(No Model.)

J. B. BEUGLER.

BURIAL APPARATUS.

No. 481,840. Patented Aug. 30, 1892.

Fig 1

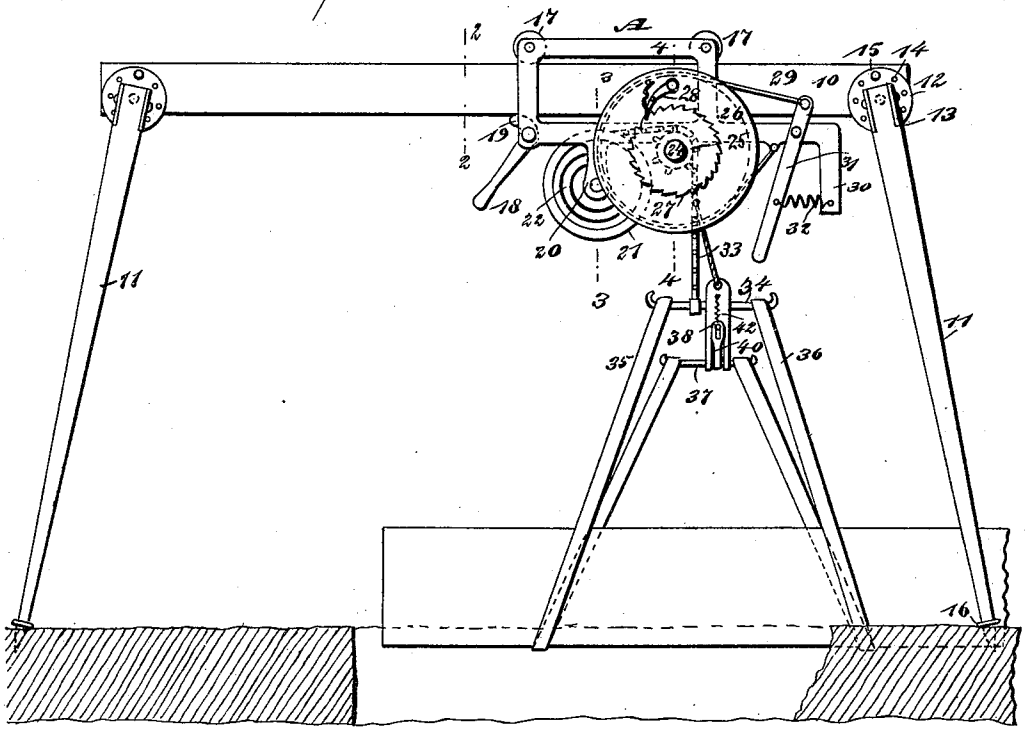


Fig 4

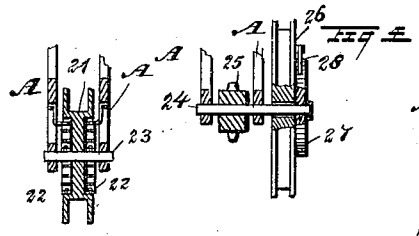


Fig 2

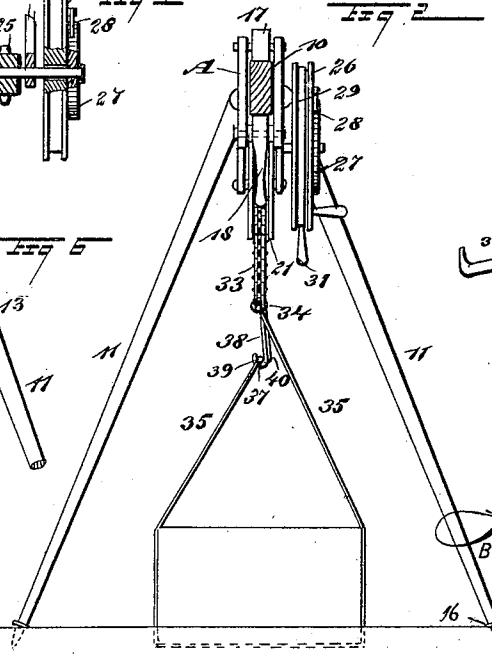


Fig 5

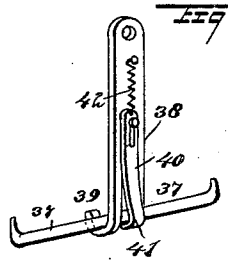


Fig 3

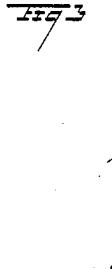
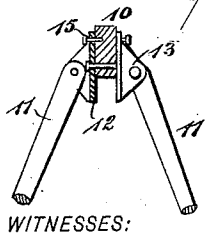


Fig 6



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UNITED STATES PATENT OFFICE.

JOHN B. BEUGLER, OF DAYTON, TENNESSEE, ASSIGNOR OF ONE-HALF TO CRAWFORD WILBER, OF SAME PLACE.

