United States Patent

[11] 3,587,892

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[54] **DEVICE FOR ELEVATING, AS WELL AS TIPPING OR TILTING DRUMS, BARRELS, CONTAINERS AND THE LIKE TO DUMP THE CONTENTS THEREFROM**
12 Claims, 13 Drawing Figs.

[52] **U.S. Cl.** **214/313,** 187/11, 214/652, 214/701, 214/652
[51] **Int. Cl.** **B65g 65/24**
[50] **Field of Search** ..... 214/652, 314, 312, 313, 331, 333, 1 (D), 700, 701; 187/11

[56] **References Cited**

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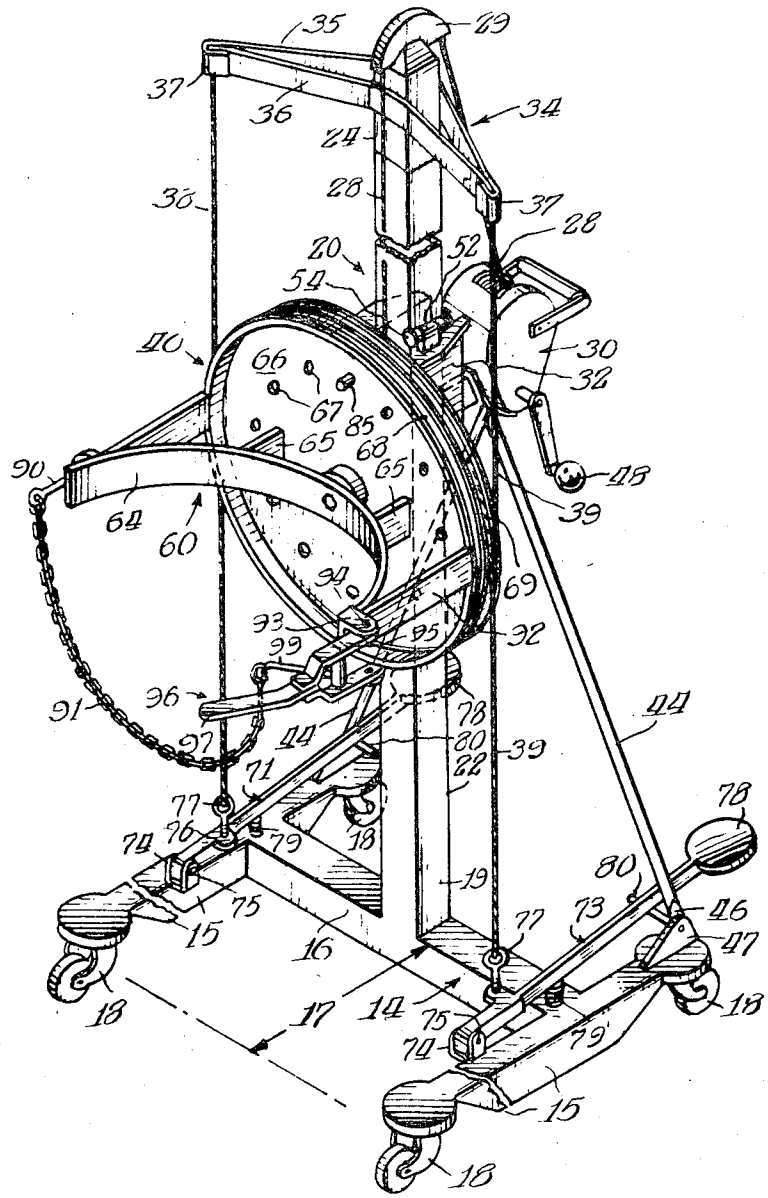
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ABSTRACT: A device for elevating, as well as for tipping or tilting drums, containers and the like for dumping the contents therefrom, which device includes an upright or post supported on a base and a carriage member slidable on said upright and operated by means of a winch which raises and lowers the carriage member on said upright. The carriage member supports a rotatable member which carries means for engaging a drum container and the like so that the drum may be elevated as well as tipped or tilted.



