

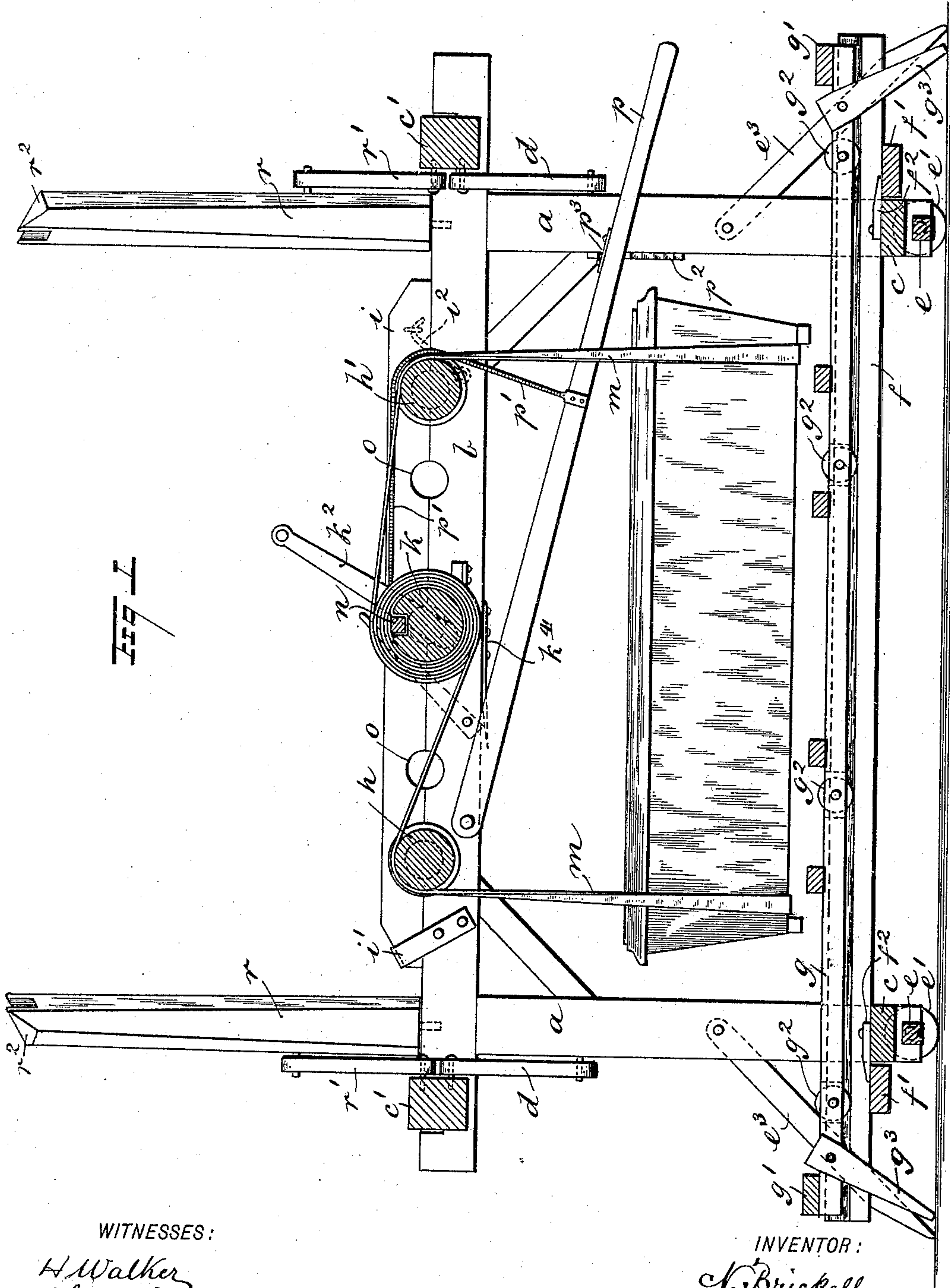
(No Model.)

3 Sheets—Sheet 1.

N. BRICKELL.
BURIAL APPARATUS.

No. 445,875.

Patented Feb. 3, 1891.



WITNESSES:

H. Walker
C. Bedgwick

INVENTOR:

N. Brickell

BY

Munn & Co.

