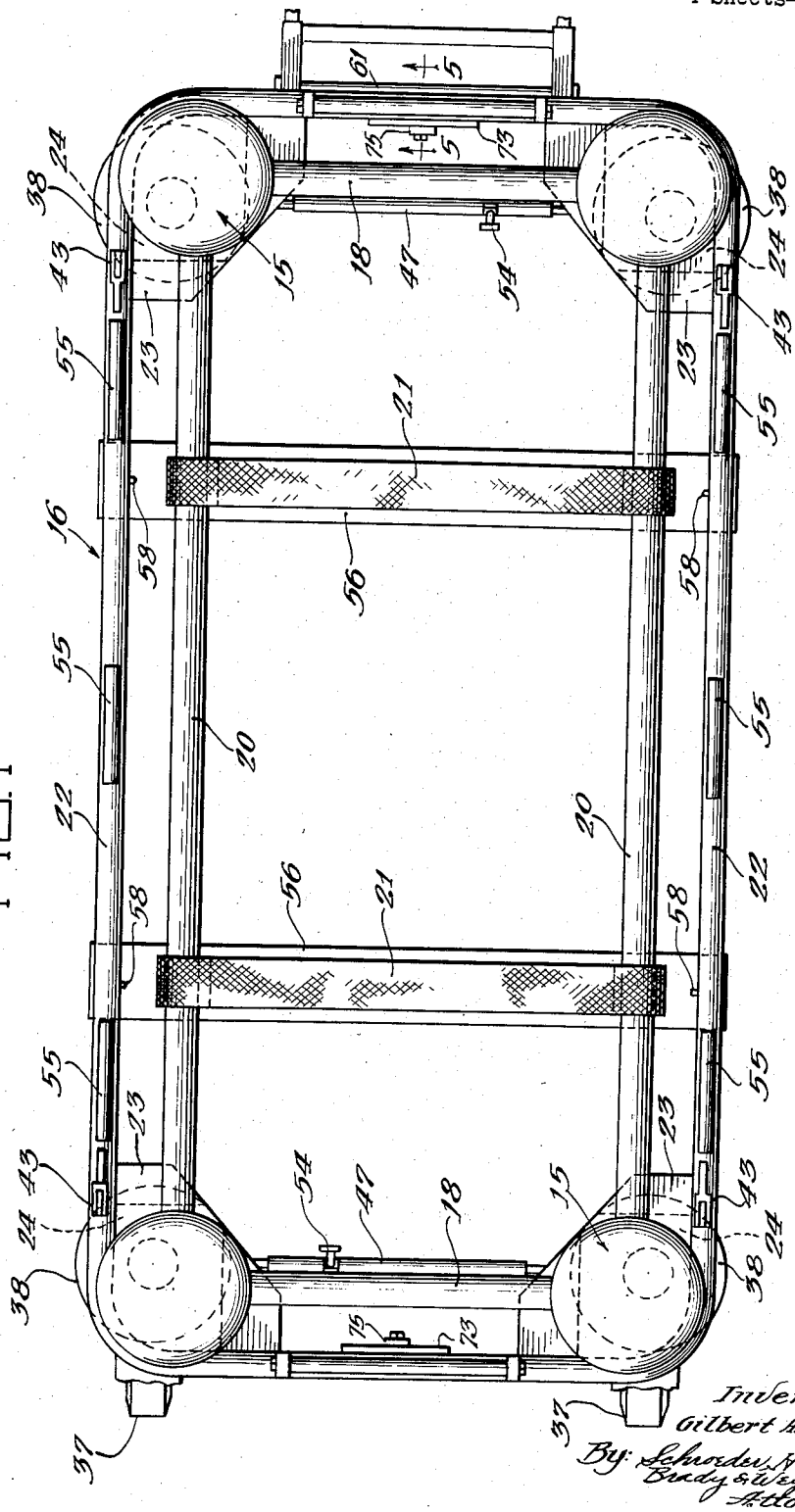
Jan. 27, 1959 G. A. YEAZEL 2,870,519

CASKET CARRIAGE

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FIG. 1



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FIG. 2