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SHEET 1 OF 4

Fig. 11

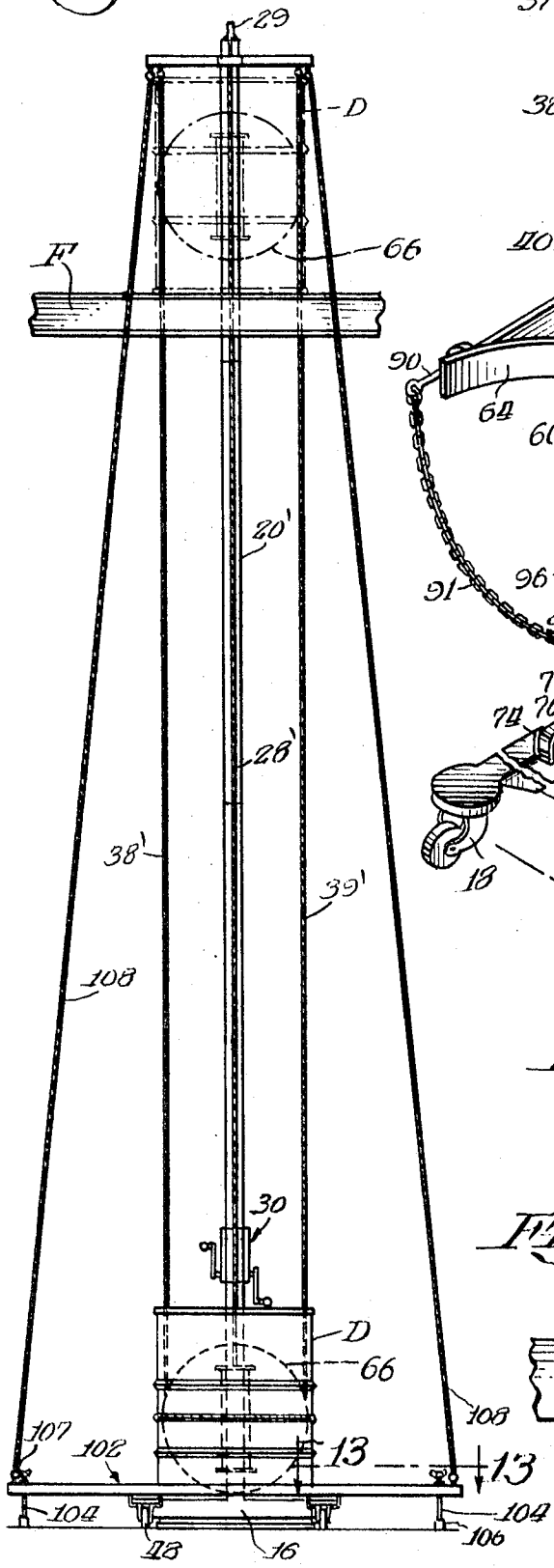


Fig. 1

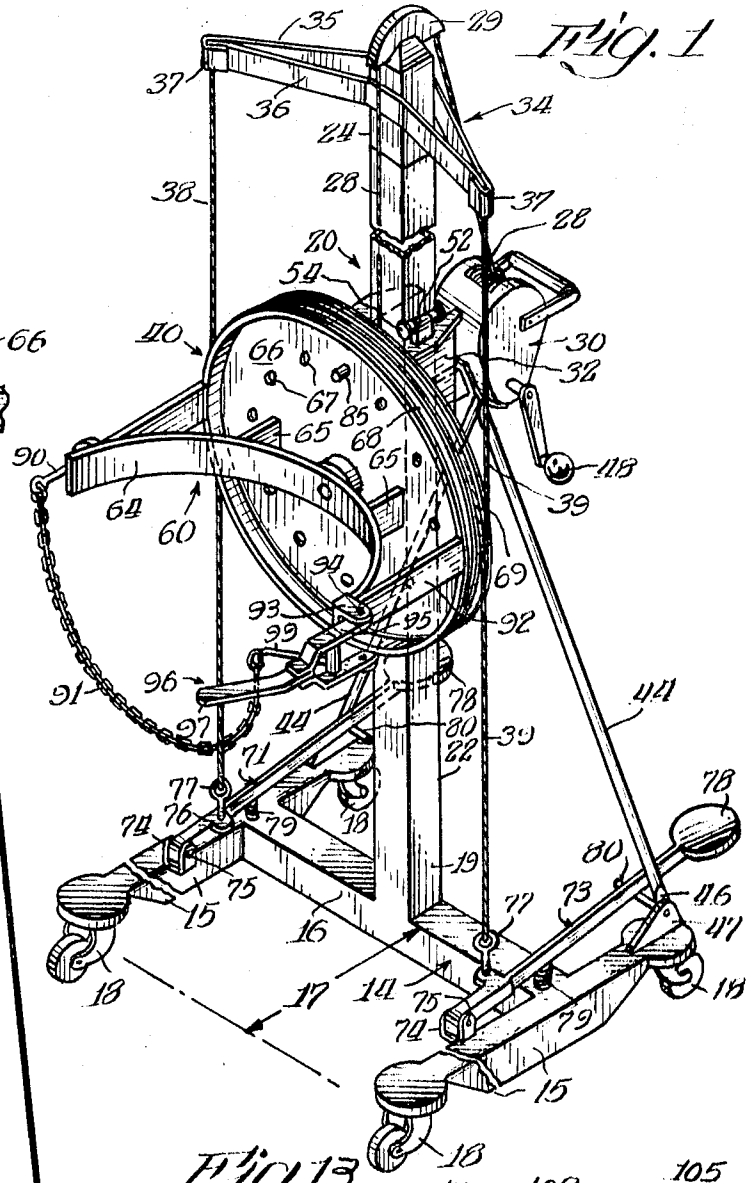


Fig. 13

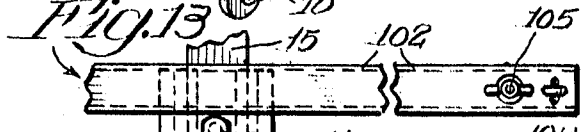
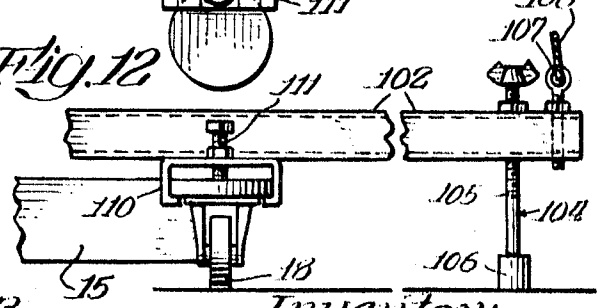