ATTORNEYS

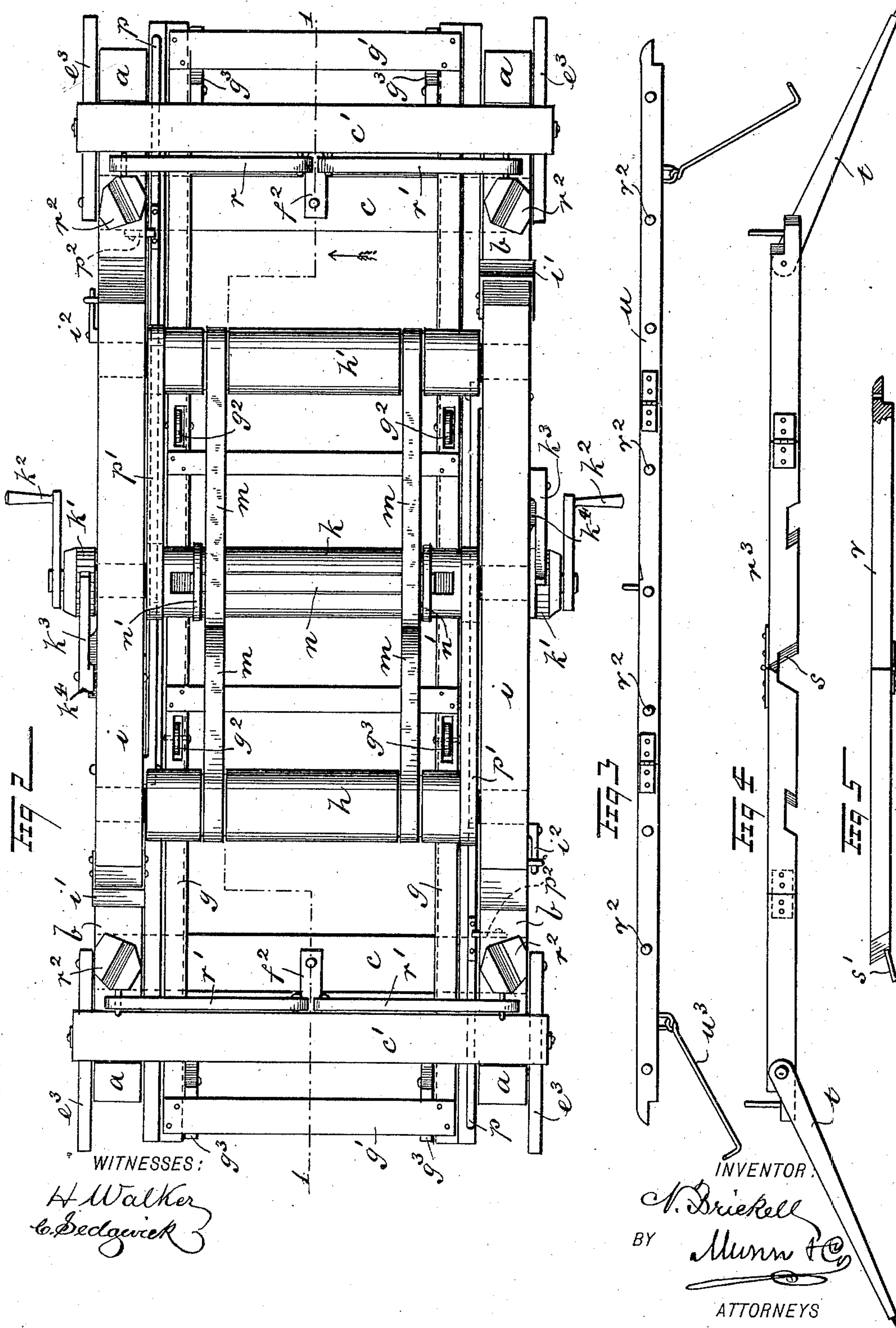
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