

(No Model.)

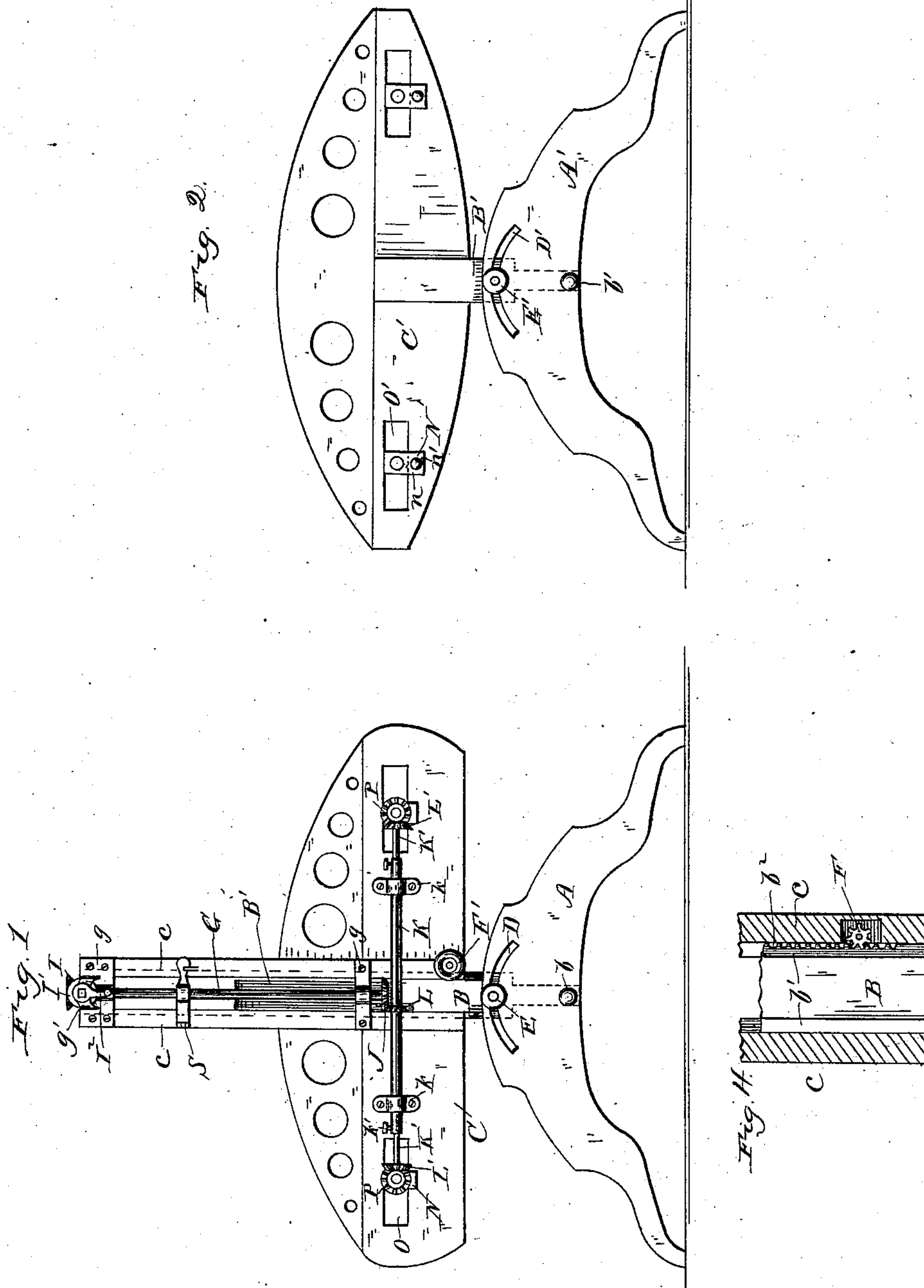
2 Sheets—Sheet 1.

G. T. CONRATH.

DEVICE FOR LOWERING COFFINS INTO GRAVES.

No. 294,366.

Patented Mar. 4, 1884.