Fig. 12



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Fig. 2

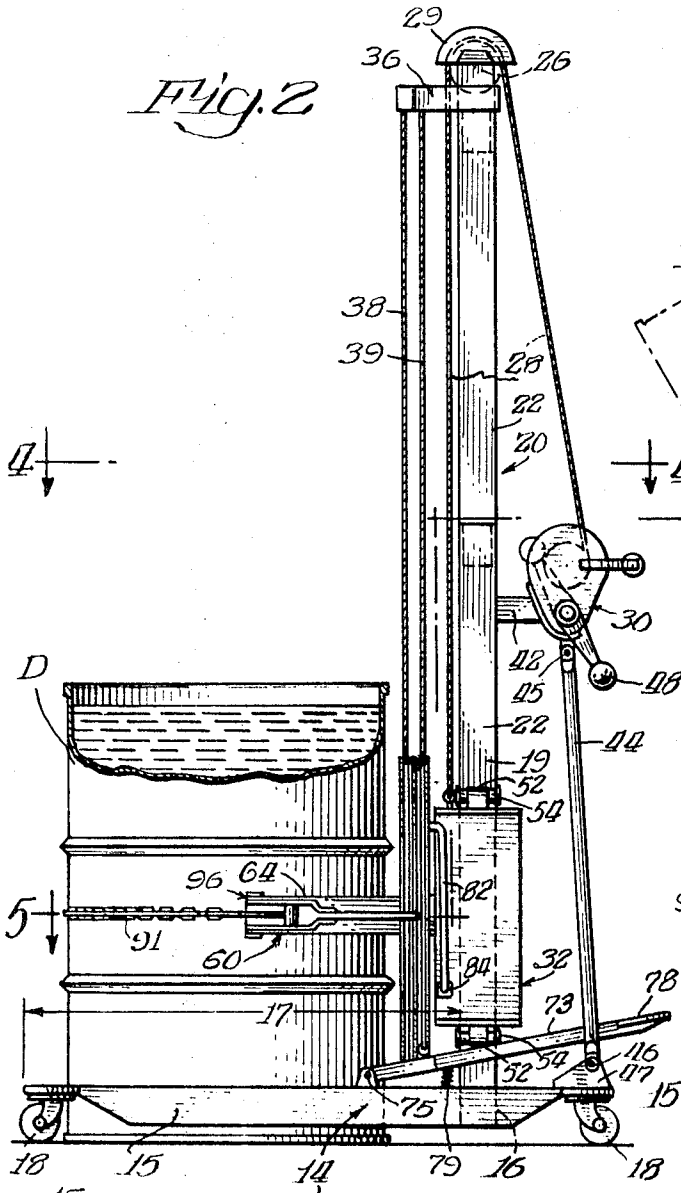
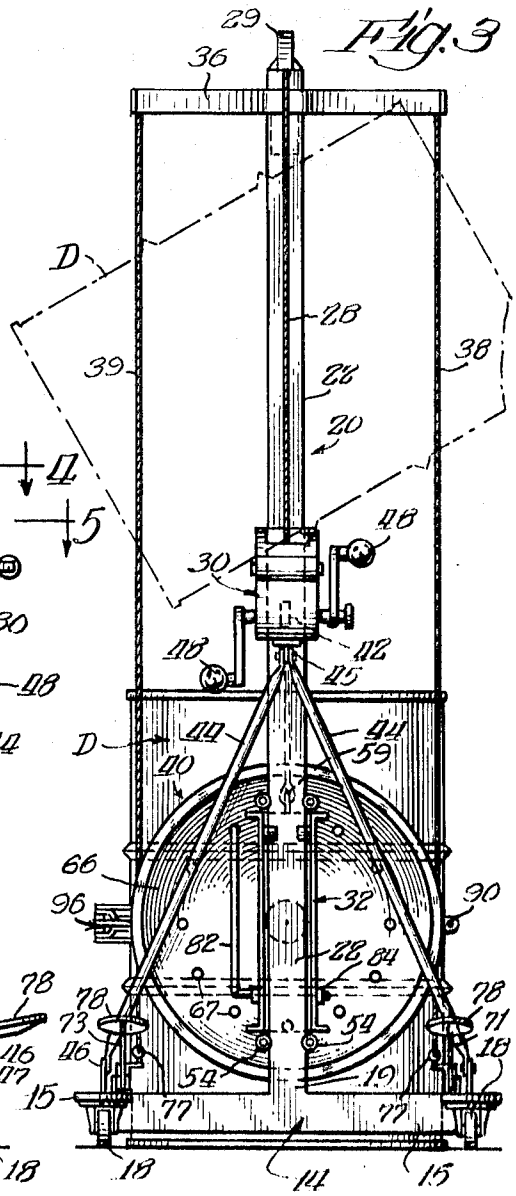