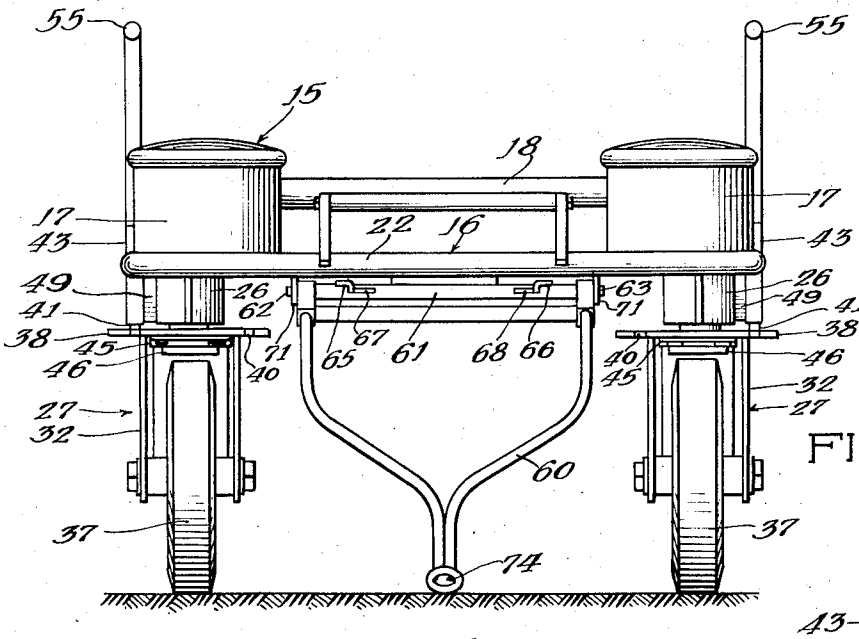


FIG. 6

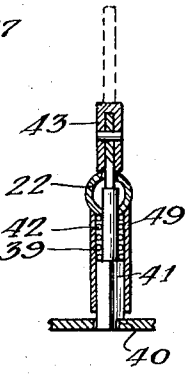


FIG. 5

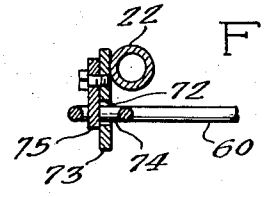
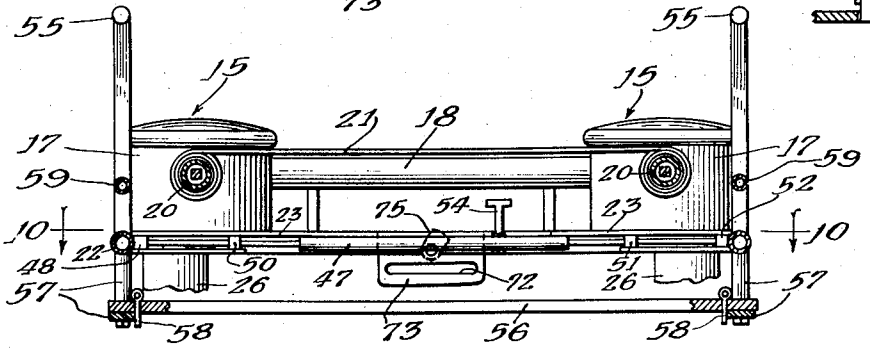