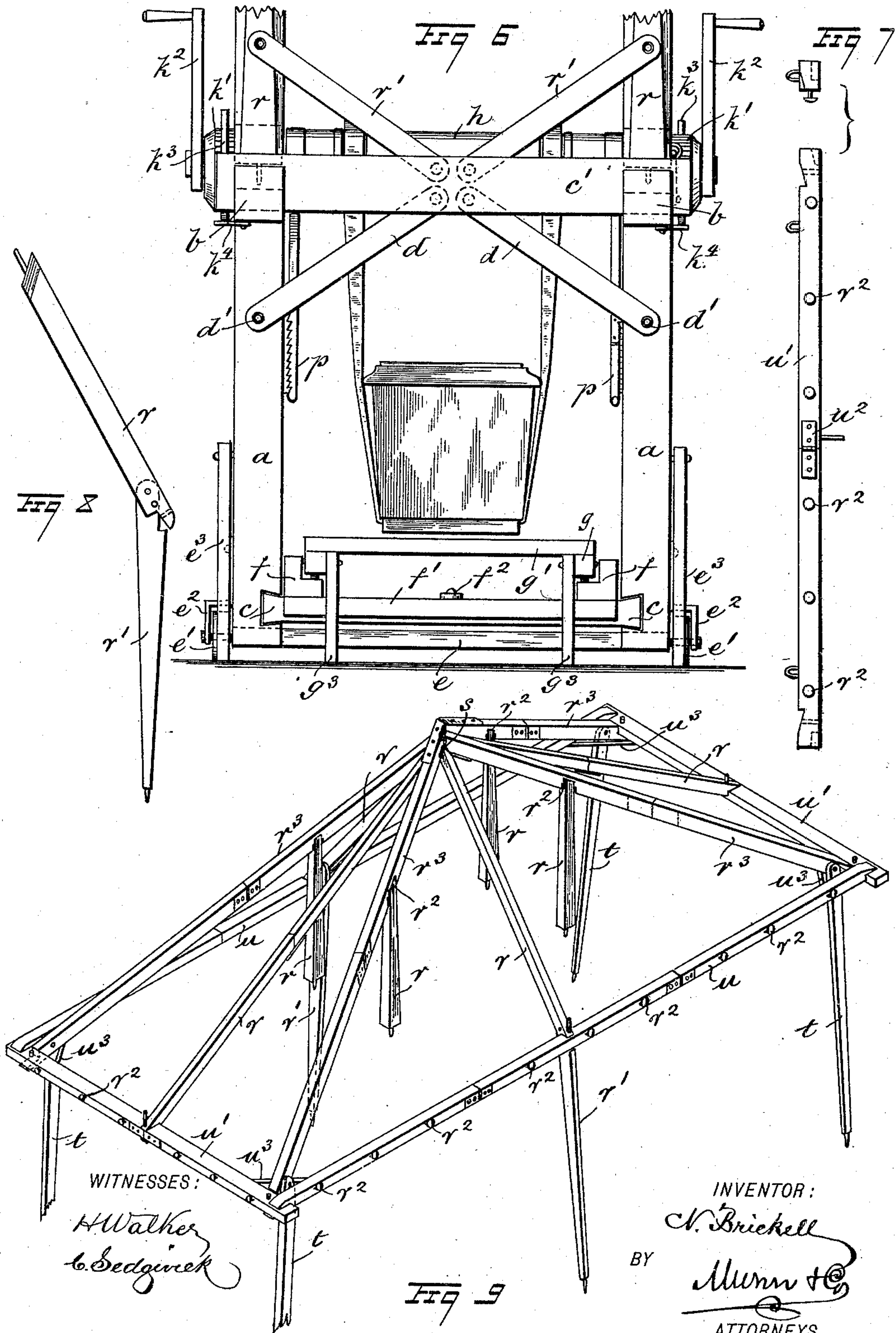
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UNITED STATES PATENT OFFICE.