Fig. 3



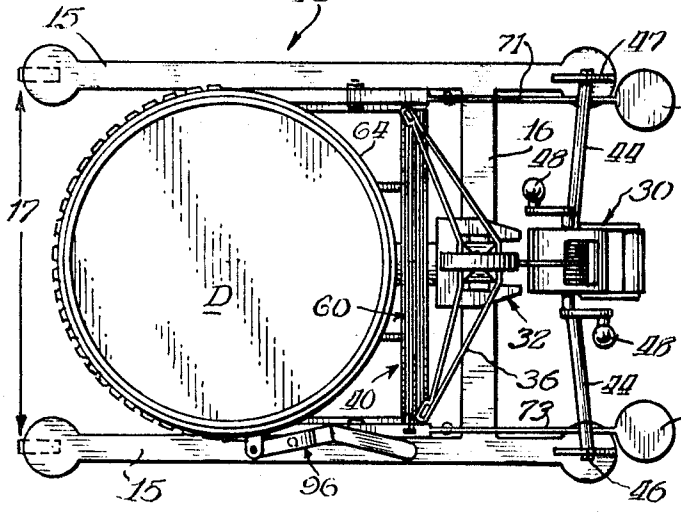


Fig. 4

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Fig. 6

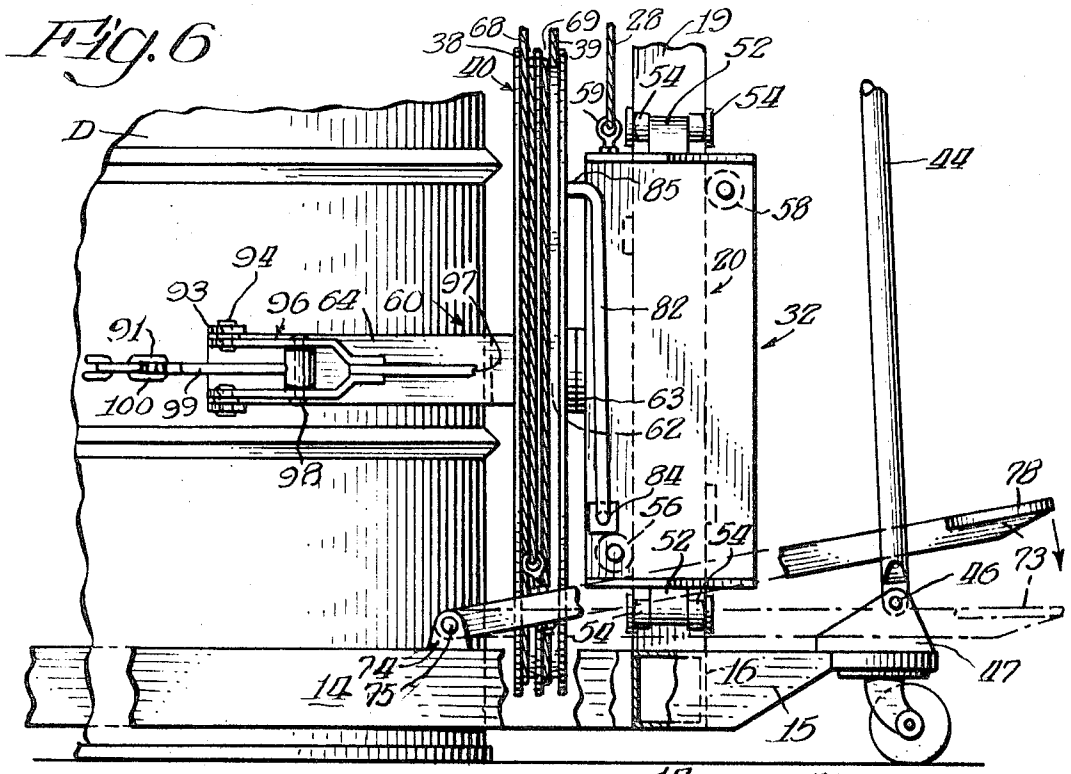
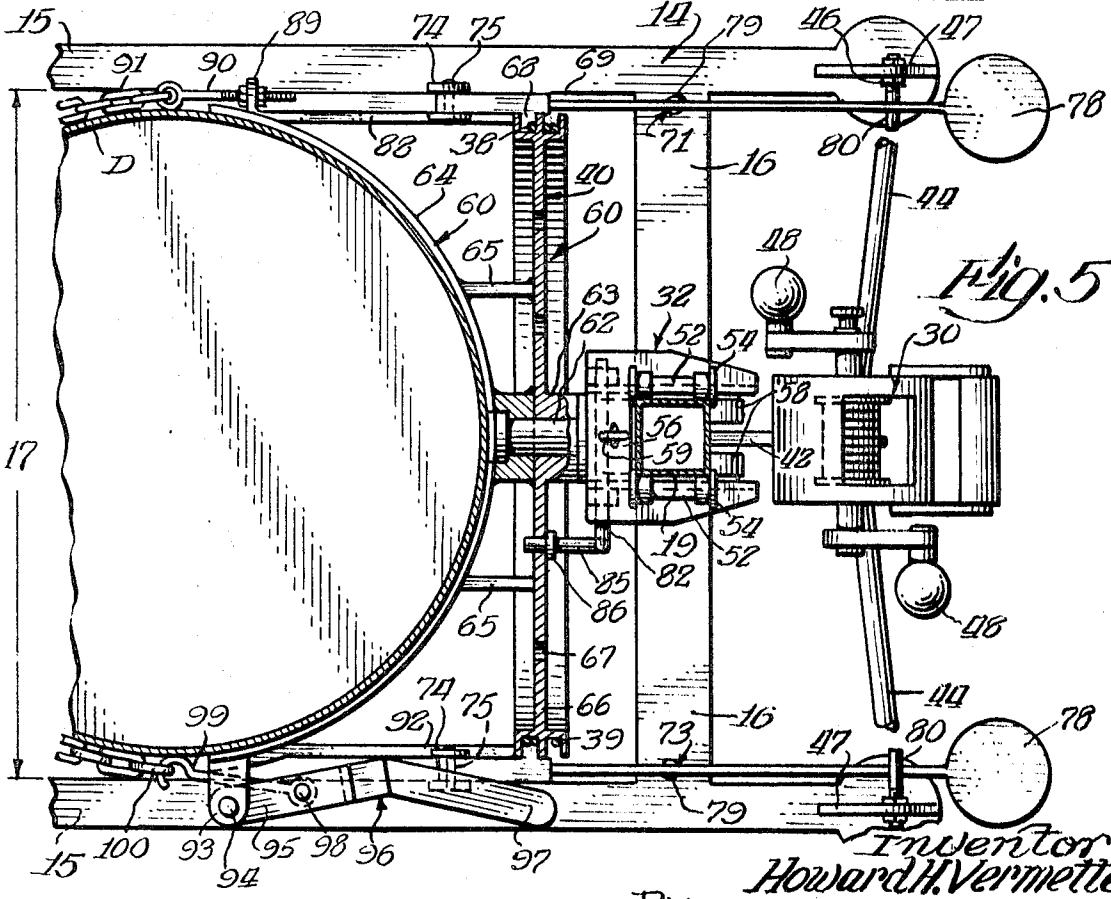