FIG. 3



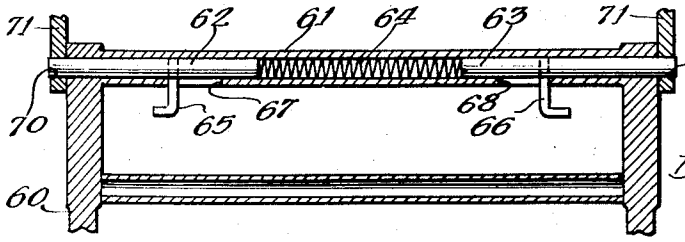


FIG. 4

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CASKET CARRIAGE

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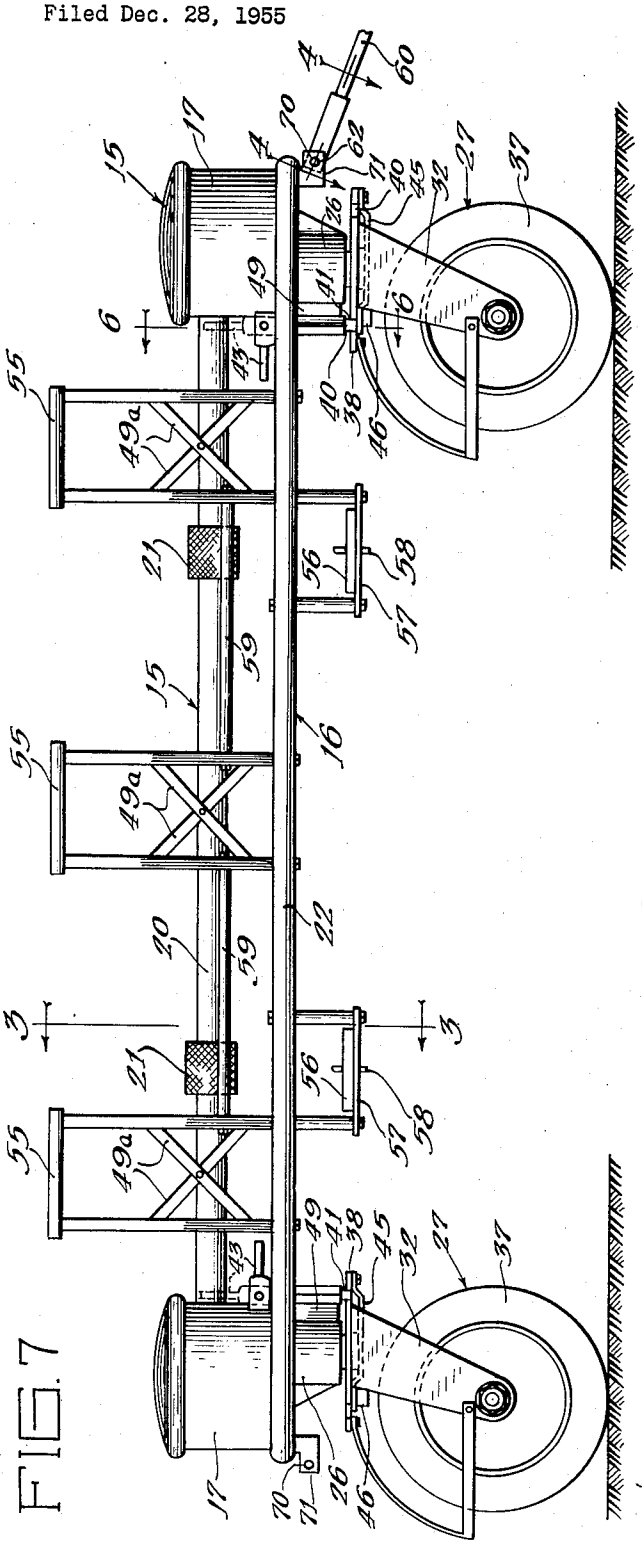