BURIAL APPARATUS.

SPECIFICATION forming part of Letters Patent No. 481,840, dated August 30, 1892.

Application filed June 4, 1892. Serial No. 435,545. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. BEUGLER, of Dayton, in the county of Rhea and State of Tennessee, have invented a new and useful Improvement in Devices for Lowering Burial-Caskets, of which the following is a full, clear, and exact description.

My invention relates to an improvement in devices for lowering burial-caskets, and has for its object to provide a device capable of being expeditiously and conveniently manipulated and of simple construction, by means of which, when the device is located over a grave, a casket may be lowered therein and the rapidity of the descent be under the complete control of the manipulator, and whereby also when the casket has reached the bottom of the grave or vault the sling encompassing the casket will automatically disengage itself from the casket.

It is a further object of the invention to provide a means whereby the lowering mechanism may be moved along a supporting-beam and locked in any position thereon, and, further, whereby the sling and the support therefor will be automatically returned when disengaged from the casket to a position in close engagement with the operative mechanism of the device.

The invention consists in the novel 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 and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the device, illustrating it in position at a grave, a portion of the ground at the side of the grave being illustrated as broken away. Fig. 2 is a vertical section taken practically on the line 2 2 of Fig. 1. Fig. 3 is a similar section taken essentially on the line 3 3 of Fig. 1. Fig. 4 is a section taken vertically through the device and on the line 4 4 of Fig. 1. Fig. 5 is a perspective view of the latch and its releasing mechanism; and Fig. 6 is a section taken through the supporting-bar of the device in front of the plates connecting the legs with the support, one of the plates being in section.

In carrying out the invention a beam 10 is supported in a horizontal position by means of four legs 11, two legs being located at each end of the beam. The beam is preferably made rectangular in cross-section and the connection between the legs and the beam is a pivotal and adjustable one. This connection is effected through the medium of plates 12, preferably circular in general contour, the plates being pivotally attached to the beam, as shown in Fig. 5. A plate is provided for each leg and each plate has a clamp-section 13 produced thereon, receiving the upper end of the leg. The plates are pivoted at their centers to the beam 10 and near their peripheries are provided with a series of apertures 14, and in connection with each plate a pin 15 is employed, which is passed through one of the apertures into registering apertures in the beam. By removing the pins 15 the legs may be carried inward or outward in direction of the ends of the beam, and when a proper position of the legs has been obtained they may be held in that position by passing the pins through the apertures in the plates registering with the apertures in the beam. The upper ends of the legs are pivotally attached to the clamp-sections 13 of the plate, so that the legs, through the medium of the clamps may have vertical movement also. It may be readily observed that the legs may at any time be folded up parallel with the beam. Each leg near its lower end is provided with a collar 16, which prevents the legs from entering too far into the ground.

A carriage A is held to travel upon the beam, the upper portion of the carriage being provided with friction-rollers 17, which travel upon the beam, and between the lower portion of the carriage, at one end, a lock-lever 18 is pivoted, provided with a head 19, having a cam-face, and when this lever is carried in one direction the cam-face engages with the under surface of the beam and locks the carriage to it. When the lever is carried in an opposite direction, the cam-face is removed from the beam and the carriage may be made to travel in direction of either end thereof.

At or near the center of the carriage ears 20 are projected downward from its under surface, and between these ears a peripherally-grooved pulley or wheel 21 is pivoted. The side surfaces of this pulley or wheel are recessed, preferably, as shown in Fig. 3, and in each of the recesses a spring 22 is coiled, one end of each spring being secured to the hub of the wheel and the other end to the ears 20, which hold the wheel, the spindle 23 being fixed in the wheel and turning in the ears.

At the opposite end of the carriage to that in which the lock-lever is located a shaft 24 is held to revolve. Upon this shaft within the carriage a sprocket-wheel 25 is firmly mounted, and outside of the carriage a large peripherally-grooved wheel 26 is loosely mounted, and upon the outer end of the shaft a ratchet-wheel 27 is securely fixed, which ratchet-wheel is adapted to be engaged by a pawl 28, pivotally attached to the outer face of the loose wheel 26, the pawl being spring-pressed. The loose wheel 26 is adapted as a brake-wheel, and to that end is surrounded by a strap-brake 29, constructed of spring metal, one end of the brake being secured to an extension 30, projecting from the lower portion of the carriage, while the other end of the brake is attached to the upper end of a lever 31, pivoted upon each extension, the lever being normally held in a position to apply the brake to the periphery of the brake-wheel through the medium of a spring 32, thus rendering accidents impossible, as the coffin cannot be lowered without pressure being applied to the brake-lever.

A chain 33 is attached to the periphery of the small spring-controlled grooved wheel 21, and this chain passes over the sprocket-wheel 25 of the shaft 24. The lower end of the chain is attached to a bar 34, and to each end of the bar one end of a strap is secured, the straps being designated as 35 and 36. The opposite ends of the straps are also connected by a bar 37, this bar being preferably shorter than the bar 34.