Fig. 5



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Fig. 8

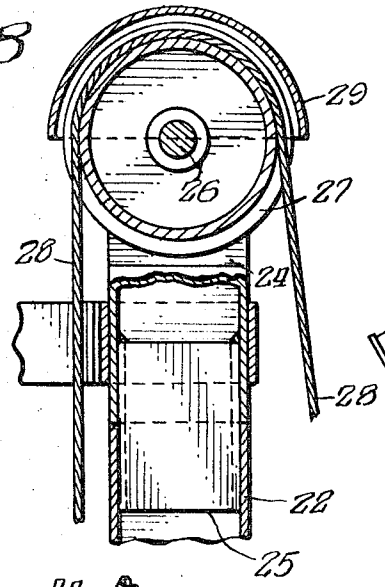


Fig. 10

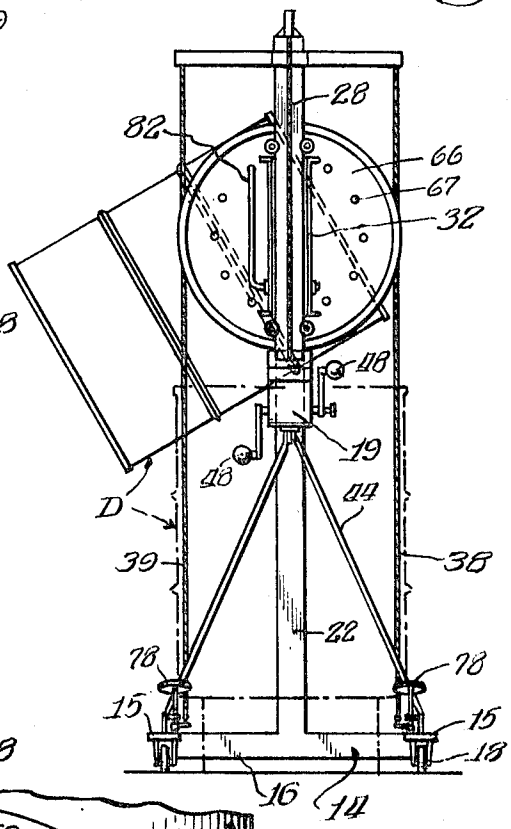
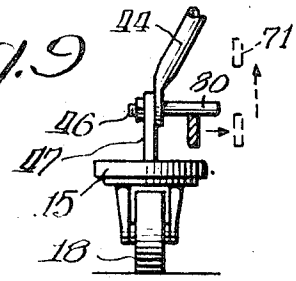


Fig. 9



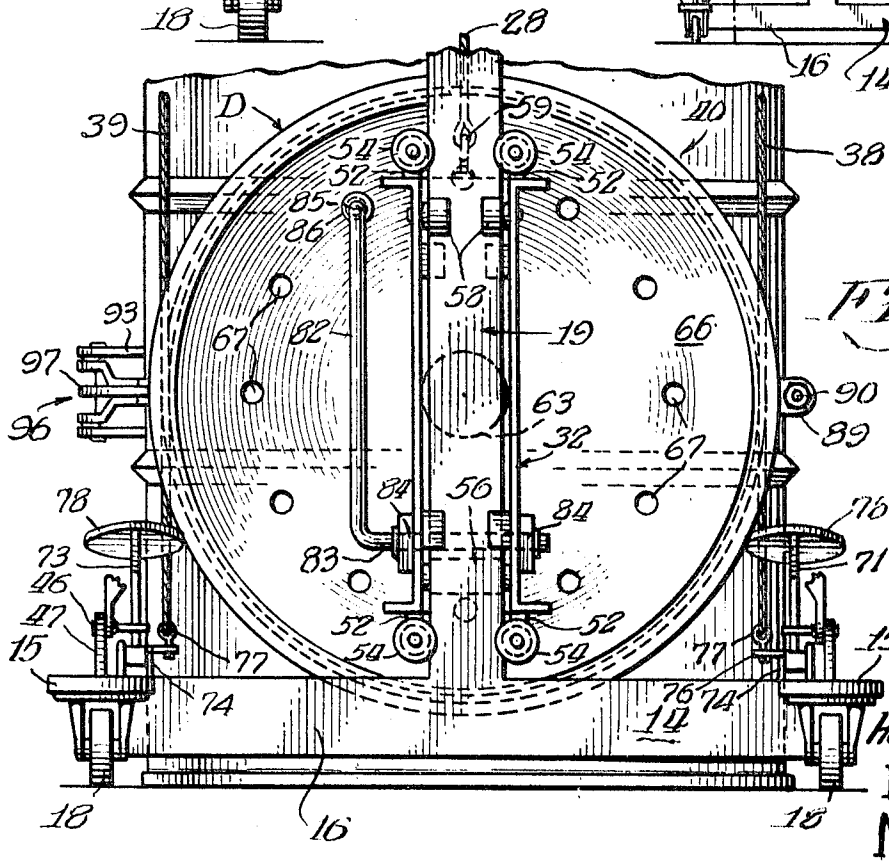


Fig. 7

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DEVICE FOR ELEVATING, AS WELL AS TIPPING OR TILTING DRUMS, BARRELS, CONTAINERS AND THE LIKE TO DUMP THE CONTENTS THEREFROM

BRIEF SUMMARY OF THE INVENTION

One of the objects of this invention is to provide a device which may be used for lifting a drum, barrel, container and the like from the floor or ground surface to a desired elevated position where it may be removed to be placed on the higher elevation than the floor or ground surface on which it initially rests, or the device may be used to lift as well as to tip or tilt or rotate the drum or container while in its lifted position for dumping the contents therefrom.

Another object of this invention is to provide a device which may be easily operated and which has positive controls for locking the device with the drum in a desired elevated position as well as in a tipped or tilted position.

Another object of this invention is to provide a device whose height can be readily increased so that a drum may be lifted to the height of a second floor or the like so that the drum may be removed from the device at such an elevation.

Other objects will become apparent as this description progresses.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. **1** is a perspective view looking at same from the rear of the device with parts broken away to conserve space.

FIG. **2** is a side elevational view thereof.

FIG. **3** is a front elevational view thereof.

FIG. **4** is a top plan view taken on line **4–4** of FIG. **2**.

FIG. **5** is a view partly in section taken on line **5–5** of FIG. **2**.

FIG. **6** is an enlarged elevational view of the lower portion of the device corresponding to that shown in FIG. **2**. FIG. **7** is an enlarged front elevational view of the lower portion of the device corresponding to that shown in FIG. **3**.

FIG. **8** is a view partly in section of the upper portion of the post or column and the pulley supported thereby.

FIG. **9** is an enlarged elevational view of a portion of the base and the supporting caster.

FIG. **10** is a front elevational view showing a drum supported in a tilted position.

FIG. **11** is a view showing the device with an extended upright column and with an outrigger base.

FIG. **12** is an enlarged view of the lower right-hand portion of FIG. **11**, and

FIG. **13** is a view taken on line **13–13** of FIG. **11**.

The device illustrated in FIGS. **1** through **10** will be first described.

The device is adapted to be used for drums, barrels, containers and the like, however, for the purpose of this application the term "drum" will be used to designate the others.

