward, the ferrule 26 will automatically disengage itself, and that end of the sling will be free.

The lower end of the frame is provided with a transverse partition, 27, located near the end piece, 12, in which partition 27 one end of the shafts 14 and 15 is journaled. Within the space or chamber 28 thus produced a transverse drive-shaft, 29, is journaled, being provided upon one outer end, preferably to the left, with a balance or hand wheel, 30, whereby the shaft is rotated. Each of the winding-shafts 14 and 15 has secured upon the extremities projecting into the chamber 28 a miter-gear, 31, the miter-gear of the shaft 14 being adapted to mesh with a bevel-pinion, 32, keyed or otherwise firmly attached to the drive-shaft 29. The bevel-gear upon the extremity of the winding-shaft 15 is purposed to mesh with a bevel-pinion, 33, sliding upon the said shaft 29.

The pinion 33 is manipulated by a shifting-lever, 34, which lever, extending from the outside of the frame at the end 12, passes above the shaft 29 and is pivoted in the partition 27, as best illustrated in Fig. 6. From the under face of the shifting-lever 34 a bifurcated clutching-arm, 35, is projected, which bifurcated arm embraces the grooved hub of pinion 33. To the face of the pinion 32, contiguous to the pinion 33, a sleeve, 36, is fastened, surrounding the shaft 29, and a similar sleeve, 37, is projected from the inner face of the pinion 33. The latter sleeve, however, is provided with a longitudinal slot receiving the pin 38, secured in the shaft 29, and a spring, 39, encircling the shaft, is made to bear, respectively, against the pinion 32 and the inner end of the sleeve 37. The recess 40, through which the shifting-lever 34 extends, is provided with a notch, 41. The said notch 41 is designed to receive the lever 34 when the said lever is manipulated to throw the pinion 33 out of engagement with the bevel-gear 31.

Upon the left of the machine a brake-lever, 42, is pivoted to the side near the end 12, which lever is upheld by a spring, 43, and provided with a recess, 44, in the under edge near its fulcrum, adapted to receive the shaft 29, or a friction-wheel, 29^a, thereon, whereby when the outer or free end of the lever is pressed downward against the spring 43 the concave portion thereof will be brought in frictional contact with the friction-wheel. The lever is held in contact with the shaft by passing a pin, 45, through a suitable aperture, 46, produced in the side of the frame, as illustrated in Fig. 7. A guide, 47, may be provided for the brake-lever 42, if desired.

Upon the side pieces of the frame a scale, 48, is drawn, and at the center of the frame a star or other equivalent mark, 49, is produced.

The end 11 of the frame is slightly recessed to receive a friction-roller, 50, the said roller being designed to facilitate the delivery of the coffin to the slings.

Near the end 12 of the frame a rack, 51, is secured longitudinally to the side pieces, 10, adapted for the reception of a transverse guide, 52, the said guide being provided upon its inner face with a central concavity, 53. At the bottom of the central legs, 13, guide-bars 54 are pivoted, the said legs being recessed for the reception of the said guide-bars when the same are folded up out of the way. The guide-bars are also preferably provided with a scale produced therein to indicate the width of the grave. The legs located at the end 11 are also recessed, and handles 55 are pivoted in the said recesses, whereby the manipulation of the device is greatly facilitated, and for that purpose the legs at the opposite end are provided with wheels or rollers 56.

It will be observed that when the device is not in use it may be left standing exposed to the weather, as the driving mechanism is thoroughly protected, a roof or casing, 57, being made to cover the chamber 28. When the device is in use at the grave, or prior to said use, a drapery, 58, is attached to the frame through the medium of hooks 59, secured to the said drapery, and eyes 60, fastened to the frame, as illustrated in Fig. 5. The drapery usually consists of an apron of sufficient depth to completely conceal the legs, which apron may consist of water-proof material, the drapery, 61, proper being looped at the top of the apron.

In operation the device is placed over the grave in such a manner that the middle or center legs will come directly in the center of the grave. This may be determined by lowering the guide-bars 54 to a horizontal position transversely of the grave, as illustrated in Fig. 1. The central legs having been made to assume their proper position, the upper guide-plate, 52, is moved in direction of the center until the inner side will have assumed a position equal to one-half of the length of the coffin, the calculation being made from the central star or mark, 49. The drums 16 are then adjusted upon the shaft in a similar manner. For instance, if the coffin to be lowered is six feet in length, each drum will be placed and secured about three inches from the center of the frame or the center of the shaft. The box which it is customary to use is then placed in the slings and the said slings lowered by manipulating the hand-wheel 30 until the top edge of the box is essentially in the same plane with the friction-roller 50. The brake-lever 42 is made to engage the drive-shaft 29, and held in such position. The coffin is now placed upon the friction-roller 50 and carried foot-end foremost in direction of the guide-plate 52. The coffin may then be readily lowered in the box, the said foot end being guided down by the concavity 53 of the said guide-plate. The coffin having been placed in the box, the brake-lever is