NICHOLAS BRICKELL, OF POPLAR GROVE, ARKANSAS.

BURIAL APPARATUS.

SPECIFICATION forming part of Letters Patent No. 445,875, dated February 3, 1891.

Application filed May 10, 1890. Serial No. 351,252. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS BRICKELL, of Poplar Grove, in the county of Phillips and State of Arkansas, have invented a new and useful Derrick and Canopy therefor, of which the following is a full, clear, and exact description.

This invention relates to an improved means for transferring a coffin or burial-casket from the ground surface to a grave-bottom or vault, and has for its object to provide a device which is portable, easy and convenient to operate, and that will afford safety and celerity in the transmission of the incased dead body from the surface to the bottom of a vault or grave, a further object being to afford a protection from the elements around the grave while the funeral services are being there conducted.

To these ends my invention consists in the construction and combinations of parts, as is hereinafter described, and indicated in the claims.

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

Figure 1 is a sectional side elevation of the derrick, taken on the line 1 1 in Fig. 2, showing a casket in position to lower it into a grave. Fig. 2 is a plan view of the derrick. Figs. 3, 4, and 5 are enlarged views of detached portions of a separable canopy-frame employed in connection with the derrick to protect it from the sun, rain, or snow. Fig. 6 is an end elevation of the derrick. Figs. 7 and 8 are detached and enlarged views of portions of the canopy-frame, and Fig. 9 is a perspective view of the canopy-frame detached from the derrick.

One of the essential features of this device is that it is made separable into pieces convenient to pack into compact bundles, thus facilitating its transportation from one locality to another, and in so constructing the several parts that they may be rapidly and surely assembled into form as a complete machine ready for use without noise or re-

quiring special tools to effect such an erection of the device.

With this in view the main frame of the derrick is composed of four upright posts *a*, which are united in pairs on each side by the cap-plates *b*, that have sockets or mortises produced in them for reception of tenons or tongues formed on the upper ends of the posts in the usual manner of framing timbers together. The side sections of the frame are secured together separately by cross-sills *c* near the lower ends of the posts *a*, that have interlocking dovetail connections of their ends, with mating notches formed oppositely in the inner sides of the posts, as shown in Fig. 6, and at the top the frame-sections are held spaced apart to produce a rectangular frame by the cross-bars *c'*, that are notched on their lower surfaces, a sufficient portion being removed to permit the bars to have a sliding engagement with the cap-plates *b* and retain the sides of the frame spaced apart.

As a means for stiffening the connection of parts just described there are diagonal braces *d*, pivotally secured by their upper ends near each other in pairs, the lower ends of the braces being extended in a diagonal direction to engage their laterally-perforated ends *d'* with projecting pins that are affixed in the sides of the posts *a* at proper points, which braces, when in place, hold the cross-bars *c'* firmly but removably in place. It will thus be seen that with a wooden muffled mallet the frame structure may be erected at a point convenient to the grave, and to further its movement into place above a vault or open grave there are transverse axles *e* furnished, which are inserted in square notches in the lower ends of the posts *a*. Said axles, projecting outside of the frame on each side, are rounded into spindles on their end portions, upon which low wheels *e'* are adjusted and retained removably by the spring bracket-plates *e''*, that are pivoted by their upper ends on the outer sides of the posts *a*, so that they may be swung into position aligning with the posts and engage with their perforated lower ends pintles formed on the ends of the axle-

spindles, whereby the wheels e' are revolvably retained and the frame free to be rolled into any desired position and there retained by the pivoted props e^3 , which project from the posts a .

On the cross-sills c a rectangular frame is placed having side bars f , formed with up-turned flanges at their outer edges, and at each end the cross-pieces f' , which hold these side bars spaced apart a proper width, are made to loosely impinge on the outer faces of the cross-sills, thus preventing a longitudinal displacement of the frame, which serves the purpose of a tramway for a traveling carriage, the turn-buttons f^2 retaining the tramway when in use.

The carriage just named is made light and strong in rectangular form, consisting of two similar side pieces g , that are secured together and properly spaced apart to loosely engage the flanges of the tramway-bars f by cross-bars g' , these latter being also designed to support a burial-casket or coffin when in service. Small wheels g^2 are journaled in the side pieces g and project through the slots they are located in, so as to rest on and roll upon the side bars f of the tramway below the movable carriage, and in order to permit the carriage to be utilized as a stretcher-frame for the reception of the coffin or casket from the hearse and transportation of the same to the derrick four folding handles are provided, as shown at g^3 in Fig. 1, which by their extension horizontally serve as grip-pieces, whereby two men can transfer the coffin, if of an ordinary weight, from the vehicle to the derrick, which coffin, when rolled into place over the grave, is ready to be lowered therein, the handles g^3 also serving as supports for the rolling carriage to retain it stable when in position above the open grave.