The device has a base generally indicated at **14** which is generally of H-shaped configuration, having a pair of sides **15** spaced from each other and connected by a crossmember **16** which defines a space or area **17** within the confines of the base to accommodate the drum which may rest on a ground or floor surface. The base is supported on swivelly mounted rollers or casters **18**, one at each of the opposite ends of the sides **15** of the base. The swivelly mounted rollers permits the entire device to be moved across a floor surface on which it rests. The crossmember **16** of the base has welded or otherwise fixedly secured to it a lower upright section **19** which is adapted to form the lower or bottom end of the upright, post or vertical column of the device upon which the carriage, presently to be described, is slidable up or down. The lower upright section **19** is hollow and generally square-shaped in cross section.

The upright column or post generally indicated at **20** includes a plurality of sections **22**, preferably two, as shown in FIG. **2**, each hollow and of generally square-shape in cross section, which telescope with each other and with the lower upright section **19**. Attached to either end of each of the sections **22** is a sleeve **25** having the same configuration as the

section but of a reduced dimension which extends outwardly of each of the sections so that it can be inserted into and nested or telescoped within the end of the adjacent section to interlock therewith. The nesting or telescopic arrangement of the sections forming the post or upright is similar to that shown in FIG. **8** in relation to the uppermost section of the post. The interlocking of the sections are the same.

To make up the upright post or column **20**, the individual sections **22** are nested and interlocked in the manner described and the lowermost section **22** interlocks with the lower upright section **19**. To complete the post, a top hollow section **24** (FIG. **8**) of the same configuration as section **22** is secured to the uppermost section **22** of the post in the manner described, that is, with the attached sleeve **25** of the top section **24** extending and telescoping within the top of section **22**. The top section **24** supports a shaft **26** and a rotatable pulley **27** mounted thereon, which in turn supports a cable **28**, which cable is secured at one end to a winch, generally indicated at **30**, and at its other end to a carriage, generally indicated at **32**. A shield or covering **29** secured to the top section **24** extends over the pulley **27** and serves to confine the cable in the pulley.

The top section **24** of the vertical column or post supports a top crossmember, generally indicated by the numeral **34**, which comprises a front arm **35** fixedly secured to the front of the top section, and a rear arm **36** fixedly secured to the rear of the top section. Said front arm is bow-shaped so that its opposite sides diverge towards the rear, with the rear arm **36** being secured thereto at the ends. The top crossarm **36** has cables **38** and **39** anchored and attached to it at the turned-in ends **37**, which cables are each adapted to encircle a larger rotatable pulley, generally designated at **40**, which is connected to the carriage **32**, as will be subsequently described. The cables **38** and **39** are each then connected to a separate foot pedal supported on the base **14**.

Extending forwardly of one of the sections **22** of the column **20** (FIG. **2**) is a horizontal tongue **42** to which is secured the winch **30**. The winch is further supported by a pair of bracing rods **44**, the upper ends of which are secured to the winch as at **45**. The bracing rods **44** incline outwardly towards the bottom, with the bottom end of the bracing rod (FIG. **9**) suitably secured as at **46** to the ears **47** extending upwardly of the sides **15** of the base **14**. The winch **30** is therefore firmly supported on the upright or column as well as on the base to provide a positive support for the winch.

The winch **30** is of conventional construction and has two handles **48** which work in unison for operating same. It has a self-energizing brake which automatically takes over and locks the drum or container securely in an elevated position. Reversing the right-hand control handle releases the brake and allows the carriage to descend under full control. As stated, the winch is of conventional commercial construction and the details thereof form no part of this invention.

The cable **28** is secured to the winch **30** and extends upwardly and around the small pulley **27** supported on the top of the post or column, with the opposite end of said cable secured to the carriage **32** which is slidable on the column or post through the operation of the winch.

The carriage **32** is of generally U-shaped configuration in plan so that it surrounds the post or column **20** as it engages same, except for the front open end portion of the carriage. The front open end of the carriage permits the carriage to move past the tongue **42** which supports the winch. This can be seen in FIGS. **2** and **5**.

Secured to the top and bottom of the carriage **32** by brackets **52** on one side thereof are short shafts which rotatably support a pair of spaced rollers **54**. The rollers engage the opposite sides of the column adjacent the top and bottom of the carriage and guide the carriage as it ascends or descends on the column **20**. Suitably attached to and secured within the lower end of the carriage is a bottom rear rotatable roller **56** which engages the rear of the column **20**. Rotatably secured to and within the upper front portion of the carriage is

a pair of spaced rotatable rollers **58** which are adapted to engage the front of the column **20**. The front spaced rollers **58** are clear of the tongue **42** so that the movement of the carriage **32** will not be obstructed when ascending or descending on the column. The rollers **56** and **58** principally carry the load of the drum.

The cable **28** which is attached to the winch is attached to the top of the carriage **32** by means of an eye bolt **59**, best shown in FIG. **6**. The carriage **32** is secured to a large pulley **40** and to the drum supporting member, generally designated by the numeral **60**. The carriage **32**, pulley **40**, and drum supporting member **60** operate as a unit on ascending or descending on the column. As best seen in FIG. **5**, the carriage **32** supports a rearwardly extending stub shaft **62** on which the hub **63** of the pulley **40** is rotatably supported. Ball bearings, not shown, are positioned between the shaft **62** and hub **63**. Fixedly secured to the rear of said hub is an arcuate-shaped band **64** against which the drum rests and which supports the drum. Spaced bracing members **65** also connect the pulley **40** to the arcuate-shaped band **64** to provide reinforcement and support for said band. The pulley **40** has a disc body **66** provided with axially spaced openings **67**. The periphery of the pulley has two separate channels or grooves **68** and **69**. Groove **68** receives one turn of cable **38** while groove **69** receives one turn of cable **39**.