FIG. 7

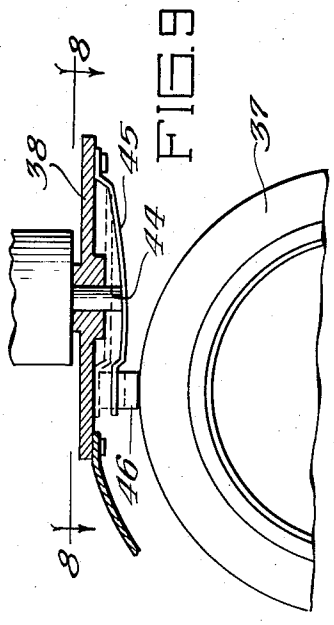


FIG. 9

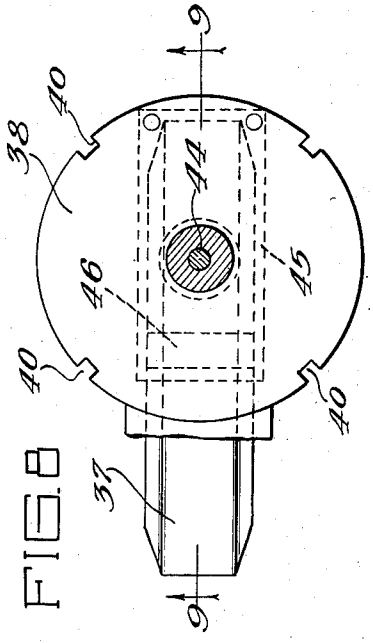


FIG. 8

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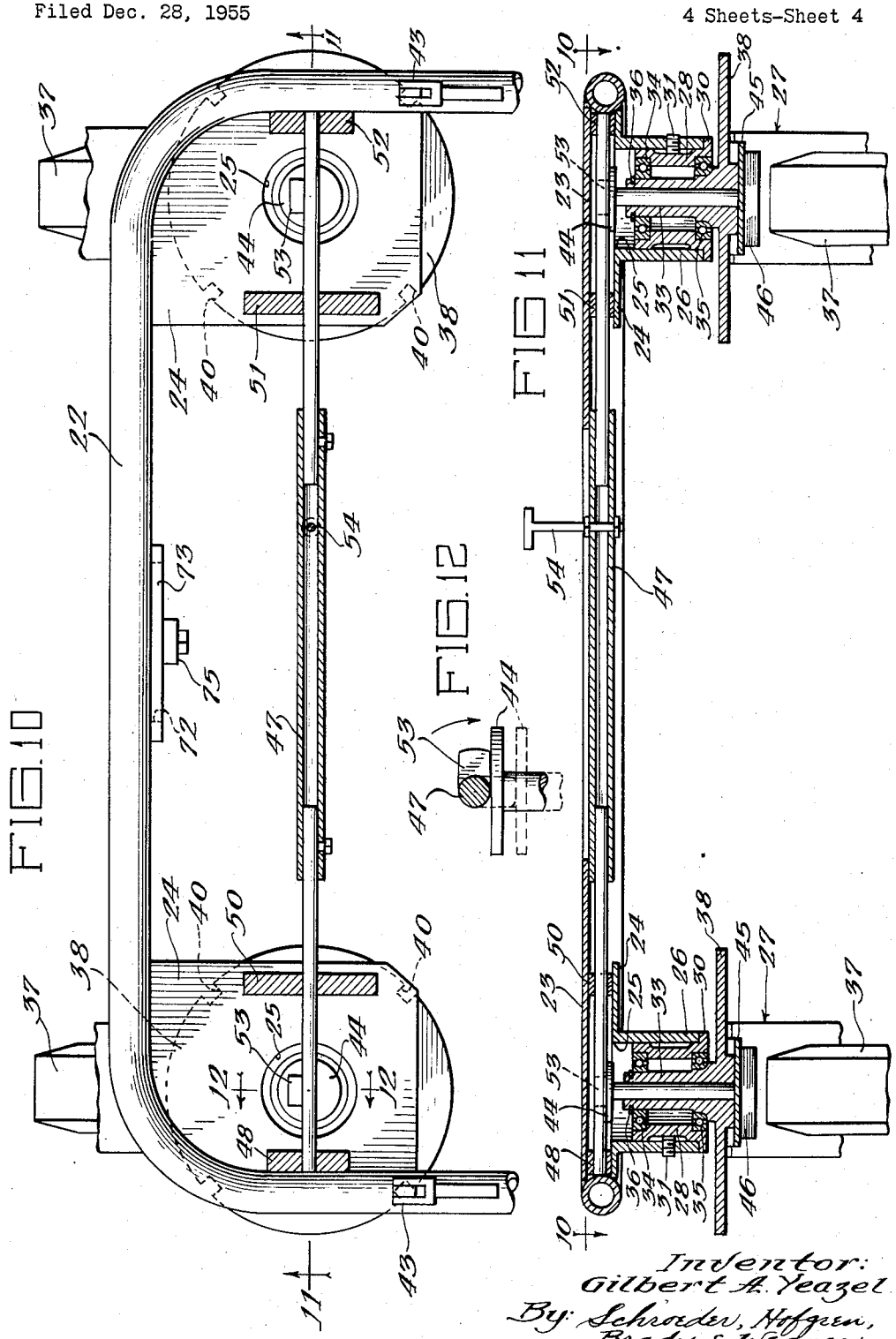