Witnesses

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J. S. Barker.

Inventor

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(No Model.)

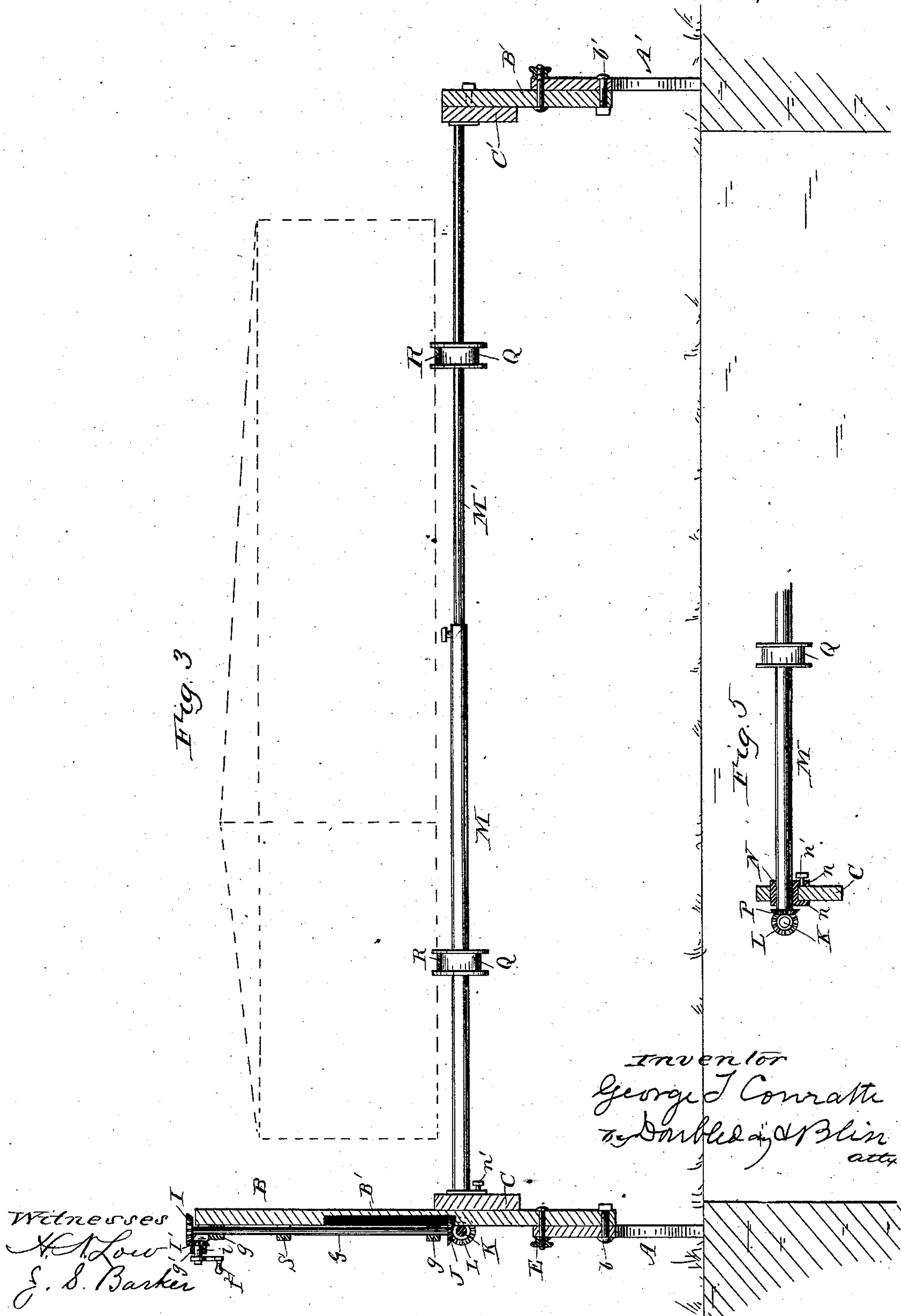
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# UNITED STATES PATENT OFFICE.