Cable **38** which is fixedly secured to the top crossmember **34**, as previously described, extends downwardly from the top of the crossmember **34** and is loosely wound once around the pulley **40** in groove **68** and then extends downwardly from said pulley and is connected to a foot pedal generally designated by the numeral **71**. The other cable **39** is secured to the opposite end of the crossmember **34** and extends downwardly and makes one loose wind around the pulley **40** in the channel or groove **69** and then extends downwardly thereof and is connected to another foot pedal designated generally by the numeral **73**. Both said foot pedals are of identical construction and a description of one will suffice.

Secured to the top of the side **15** of the base is a U-shaped bracket **74** which pivotally supports, as at **75**, the rear end of the foot pedal **71** or **73**. The foot pedal has an inwardly extending lateral extension **76** which is internally threaded to receive an eye bolt **77** to which the end of the cable (either **38** or **39**) is secured. The front end of the foot pedal terminates in a round plate **78** so that the operator's foot can be positioned thereon to pivot the foot pedal downwardly and thereby tighten its respective cable, which in turn will cause the pulley **40** to rotate in the direction in which the respective cable is wound when the carriage **32** and pulley **40** are moved upwardly. Thus, for example, as viewed from the rear in FIG. **1**, if foot pedal **73** is depressed the cable **39** will tighten and thereby rotate pulley **40** clockwise as the pulley moves upwardly on the post **20** and will tip or tilt the drum supported thereon to the right. If the opposite foot pedal **71** is depressed the cable **38** will tighten around the pulley and will cause the pulley **40** to rotate in the opposite direction, namely, to the left when the carriage and pulley are moved upwardly relative to the post.

Positioned under each of the foot pedals **71**, **73** and supported on the base **14** is a coil spring **79** which normally urges the foot pedal upwardly when it is released. Extending laterally inwardly of each of the ears **47** of the base is a pin **80** which serves to lock the foot pedal in its depressed position. In depressing each of the foot pedals, the foot pedal is moved slightly inwardly to bypass the inwardly extending pin **80** and then it is pushed back under the pin so that when the operator removes his foot from the pedal the pin will prevent the foot pedal from moving upwardly. This maintains the pulley **40** in the position to which it has been rotated, provided the pulley and drum are maintained in the elevated position at which they have been stopped. To release it, the foot pedal is pushed inwardly so that it can bypass the pin **80** and then it assumes the position on top of the pin, as shown in FIG. **1**. The drum, providing it is bottom heavy will swing to a vertical position. The pivotal connection **75** between the arm of the foot pedal and the U-shaped bracket **74** is such that there is sufficient leeway to permit the sidewise movement of the arm of the foot pedal. The winch when released will maintain the drum at the vertical position as the load is lowered due to both cables **38** and **39** being loose to slip on pulley **40**.

The means for locking the drum in its tipped or tilted position will now be described.

As previously described, the disc **66** of the pulley **40** is provided with spaced openings **67**. As best shown in FIGS. **5**, **6** and **7**, a locking arm designated by the numeral **82** has a lower end **83** turned at right angles to the axis of the arm, which lower end is pivotally or rotatably secured as at **84** to the side of the carriage **32**. The upper end **85** of the arm is bent rearwardly at right angles to the axis of the arm and a collar **86** is fixed thereto spaced from the end. The upper end **85** of the arm is adapted to be inserted into the openings **67** in the disc **66** of the pulley **40** aligned with the end of the arm. When the locking arm **82** is in engagement with the pulley **40**, the pulley is prevented from rotating and will by virtue thereof maintain the pulley, the drum support, and the drum supported thereon in the position thus locked. To release or unlock the pulley the locking arm **82** is manually withdrawn from the opening in the disc of the pulley.

As best shown in FIGS. **1**, **2** and **4**, the drum, designated by the letter D, is supported against the arcuate-shaped band **64** which has substantially the same radius as the conventional drum or barrel. Adjacent one side of said band FIGS. **1** and **5**) between and connecting the band and the pulley **40** is a supporting strut **88** with an outwardly turned end **89** which receives a threaded adjustable eye bolt **90**, which in turn is connected to one end of a chain **91**. A strut **92** connects the opposite side of the band **64** to the pulley **40**. The end of the band **64** adjacent the strut **92** has spaced outwardly laterally extending ears **93** to which are pivotally secured as at **94** the spaced ends **95** of a hand operated lever generally designated at **96**. The spaced ends **95** of the lever converge and have fixedly affixed thereto a handle **97** which is inclined inwardly of the axis of the spaced ends **95**. A pin **98** extends between the spaced ends **95**. A hook **99** is affixed to the pin **98**. The unfastened end **100** of the chain **91** is adapted to be detachably secured to said hook. The end **100** of the chain can be detached from the hook and is adapted to be positioned around the drum D, as shown in FIGS. **2** and **4**, with the barrel resting against the arcuate band **64**. The lever **96** operates over center, as shown in FIG. **4**, to lock the chain to the drum to support the drum for elevation and for tilting of the drum.

FIG. **1** shows the level **96** with the chain **91** loose, however, when the chain is around the drum the lever **96** is manually engaged and pivoted to its overcenter position, as in FIGS. **2** and **4**, where the handle **97** is positioned to extend forwardly of the pivot **94** of the lever to lock the lever in its locking position.

FIG. **2** shows the chain **91** and the band **64** connecting the drum at approximately the center of the height of the drum. If it is desired to connect the chain and band to the lower portion of the drum, as in FIG. **10**, then this may be accomplished by first connecting it to the drum in the manner shown in FIG. **2** and then elevating the drum so that a support or block is positioned under the drum, which elevates the drum in relation to the carriage **32**. The lever **96** is then operated so that the chain releases the drum, after which the carriage **32** is lowered. This then positions the arcuate band **64** and chain **91** to engage the lower portion of the drum, as shown in FIG. **10**. By supporting the drum at its lower end the drum when tilted will extend outwardly beyond the side of the device to facilitate dumping or pouring of the contents of the drum, whereas if it were more centrally connected the relative position of the barrel when tilted would be as shown in FIG. **3**.