FIG. 10

FIG. 11

FIG. 12

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United States Patent Office

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CASKET CARRIAGE

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Application December 28, 1955, Serial No. 555,878

7 Claims. (Cl. 27—32)

This invention relates to casket carriages to be used in cemeteries to transport a casket from a hearse to a grave and to lower the casket into the grave.

In the usual burial proceeding in a cemetery, the grave is first opened and the casket lowering device is placed in position over the grave. Such lowering devices are well known in the art and have been used for many years. The casket is generally transported to a place near the grave in a hearse, and the pallbearers manually carry the casket to the grave and position it upon the lowering device. The casket is a heavy load, especially for pallbearers of advanced age. In addition, it is not uncommon for the solemnity of the funeral proceeding to be interrupted by embarrassing incidents. For example, when carrying the casket over uneven terrain, pallbearers have been known to fall and drop the casket to the ground. At other times, the ground near the grave has given way as the casket is being placed upon the lowering device, and the casket is prematurely dropped into the grave.

The present invention facilitates movement of the casket and minimizes the possibility of the occurrence of such unforeseen and embarrassing incidents. In using the present device, it is contemplated that the casket will be removed from the hearse and placed immediately in a secure position upon the carriage, and then wheeled into casket lowering position over the grave. Channeled guides are preferably used on opposite sides of the grave, and the carriage is wheeled over the grave upon the guides so that the load of the carriage is distributed along the opposite edges of the grave. Thus, with the present device there is no danger of the casket being dropped either on the way to the grave or at the grave.

The primary object of the present invention is to provide a new and improved casket carriage adapted for lowering a casket into a grave.

Another object is to provide a casket carriage having a lowering device and a plurality of conveniently positioned pallbearer handles to facilitate movement of the casket from a hearse to casket lowering position over an open grave.

A further object is to provide a novel brake means for securing an adjacent pair of carriage supporting wheels against rotation when it is desired to stabilize the carriage.

Another object is to provide means for selectively locking each of the carriage supporting wheels in a predetermined direction of travel, and to provide braking means for applying braking pressure to an adjacent pair of the supporting wheels regardless of the predetermined position of that pair of wheels.

Still another object is to provide detachable supporting members which extend transversely of the carriage frame and form a supporting bed for a casket within the carriage frame when the carriage is moved over uneven terrain.

The invention is illustrated in a preferred embodiment in the accompanying drawings, in which:

Fig. 1 is a top plan view of the casket carriage;

Fig. 2, an end elevational view of the casket carriage;

Fig. 3, a broken, fragmentary sectional view taken as indicated on line 3—3 of Fig. 7;

Fig. 4, a sectional view taken as indicated on line 4—4 of Fig. 7;

Fig. 5, a fragmentary sectional view taken as indicated on line 5—5 of Fig. 1;

Fig. 6, an enlarged fragmentary sectional view taken as indicated on line 6—6 of Fig. 7;

Fig. 7, a side elevational view of the casket carriage;

Fig. 8, a sectional view taken as indicated on line 8—8 of Fig. 9;

Fig. 9, a sectional view taken as indicated on line 9—9 of Fig. 8;

Fig. 10, an enlarged fragmentary sectional view taken as indicated on line 10—10 of Fig. 3;

Fig. 11, a sectional view taken as indicated on line 11—11 of Fig. 10; and

Fig. 12, a fragmentary sectional view taken as indicated on line 12—12 of Fig. 10.