The device for transferring the coffin from the rolling carriage into the grave or vault below consists of a windlass mechanism, of which two transverse rollers h h' are journaled in bearings formed one half in the upper edge portions of the cap-plates b and the other half of the same in keeper-bars i , placed upon the plates b and removably retained there by the insertion of their tapered ends into the loops i' , which are secured to and project upwardly from the cap-plates near two diagonally-opposite posts a , the other end portions of the keeper-bars being held seated on the cap-plates by hooks i^2 , engaging staples in the sides of said bars i . Centrally between the bearings of the rollers h h' a transverse windlass-drum k is journaled in the cap-plates and keeper-bars in a manner similar to that employed for revolvable support of the rollers, journals of reduced diameter, affording lateral shoulders for retention of the drum, being cut therein at suitable points to engage the bearings provided to receive them. Outside of the frame of the derrick the drum k is furnished on each end portion with a ratchet-wheel k' , which may be made integral with the drum-shaft or be secured thereto, and on the terminal ends of said shaft removable crank-handles k^2 are placed when the machine is to be used. The ratchet-wheels k' are engaged when necessary by the pawls k^3 , that are held in mesh or away from the ratchet-wheels by the springs k^4 . Upon the drum k the oppositely-wrapped bands m are secured by their ends, which are spaced apart sufficiently to permit two portions of each band to engage flat grooves in the rollers h h' , that thus direct the descending loop portion of each band, so that they will hang properly to engage the bights of their loops with the end portions of a coffin or casket.

All the ends of the oppositely-leading bands m are removably held in contact with the drum k by their insertion below a locking-strip n , that is embedded in a longitudinal channel formed in the peripheral surface of the drum, said strip being there retained by the sliding engagement of the ring-keepers n' , (see Fig. 2,) which, when slid over the ends of the strip n , clamp the same upon the band ends and retain them secured until the rings n' are moved off of the strip, as is done when the bands are to be removed from a lowered coffin.

There are other bearings o made in the cap-plates b and keeper-bars i , which are intermediate of those already described, the inner bearings being adapted to receive the rollers h h' , if a small coffin or casket is to be lowered. In order to enable the operators to safely control the downward movement of the coffin when it is being lowered, a brake-lever p is provided for each side of the derrick-frame and are pivoted at one end on the cap-plates b , as shown in Fig. 1, said levers having straps or flexible bands p' attached by one end of each upon the levers nearly in vertical line below the center of the nearest of the rollers h h' , these bands being extended upwardly from their points of attachment to the levers, so as to engage the upper surface of the rollers h h' , and thence to have their opposite ends attached to the windlass-drum k , so that a depression of the levers at their outer ends will control the revolution of the rollers and drum as the bands p' are wrapped upon the latter-named to extend toward opposite ends of the derrick-frame.

To secure the levers p at any desired point of depression and thereby hold the drum from revolving too fast in case a heavy casket is being lowered, the levers are interlocked with the ratchet-racks p^2 , which are secured in a vertical position on the posts a by engagement therewith of the locking-plates p^3 of said levers.

As the burial service is frequently conducted at the grave, and possibly during inclement weather, or under the rays of the sun in summer when there is great heat, and injury may result to participants in the service, a

movable canopy has been devised, which forms a valuable adjunct of the coffin-lowering device herein described. Said covering consists of four standards r , which are erected on the cap-plates b above the posts a , being provided with dowel-pins that enter mating sockets in the cap-plates.

On the inner sides of the cross-bars c' diagonal braces r' are pivoted, the upper ends of which are laterally perforated and engage pins placed at proper points in the outer sides of the standards r , thus laterally stiffening these standards in their upright positions. Upon the beveled and notched upper ends r^2 of the posts r rafter-strips r^3 are loosely secured by their engagement with the notches at r^2 . These strips are inclined and project toward a point above the derrick-frame where the four rafter-strips meet, and are detachably connected by any preferred means. As shown, the rafter-strips have notches for interlocking connections, produced as at s in Fig. 4, which represents the capping-pair of rafters that are hinge-jointed together at their upper ends and receive the other pair of rafters, the ends of which enter the notches of the capping pair and are joined together by a dowel-pin s' on one rafter entering a socket-hole in the other rafter and abutting upon one of the last-mentioned rafters, being shown in Fig. 5.