GEORGE T. CONRATH, OF WARREN, PENNSYLVANIA.

## DEVICE FOR LOWERING COFFINS INTO GRAVES.

SPECIFICATION forming part of Letters Patent No. 294,366, dated March 4, 1884.

Application filed August 3, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE T. CONRATH, a citizen of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Lowering Coffins into Graves, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is an elevation of the end of the device placed at the lower end of the grave. Fig. 2 is a similar view of the end at the higher end of the grave. Fig. 3 is a central longitudinal section of the device. Fig. 4 is a sectional view, showing the rack and pinion for raising and lowering the mechanism. Fig. 5 is a view of a portion of one of the longitudinal shafts, its bearing-box being in section.

A A' represent the foot pieces or standards which rest upon the ground and support the operating mechanism, the one A being placed at the lower end and the one A' at the higher end of the grave, should the surface of the ground be sloping.

B is an upright post pivotally connected at *b* to foot-piece A, and extending upwardly therefrom, it being adapted to swing around said pivot as a center.

C is a cross-piece situated transversely to post B, and adapted to be raised and lowered relative thereto.

*c c* are strips attached to the outer face of cross-piece C, one being on each side of post B. Their inner edges overlap the beveled faces *b'*, Fig. 4, of post B, and prevent the parts from becoming separated, while permitting a relative vertical movement.

D is a curved slot formed in foot-piece A concentric with pivot *b*, through which slot passes a set-screw, E, engaging with the vertical post, and operating to hold it in any desired position.

B' represents an upright post pivoted at *b'* to standard A', and extending upwardly therefrom.

D' is a curved slot in standard A', through which passes a set-screw, E', these being similar to slot D and set-screw E above described.

It will be seen that by loosening set-screws E and E' the whole frame may be rocked upon pivots *b b'* until in a level position, where it may be secured by again tightening the screws.

Upon one edge of post B is a series of cogged teeth, *b'*, with which engages a pinion, F, operating in a recess formed in one of the strips *c*, as shown in Fig. 4.

F' is a hand-wheel upon the outer end of the pinion-shaft, by which the pinion is rotated. By this arrangement the cross-piece C and the mechanism carried thereby may be raised and lowered relatively to the parts A and B, any form of stop desired being used to hold the parts rigidly when the proper position has been secured.

I do not wish to be limited to the precise construction of raising and lowering mechanism shown, as the rack may be formed upon the strips *c*, while the pinion is carried by the upright post; or, in place of the pinion, simply a spring-catch may be employed, the cross-piece being raised by hand. Nor do I wish to be limited to the arrangement of the post B, strips or cleats *c*, and cross-piece C shown, as the post B may be made in two parts—a lower part pivoted to foot-piece A, and to which are connected cleats *c*, and an upper part secured to and carrying cross-piece C, and sliding in the way formed by the strips *c c*. In such case the brackets *g* and the brake (to be hereinafter described) would be attached to the upper part of the vertical post, instead of to strips *c*.

Referring to the devices for lowering the coffin, G is a vertical shaft working in brackets *g g*, attached to strips *c*, and carrying a bevel-wheel, I, at its upper end, and a similar bevel-wheel, J, at its lower end.

I' is a bevel-pinion mounted upon a stud-shaft, *i*, carried by a bracket, *g'*, and engaging with wheel I. The shaft *i* is provided at its outer end with a crank, *f'*, by which power may be applied to shaft G.

K K' K' is an extensible horizontal shaft lying upon the outer face of bar C, and secured thereto by brackets *k*. The part K is hollow and of larger diameter than the parts K' K', which latter pass into the part K, and when inserted the proper distance are secured rigidly therein by set-screws *k'* or otherwise.

L is a bevel-wheel keyed to the center of shaft K and meshing with wheel J, and L' L' are bevel-wheels upon the outer ends of parts K' K' of the horizontal shaft. The upright post is cut away or recessed at B', to permit



the bevel-wheels J and L to be raised and lowered when the parts are being adjusted to a longitudinal level position.