In the embodiment illustrated, a casket lowering device, generally designated 15, is mounted on a movable wheeled carriage, generally designated 16. The casket lowering device is of the type now conventionally used in most cemeteries for burials. The device includes four supporting corner posts 17 which are joined together in rectangular fashion by a pair of rails 18 at opposite ends and by a pair of winding shafts 20 on opposite sides. The shafts 20 are journaled for axial rotation in bearings, not shown, in the posts 17.

A pair of flexible straps 21 are secured at their opposite end portions to each of the shafts 20 and are wound thereupon, as can best be seen in Figs. 1 and 7. When the lowering device 15 is in position over an open grave, the straps 21 support the casket as it is being lowered into the grave. When the casket is fully lowered, each of the straps are disconnected from one of the winding shafts 20 and are pulled free of the casket. Conventionally, the speed of rotation of the shafts 20 is regulated by gearing in the posts supporting an end of each of the shafts 20.

A latching structure is generally provided in connection with the gearing to prevent the shafts 20 from turning until the desired time. When the latch is released the weight of the casket causes the shafts to unwind the straps 21 from the shafts 20 causing the shafts to rotate at a speed determined by the gear ratio of the gearing in the posts 17. A crank, not shown, is usually provided to rewind the straps upon the shafts 20.

The wheeled carriage 16 is provided so that a casket may be moved from the hearse immediately to the lowering device 15, and may be wheeled to casket lowering position over the grave without expenditure of great effort and with no chance of a casket being dropped by pallbearers. The carriage preferably includes a generally rectangular frame 22 which is provided at each of its corners with an upper corner plate 23 upon which the posts 17 are supported. Each corner of the frame 22 may also be provided with a lower corner plate 24 which is secured in spaced relation beneath the upper plate 23 and which has a central opening 25 bounded by a depending cylindrical housing 26 for receiving a forked wheel assembly, generally designated 27.

Since each of the wheel assemblies is similarly constructed, a description of one will be sufficient for the purposes of this invention. As can best be seen in Fig. 12, a flanged sleeve 28 is formed to fit slidably within the cylindrical housing 26 so that the lower annular end of the housing 26 will be supported by a radially extending flange 30 of the sleeve 28. The sleeve is

preferably held in fixed relation with respect to the housing 26 by a threaded screw member 31.

In order that the wheel assembly 27 may be freely rotatable, it is provided with a swivel fork 32 having a hollow spindle 33 provided with upper and lower bearings 34 and 35 which correctly position the spindle axially of the housing 26. A keeper member 36 is provided in an annular recess at the upper end of the spindle 33 to secure the bearings and the spindle within the housing 26. Wheels 37 are conventionally mounted for rotation in each of the swivel forks 32.

The carriage is arranged so that each of the swivel wheel assemblies 27 may be locked in any one of a plurality of preselected positions. To this end, a wheel fork disc 38 may be provided on each of the swivel forks 32. The disc 38 preferably has notches 40 formed in its periphery of a size to receive a cooperating latching plunger 41 mounted adjacent each corner of the frame 22. The plunger 41 is preferably vertically slidable in a bore 39 at the outer end of a fin 49 of each of the swivel wheel assemblies 27. As can best be seen in Figs. 6, 7 and 10, the notches 40 are preferably circumferentially spaced 90° apart about the periphery of the disc 38, and are positioned so that the plunger 41 will be able to be slidably received in any selected notch to lock the swivel portion 32 in the desired direction of travel.

As best shown in Fig. 6, a spring 42 normally urges the plunger 41 downwardly into each notch and against the upper face of the disc 38. A bifurcated hand lever 43 is pivoted to the upper end of the plunger 41 to provide means for removing the plunger 41 from a notch 40. By pivoting the lever from its horizontal to its vertical position about an edge of its bifurcated portion, the plunger is drawn upwardly out of a selected notch, as can be seen from Figs. 6 and 7, to permit the wheel assembly to swivel freely on the spindle 33.