removed from contact with the driving-shaft and the handle slowly manipulated until the box and coffin have found a rest in the bottom of the grave. By the continued manipulation of the hand-wheel, and consequently of the shaft, the end of the sling containing the ferrule will become detached automatically from the right-hand shaft, 14, whereupon it may be readily withdrawn from the grave. By reversing the movement of the wheel the slings are wound upon the left-hand shaft a slight distance, whereupon the detached end of the sling is again fastened to the drum upon the right-hand shaft, 14, and the shifting-lever is manipulated to disengage the driving-pinion from engagement with the left-hand shaft. As the hand-wheel is now revolved, the right-hand shaft will only be turned, the revolution of the said shaft being stopped when the indicator 25 appears centrally between the opposing drums. Both shafts are then thrown into engagement with the drive-shaft, and the winding-shafts rotated until each of the slings are brought up taut. The drapery may now be removed by detaching the hooks 59 from the eyes 60, when it may be stored away.

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

1. The combination, with a frame having parallel winding-shafts, of drums on said shafts, a pin, 21, secured to each of the drums of one shaft, and a yielding hood, 22, extending over the end of each pin, an uncovered pin projecting from each of the opposite drums, and slings having apertures at their ends to receive said pins, whereby when the slings are unwound from the drums having the uncovered pins they will become detached and may then be wound upon the opposite drums.

2. The combination, with a frame, legs supporting the same, and longitudinal winding-shafts journaled in said frame, of adjustable drums sliding upon the said shafts, a pin and spring-hood secured to the drums on one shaft, and a pin attached to the drums of the opposite shaft, slings rigidly secured to one set of drums and detachably attached to the opposite set of drums, bevel-gears 31 on the ends of said shafts, a transverse shaft, 29, a bevel-gear, 32, thereon, meshing with the gear 31 on the shaft to which the slings are detachably connected, the sliding gear 33, also on the shaft 29, and means for throwing it into and out of engagement with the other gear, 31, substantially as and for the purpose specified.

3. The combination, with a frame, legs supporting the same, and longitudinal winding-shafts journaled in said frame, of adjustable drums sliding upon the said shafts, a pin and spring-hood secured to the drums on one shaft, and a pin attached to the drums of the opposite shaft, slings rigidly secured to one set of drums and detachably attached to the opposite set of drums, racks attached to the sides of the frame, an adjustable guide-plate supported by said racks, and means, substantially as shown and described, for rotating the winding-shafts, as and for the purpose specified.

4. The combination, with a frame, legs supporting the same, winding-shafts journaled longitudinally in the said frame, drums adjustably secured to the said shafts, the drums upon one shaft being provided with a pin and apertured spring-hood, and the drums upon the opposite shaft provided with a pin only, of slings clamped to one set of drums by the said hood and pin and provided with a ferrule engaging the pin upon the opposite set of drums, racks secured to the inner side face of the frame, a guide-bar supported by said racks, a transverse drive-shaft connecting with the winding-shafts, a shifting mechanism, and means, substantially as shown and described, for rotating the drive-shaft, as and for the purpose specified.

5. The combination, with a frame, legs supporting the same, winding-shafts journaled longitudinally in the said frame, drums adjustably secured to the said shafts, the drums upon one shaft being provided with a pin and apertured spring-hood, and the drums upon the opposite shaft provided with a pin only, of slings clamped to one set of drums by the said hood and pin and provided with a ferrule engaging the pin upon the opposite set of drums, racks secured to the inner side face of the frame, a guide-bar supported by said racks, a transverse drive-shaft connecting with the winding-shafts, a shifting mechanism, a brake-lever pivoted to the frame and engaging the drive-shaft, a hand-wheel secured to one outer end of the drive-shaft, and means, substantially as shown and described, for manipulating the brake-lever, as and for the purpose specified.

6. The combination, with a frame, winding-shafts journaled in said frame provided at one end with a bevel-gear, winding-drums adjustably held on said shafts, and slings held to the drums of one shaft and detachably held to the drums of the other shafts, of a transverse shaft provided with a fixed bevel-gear engaging the bevel-gear of one winding-shaft, a second bevel-gear mounted to slide on said transverse shaft and turn with the same, a spring on said shaft between said gears, and a shifting-lever engaging the sliding gear, substantially as shown and described.

GEORGE L. GEHRING.

Witnesses:
JOHN W. NOWLIN,
CHAUNCEY L. WOOD.