M M' M M' are extensible longitudinal shafts 5 connecting the two foot-pieces of the device together, one shaft extending upon each side of the grave. These shafts work in boxes N N', which are movable and may be adjusted in slots O O', formed in cross-pieces C C'. Each 10 box N N' is provided with downwardly-extending lips or lugs *n*, which lap over and bear upon each side of the cross-piece upon which it slides, thus steadying the box and its shaft, and affording a bearing for the set-screws *n'*, 15 which engage with the cross-pieces and secure the shafts against displacement.

P P are bevel-wheels secured to parts M of the longitudinal shafts, and adapted to engage with and be rotated by wheels L' L'.

20 It will be seen from the foregoing description that upon turning the crank I<sup>2</sup> power will be transmitted, through shafts G and K K' K', to the longitudinal shafts M M', and will rotate them, together with the wheels or drums Q Q 25 thereon. Around said drums are wound the straps R, upon which rests the coffin. These drums may be secured to the shafts by a backing-ratchet, or they may be made fast thereon, as desired, though in practice I prefer the 30 ratchet-connection. The longitudinal shafts M M' may be moved farther apart or closer together, to correspond to the width of the coffin to be lowered, by sliding the boxes N N' in the ways O O', and securing them in proper posi- 35 tion by set-screws *n'*, or by any other preferred means. The smaller parts K' K' of the transverse shaft are then moved into or withdrawn from the part K, to secure engagement between bevel-wheels L' and P, when the shafts may 40 be worked by means of crank I<sup>2</sup>.

The device may be adjusted to correspond with the length of the coffin by moving the foot portions nearer together or farther apart, 45 this being permitted by the part M' of the longitudinal shaft sliding into the part M in a manner similar to that in shaft K K' K'.

S represents a brake, of any preferred construction, attached to strips *c* and bearing upon shaft G, to ease the descent of the coffin and 50 prevent the movement of the parts until it is desired to lower the coffin.

The operation of the device is as follows: The foot-pieces A and A', upon which are mounted the entire adjusting and lowering 55 devices, are placed at the head and foot of the grave, the part A being placed at the end which is the lower, should the ground be sloping, the extensible shafts M M' permitting the foot parts to be placed quite close to the ends of 60 the grave, whatever be its length. When properly adjusted as to length, the parts M M' of the shaft are securely clamped together. The shafts M M' are next moved in slots O O' to suit the width of the coffin, a few inches 65 being allowed for play, a corresponding movement between the parts K' K' and K of the transverse shaft being made to insure an en-

gagement between bevel-wheels L' and P. After the parts have been adjusted to suit the size of the coffin and locked in working position, 70 the entire lowering mechanism is rocked upon the pivots *b b'* until in a level position transversely, when it is clamped by set-screws E E'. Should the ground be sloping in the direction of the length of the device, the cross-piece C may 75 be elevated or lowered by means of hand-wheel F' and the rack and pinion until the connecting-shafts M M' are level, when the device will be in position to receive the coffin upon the straps R, where it will remain until the proper time for 80 lowering into the grave, which is done by means of the crank I<sup>2</sup> and the intermediate wheels and shafts, as will be understood.

From the above description, and an examination of the drawings, it will be understood 85 that the lowering devices may be adjusted to a horizontal position, whatever may be the inclination of the ground, while the foot-sections A A' will rest securely upon the ground. After the coffin is in place in the box placed 90 for its reception in the bottom of the grave, the straps are slipped from the ends of the coffin, and, by a reverse movement of the crank, again wound upon the wheels Q; or one end of each strap may be detached from its wheel, 95 and be pulled from below the coffin by hand or otherwise.

The parts of the device are made light, so the whole device may be lifted and moved from place to place by two men. 100

I do not wish to be limited to the precise construction of devices shown, as modifications will readily suggest themselves, without, however, departing from the spirit of my invention. 105

If desired, the vertical shaft may be dispensed with, power being applied directly to the transverse shafts K K' K'; but I prefer the construction shown.

What I claim is— 110

1. In a device for lowering coffins into graves, the combination of the supporting-frame adapted to rest upon the ground, the lowering mechanism mounted thereon and adjustable to a longitudinal level position, and 115 devices which lock said mechanism in a level position, substantially as set forth.