Means are also provided in the present carriage for braking an adjacent pair of wheels 37 regardless of the direction of travel in which each of the wheel assemblies 27 has been locked. As can best be seen in Fig. 11, a brake piston or plunger 44 is slidably received within each hollow spindle 33. The piston 44 is normally urged upwardly in each spindle by a leaf spring 45 which is positioned between the legs of each swivel fork 32 and is secured at one end to the disc 38. The opposite free ends of each of the leaf springs 45 carries a brake shoe 46 which is adapted to be yieldingly urged into braking engagement with the periphery of the wheels 37.

For applying braking pressure to the brake shoe 46, a pair of braking bars 47 are arranged to extend transversely of each end of the frame 22 and are journaled at their opposite ends in the bearing blocks 48, 50, 51 and 52, as can best be seen in Fig. 10. A projection or lug 53 is preferably secured near opposite ends of each braking bar 47 so that the lug is normally positioned directly above the head of the brake piston 44 in each of the forked wheel assemblies 27. As seen in Fig. 11, when the braking bar 47 is axially rotated by a brake actuating lever 54, each of the lugs 53 cams its respective brake piston downwardly against the leaf spring 45 to resiliently urge each of the brake shoes 46 into contact with the periphery of the wheels 37. This braking arrangement is preferably provided for the adjacent wheels 37 at each end of the carriage so that either or both sets of wheels may be secured against rotation as desired. Since the brake shoes 46 turn axially with each of the wheel forks 32, and the lugs 53 and brake pistons 44 operate axially of the fork spindle 33, the brake means can be applied to the wheels regardless of their direction of travel.

In order to facilitate the movement of the carriage during a burial ceremony, a plurality of upwardly extending pallbearer handles 55 are preferably secured to

opposite sides of the frame 22. The handle structures may be strengthened by cross braces 49*a* and horizontal rods 59, if desired. Preferably each of the handles 55 is positioned at a height where they can be conveniently grasped by a pallbearer so that movement of the casket and carriage from a hearse to casket lowering position over an open grave can be made without any great exertion.

In addition to the flexible straps 21 which support the casket over the grave, a plurality of transverse supports 56 are each rested upon a pair of U-shaped members 57 which are suspended from the frame 22. The supports are detachably retained on the members 57 by a pair of pins 58 which fit closely adjacent the inside of the bottom portion of each of the members 57. These transverse supports 56 form a bed for the carriage so that a casket may be lowered down within the supporting frame 22 and conveniently wheeled over uneven terrain with no possibility of the casket falling off the carriage. In addition, the support members may be retained in supporting position until just before the casket is to be lowered into the grave, so that in the event that the casket lowering device becomes faulty and prematurely drops the casket, the support members will prevent the casket from falling into the grave.

Means are also provided at opposite ends of the carriage for the attachment of a drawbar 60 so that several of the carriages may be coupled together, and pulled over long distances. As seen in Figs. 2 and 4, a hollow crossbar 61 of the drawbar 60 has telescoping elements 62 and 63 at its extremities which are resiliently urged outwardly of the crossbar by a compression spring 64. The outward and inward movement of each of the telescoping elements is limited by studs 65 and 66 attached to each of the elements and slidable in elongated slots 67 and 68.

As seen in Figs. 2, 4 and 7, apertures 70 of a size to receive the outer ends of elements 62 and 63 are provided in a pair of lugs 71 depending from the front end of the frame 22. By sliding the studs 65 and 66, the drawbar 60 may be conveniently attached to, or detached from, the carriage.

At the rear end of the frame 22, and as best seen in Figs. 3 and 5, an elongated slot 72 is provided in the depending element 73 so that an eye 74 of a drawbar may be inserted if desired. A pivoted latching member 75 is provided above the slot 72 so that it may be swung into the eye 74 of the drawbar to secure two of the carriages together.

The foregoing detailed description is given for clearness of understanding only and no unnecessary limitations should be understood therefrom, for some modifications will be obvious to those skilled in the art.