A locking device is also employed, consisting of a plate 38, having its lower end bifurcated and upturned, forming hooks 39. A slide 40 has longitudinal movement upon the plate over the bifurcated portion thereof, and this slide terminates at its lower end in a hook 41. The slide, however, is normally drawn upward away from the hooks on the main body of the plate by means of a spring 42, connected with its upper end, as is best shown in Fig. 5.

In the operation of the device, after it has been adjusted over a grave, the beam 10 extending longitudinally thereof, and the casket has been placed upon the straps, the straps passing around it and extending above opposite sides, as shown in Fig. 3, this adjustment of the straps having been effected while the casket is at the end of the grave, the hooks 39 of the locking device are made to engage with the short bar 37, and the slide 40 is drawn downward until the hook at its lower end also engages with the bar between the two main hooks 39. The coffin or casket is then carried over the grave by means of the carriage, and by exerting pressure upon the brake-lever 31 it may be caused to descend rapidly or slowly, as the manipulator may desire, as when the brake-lever is operated to apply the brake to the brake-wheel 26 the pawl 28 will act as a brake upon the ratchet-wheel 27 and retard the movement of the shaft 24. When the casket or coffin has reached its place of rest, the chain 33 is slackened and the spring 42 upon the locking device will so act upon the slide 40 as to draw the slide upward, the weight being removed from the bar 37, and the slide will carry the bar upward with it, and thereby disengage the bar from the hooks 39 of the body-plate of the device. The bar will readily roll off of the hook 41 of the slide, since it is not very deep, and the pawl 28, being then thrown off from the ratchet-wheel 27, the springs 22 upon the wheel 21, which had been constructed when the chain 33 is drawn from the wheel, expand and automatically carry the chains and the straps which constitute the sling upward out of the way.

By this device it will be readily observed that the lowering of the casket is under the complete control of the operator, and it will also be further observed that the unlocking of the sling is entirely automatic, as is also the rewinding of the chain and the return of the sling to the top of the grave.

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

1. In a device of the character described, the combination, with a beam and legs supporting the beam, of a carriage held to travel upon the beam, a spring-controlled wheel journaled in the carriage, a shaft, also journaled in the carriage, carrying a guide-wheel fixed thereto, also a ratchet-wheel rigidly secured to the shaft, and a brake-wheel loosely mounted upon the shaft and provided with a pawl adapted for engagement with the ratchet, a lever controlling the brake-wheel, a band attached to the spring-controlled wheel and passing over the brake-wheel, a sling consisting of straps and united at its ends by bars, and a clamping device carried by the straps and adapted for engagement with one of the bars of the sling, the strap being secured to the other bar, as and for the purpose set forth.

2. In a device of the character described, the combination, with a beam, legs supporting the same, and a carriage adjustable upon the beam, of a spring-controlled wheel journaled in the carriage, a shaft also journaled in the carriage, a sprocket-wheel secured to the shaft, a ratchet-wheel fast to the shaft, a brake-wheel loosely mounted upon the shaft and provided with a pawl engaging with the ratchet, a brake-strap engaging with the brake-wheel, a lever attached to the strap, a

sling consisting of straps and united at its ends by bars, a chain attached to the spring-controlled wheel, passed over the sprocket-wheel and attached to one of the bars of the sling, and a clamping device provided with a releasing-slide, the slide and clamping device being adapted for engagement with the other bar of the sling, substantially as shown and described.

3. In a device for lowering coffins, the combination, with the lowering chains or ropes, of a sling consisting of straps and bars uniting the ends of the straps, one of the bars of the sling being attached to the rope or chain, a clamping-plate attached to the rope or chain and engaging with the other bar of the sling, and a spring-controlled releasing-slide carried by the plate engaging with the bar of the sling with which the clamping device engages, as and for the purpose specified.

4. In a device of the character described, the combination, with a supporting-beam, legs adjustably attached to the beam, and a carriage held to travel upon the beam, of a lowering mechanism carried by the carriage, a sling consisting of straps united at their ends by bars, one of which bars is connected with the lowering mechanism, a clamping-plate connected with the lowering mechanism and provided with claws or hooks to engage with the bars of the sling, and a releasing-slide, spring controlled, carried by the plate and also adapted for engagement with a bar of the sling, as and for the purpose set forth.

5. In a device of the character described, the combination, with a supporting-beam, legs adjustably secured to the beam, a carriage held to travel upon the beam and provided with a brake-lever, a hoisting mechanism connected with the carriage, and a brake mechanism coacting with the hoisting mechanism, of a sling provided at its ends with bars, one of which is connected with the hoisting mechanism, a clamping-plate secured to the hoisting mechanism and adapted for engagement with the other bar of the sling, and a spring-controlled releasing-slide carried by the plate and adapted for engagement with the bar with which the plate engages, substantially as shown and described.

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Witnesses:
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