The length of the rafter-strips r^3 is so proportioned that their outer ends will project considerably outside of the derrick-frame and have pivotal engagement with the upright prop-bars t , that are of a suitable length to enter the ground with their pointed lower ends, and thus support the outer ends of the rafters.

Around the canopy-frame produced by the combination of pieces just described the horizontal border-rails $u u'$ are attached, the first-named consisting of elongated strips which are jointed together by hinges so applied thereto that when extended and in position these rails will resist strains from the inner side and afford a substantial border for the canopy-frame on its side edges. The end strips u' are similarly hinge-jointed near their longitudinal centers, as at u^2 in Fig. 7, and interlock with the ends of the side strips u , thus affording a complete canopy when the intermediate rafter-pieces v are introduced and removably secured to the other rafters at their top ends and the side and end rails at their lower ends, as shown in Fig. 9, these intermediate rafters being furnished with prop-bars v' , that are jointed thereto and enter the ground midway between the end props t , the side and end border-rails $u u'$ having hooked connections furnished, as at u^3 in Fig. 9.

Upon the canopy-frame a water-proof canvas or other cover may be spread and secured thereon by its engagement with projecting button-headed pins v^2 , that project from the rails $u u'$, whereby a substantial canopy that

will protect a number of people is supplied and supported upon the derrick-frame in a manner that will permit quick removal or erection with a muffled mallet, thus avoiding all the inconvenience and discomfort attendant upon the ordinary methods of lowering coffins or caskets into graves or vaults, and also affording complete protection to those who attend the funeral at the grave.

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

1. In a burial apparatus, the combination, with a frame adapted to be placed over a grave and provided with parallel tracks near the ground-line, of a separate and independent carriage provided with pivoted handles at its ends and wheels to run on said tracks and forming a bier upon which the coffin may be carried to the grave, the said handles being constructed to be swung down to engage the ground and form stops, substantially as set forth.

2. A burial apparatus comprising a rectangular knockdown frame having lower end cross-pieces $c c$, the parallel tracks or ways $f f$, having connecting cross-pieces $f' f'$, turn-buttons on the pieces $c c$ to overlap the cross-pieces f' and secure the tracks against displacement, and a carriage to travel on said tracks and forming a bier upon which the coffin may be conveyed to the grave, substantially as set forth.

3. A burial apparatus comprising a knockdown frame having corner-standards provided with square notches in their lower ends, a coffin-lowering mechanism on the upper part of said frame, the square axles to rest in said notches and having their outer projecting ends rounded to receive the removable wheels, and spring bracket-plates e^2 , secured at one end to said standards and having apertures in their opposite ends receiving the rounded extremities of said axles to retain the wheels in place and permit of their ready removal, substantially as set forth.

4. A burial apparatus comprising a knockdown frame, the upper edges of the side bars of which are provided with semicircular recesses, the strap i' , the bars i , having their lower edges provided with semicircular recesses registering with those of the side bars to form the drum and roller-bearings O , said bars at one end projecting into said loops, hooks and eyes securing their opposite ends, the lowering-drum having straps or bands, and the rollers $h h$ at opposite sides of the drum, substantially as set forth.

5. In a burial apparatus, a frame having mortises or sockets on its upper side, a lowering mechanism on said frame, and a knockdown canopy-frame consisting in the four standards r , having dowels or tenons on their lower ends to enter said mortises or sockets and notches r^2 in their upper ends, sectional

hinged inclined rafter-strips r^3 , extending
loosely through said notches and loosely con-
nected at the apex of the canopy-frame, the
prop-bars t , pivoted at their upper ends to
5 the outer ends of the end rafter-strips, the
horizontal side and end sectional hinged bor-
der-rails $u u'$, detachably connected to the
outer extremities of the said rafter-strips r^3 ,
and the prop-bars v' , pivoted to the ends of the

intermediate rafter-strips, the said border-
rails having securing devices for a canopy 10
top or cover, substantially as set forth.

NICHOLAS BRICKELL.

Witnesses:

S. H. KING,
A. L. WHITFIELD,
JAMES R. TURNER.