I claim:

1. A casket carriage adapted for lowering a casket into a grave, comprising: a casket lowering device; a rectangular frame for supporting said casket lowering device; a mounting member having a hollow upwardly extending cylindrical post swivelly secured adjacent each corner of said frame; a rotatable wheel secured to each of said mounting members; and brake means for an adjacent pair of said wheels, said brake means including a brake plunger slidably received in each of the hollow posts of said pair of wheels and normally resiliently urged upwardly of said posts, a brake shoe secured to each mounting member of said pair of wheels and positioned for yieldable movement adjacent the lower end of each brake plunger so that depression of a brake plunger will yieldably urge the adjacent brake shoe into braking engagement with the adjacent rotatable wheel, and a braking bar journaled in opposite sides of the frame and having lugs positioned at opposite ends of said bar, said lugs being adapted to engage and depress each of said brake plungers and brake shoes against their respective wheels when

the braking bar is axially rotated to hold said adjacent pair of wheels against rotation.

2. A casket carriage adapted for lowering a casket into a grave, comprising: a casket lowering device; a rectangular frame for supporting said casket lowering device; a rotatable wheel secured adjacent each corner of said rectangular frame, an adjacent pair of said wheels each being provided with a mounting member permitting swivel movement of the pair of wheels, one mounting member being provided with a hollow, upwardly extending, cylindrical post; brake means for a wheel of said pair, said brake means including a brake plunger slidably received in the hollow post and normally resiliently urged upwardly thereof, and a brake shoe secured to said one mounting member adjacent the lower end of said brake plunger, said brake shoe being yieldingly movable so that depression of the brake plunger will yieldably urge the brake shoe into braking engagement with the adjacent rotatable wheel; and brake actuating means for depressing said brake plunger and effecting said braking engagement.

3. A casket carriage as specified in claim 2, in which a leaf spring is secured at one end to the one mounting member and extends transversely of the lower end of the plunger normally to retain said plunger within the hollow post, the other end of said leaf spring mounting the brake shoe whereby depression of the plunger against said leaf spring brings said brake shoe into braking engagement with the adjacent rotatable wheel.

4. A casket carriage as specified in claim 2 in which cooperating latching portions are provided on the frame and mounting members for selectively locking each mounting member and wheel in any one of several predetermined directions of travel.

5. A casket carriage as specified in claim 4, in which each of the cooperating latching portions includes a disc-like member secured to each mounting member and having a plurality of circumferentially spaced notches, and a plunger on the frame normally urged into engagement with said disc-like member and positioned to snap into a preselected one of said notches when the mounting member is axially turned.

6. A casket carriage adapted for lowering a casket into a grave, comprising: a casket lowering device; a rectangular frame for supporting said casket lowering device; a mounting member having a hollow upwardly extending cylindrical post swivelly secured adjacent each corner of said frame, a rotatable wheel secured to each of said

mounting members, and brake means for said wheels, said brake means including a brake plunger slidably received in each of the hollow posts and normally resiliently urged upwardly thereof, a brake shoe secured to each mounting member and positioned for yieldable movement adjacent the lower end of each brake plunger so that depression of a brake plunger will yieldably urge the adjacent brake shoe into braking engagement with the adjacent rotatable wheel, and a pair of braking bars journaled in opposite sides of the frame in tandem and having lugs positioned at the opposite ends of each of said bars, said lugs being adapted to engage and depress each of said brake plungers and brake shoes against their respective wheels when the braking bars are axially rotated to prevent rotation of the respective wheels.

7. A casket carriage adapted for lowering a casket into a grave, comprising: a casket lowering device; a rectangular frame for supporting said casket lowering device; a rotatable wheel secured adjacent each corner of said rectangular frame, each of said wheels being provided with a mounting member permitting the wheels to swivel, one mounting member being provided with a hollow, upwardly extending, cylindrical post; brake means for the wheel of said one mounting member, said brake means including a brake plunger slidably received in the hollow post and normally resiliently urged upwardly thereof, and a brake shoe secured to said one mounting member adjacent the lower end of said brake plunger, said brake shoe being yieldingly movable so that depression of the brake plunger will yieldably urge the brake shoe into braking engagement with the adjacent rotatable wheel; brake actuating means for depressing said braking plunger and effecting said braking engagement; and cooperating latching portions on the frame and mounting members for selectively locking each mounting member and wheel in any one of several pre-determined directions of travel.

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