2. In a device for lowering coffins into graves, the combination of the supporting-frame adapted to rest upon the ground, the 120 lowering mechanism mounted thereon and adjustable to a transverse level position, and devices which lock said mechanism in said level position, substantially as set forth.

3. In a device for lowering coffins into 125 graves, the combination of the supporting-frame adapted to rest upon the ground, the lowering mechanism mounted thereon and adjustable to both a longitudinal and a transverse level position, and devices which lock said 130 mechanism in both of said level positions, substantially as set forth.

4. In a device for lowering coffins into graves, the combination of the foot-pieces A



and A', provided with curved slots D D', a frame carrying the lowering mechanism supported upon pivots b b', and the set-screws which pass through said slots, substantially as set forth.

5 5. In a device for lowering coffins into graves, the combination of the foot-piece A', a frame for supporting one end of the lowering mechanism attached to said foot-piece, the  
10 foot-piece A, a vertical post attached to foot-piece A, and a cross-frame sliding upon said post and carrying the other end of the lowering mechanism, substantially as set forth.

15 6. The combination of the foot-pieces A A', the frames C C', carrying the lowering mechanism, the post B, upon which the frame C slides vertically, and the rack and pinion for elevating and lowering said frame, substantially as set forth.

20 7. The combination of the foot-pieces A A', the frames C C', carrying the lowering mechanism, the post B, upon which the frame C slides vertically, and having recess B' in its outer face, for the purpose described, and  
25 mechanism for elevating and lowering frame C upon the post B, substantially as set forth.

30 8. The combination of the supporting-frame adapted to rest upon the ground, the frames C C', mounted upon said supporting-frame, the vertical post B, upon which slides the frame C, the strips c, carried by frame C, adapted to prevent displacement of post B, and mechanism for elevating and lowering the  
35 frame C upon the vertical post, substantially as set forth.

40 9. In a device for lowering coffins into graves, the combination of the supporting-frame adapted to rest upon the ground, and the lowering mechanism mounted upon said frame and adjustable to suit coffins of various widths, substantially as set forth.

45 10. In a device for lowering coffins into graves, the combination of the supporting-frame adapted to rest upon the ground, and the lowering mechanism mounted upon said frame and adjustable longitudinally and transversely, to suit coffins of various sizes, substantially as set forth.

11. In a device for lowering coffins into graves, the combination, with the supporting-  
50 frame, of the longitudinal shafts mounted therein and carrying gear-wheels, a transverse shaft carrying gear-wheels engaging with the wheels on the longitudinal shafts, and mechanism for rotating said shafts, substan-  
55 tially as set forth.

12. In a device for lowering coffins into graves, the combination, with the supporting-frame adapted to rest upon the ground, of the longitudinal shafts carrying the straps R, the  
60 transverse shaft, the gear-wheels between said shafts, the upright shaft G, the gear-wheels between said shaft G and the transverse shaft, and means for rotating all of said shafts and wheels, substantially as set forth.  
65

13. In a device for lowering coffins into graves, the combination, with the supporting-frame, of the transverse extensible shaft K K' K', the longitudinal shafts movable toward  
70 and from said transverse shaft, bevel-wheels between said shafts, and mechanism for rotating said shafts, substantially as set forth.

14. In a device for lowering coffins into graves, the combination, with the supporting-frame, of longitudinal extensible shafts M M',  
75 a transverse shaft, bevel-wheels between said shafts, and mechanism for rotating said shafts, substantially as set forth.

15. In a device for lowering coffins into graves, the combination, with the supporting-  
80 frame, of the longitudinal extensible shafts M M', the transverse extensible shaft K K' K', the bevel-wheels between said shafts, the vertical shaft G, bevel-wheels between said shaft G and the transverse shaft, and devices for ro-  
85 tating said mechanism, substantially as set forth.

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

GEORGE T. CONRATH.

Witnesses:

A. T. SCOFIELD,  
O. F. HOFFMAN.