FIGS. **11**, **12** and **13**

FIG. **11** shows a device as previously described but built with an upright post or column **20'** of a greater height so that

the drum may be lifted to a higher elevation than that possible with a shorter column. The construction remains the same and therefore will not be redescribed. The greater height of the column or post **20'** is accomplished by additional column sections, similar to the column sections **22** previously described, and by providing longer cables **38'** and **39'** which are connected to the pulley **40** and a longer cable **28'** connected to the winch. The increased height of the device permits the drum to be elevated to the height of a second floor, indicated by the letter F in FIG. **11**. The drum can thus be elevated to a second floor level and can be removed at such level, or it can be turned or tilted for a dumping operation at such level.

By virtue of the increased height of the device an outrigger base is necessary to prevent the device from capsizing. The outrigger base consists of one or more hollow square-shaped bars **102** which are detachably secured to the base **14** to extend laterally outwardly of the base. More specifically, the square-shaped bars **102** support at each of their opposite ends an adjustable leveling member **104** which may be a threaded bolt **105** in threaded engagement with the bar **102** and provided with means for adjusting same vertically. The bottom of the bolt has a rubber base **106** which rests on the ground surface. Also secured to said bar or bars **102** by means of threaded eye bolts **107** are guide cables **108**, the upper ends of which are suitably attached to the top crossmember **34**. The bars **102** rest on top and across the two sides **15** of the base **14** and are clamped or secured thereto by means of a C-shaped clamp **110** secured to the underside of the bar, which clamp engages the sides **15** of the base. A threaded bolt **111** passes through the center portion of the C-shaped clamp and likewise passes through an opening in the bar to thereby secure the bar to the two sides of the base and removably locks the outrigger bar to said base. The bars **102** may be readily attached to the base for supporting the device of the height shown in FIG. **11**, and may be readily removed and/or detached from the base when desired.

The device as shown in FIGS. **1** to **10** may be readily adapted to form a height as shown in FIG. **11** and is readily supported to be properly balanced against tipping or capsizing.

OPERATION

The operation of the device has been described in connection with the parts, however, a brief summary of the operation will now be set forth. The description of the operation is the same for that shown in FIGS. **1** through **10**, as well as for the device shown in FIG. **11**.

To secure the drum along the center of the height of the drum, as shown in FIG. **2**, the drum is placed on the ground or floor surface in the open space **17** between the sides **15** of the base. The carriage **32** is lowered to its lowermost position by rotating the handles **48** of the winch **30** so that the winch unwinds the cable **28** connected to the carriage **32**. The cable passes over the top pulley **27** to lower the carriage. The arcuate band **64** will then be positioned approximately midway of the height of the drum. The chain **91** is then positioned around the balance of the circumference of the drum and then by pivoting the lever **96** to its offcenter position, as in FIG. **5**, the chain is locked in a locked position and the drum is positioned between the arcuate-shaped band and the chain. The drum is thereby locked in a secure position to the drum supporting member. When the drum thus secured, the slidable carriage **32** is elevated or raised vertically on the post or column **20** by rotating the handles **48** of the winch **30**, which in turn will wind the cable **28** into the winch, and as the winding of the cable takes place the carriage **32** is elevated on the post and with it the drum supported thereby. When rotation of the handles **48** is stopped, the winch will maintain the cable **28** in the withdrawn position and lock the barrel or drum in the elevated position, with the drum in a vertical or upright position. To lower the drum the handles of the winch are rotated in the opposite direction.

In any elevated position the drum may be tilted or tipped either to the right or to the left for dumping the contents of the drum, or it may be completely rotated. This is accomplished by operating and depressing either one of the foot pedals **71** or **73**, dependent upon which direction it is desired to tip or tilt the drum. Depression of the foot pedal will tighten the corresponding cable around the pulley **40** and the continued upward movement or lifting of the carriage, pulley and drum will then cause the drum to tip or tilt. For example, if it is desired to tilt the drum to the operator's left, or dotted line position shown in FIG. **3**, the foot pedal **73** which will normally be positioned above the retaining pin **80** is depressed at first swinging it so that it passes the retaining pin and then when it is underneath the retaining pin it will be locked thereby, as previously described. By depressing the foot pedal **73**, the cable **39** which is wound around and in groove **69** of pulley **40** is tightened around the pulley. This in effect acts like a clutch so that when the carriage, pulley and drum move upwardly the pulley will rotate counterclockwise (as viewed from the front in FIG. **3**) to thereby tilt the drum to the left as shown in dotted lines in FIG. **3**). The drum may be rotated and tilted in the opposite direction, or to the operator's right, in a similar manner by depressing the foot pedal **71** which will tighten cable **38** around the pulley, and as the carriage, pulley and drum move upwardly the pulley will rotate clockwise (as viewed from the front in FIG. **3**) to thereby tilt the drum to the right.

If the carriage and drum are kept at the elevated position at which it has been stopped, the drum will be maintained at the tilted or tipped position in which it has been placed. The depressed and locked foot pedal will maintain such tilted position. However, the drum may be positively locked in such tilted position by means of the locking arm **82** which is then pivoted so that the upper end **85** thereon engages the aligned opening in the disc **66** of the pulley **40** to lock the pulley in a locked position. This positive locking should take place before the foot pedal is released to its elevated or unlocking position.

If the drum is not pivoted to the desired tilting position before locking same, as previously described, the angle or tilt of the drum may be increased relative to the vertical by continuing the raising or elevating of the carriage **32** with the drum supported thereon through the operation of the winch. The tilting or inclination of the drum may be increased or decreased by either raising or lowering the carriage and with it the drum. After the cable has been tightened around the pulley by the depression of the appropriate foot pedal, the higher the carriage ascends on the column **20** the greater can be the inclination or tilt of the drum, and the converse is also true. If it is desired to lock the drum in any of the tilted positions, the locking bar is then pivoted to engage the opening **67** in the pulley to lock the pulley against rotation. With the elevation of the drum being maintained in its elevated adjusted position the drum will be tilted and will remain in a fixed locked position.

To unlock the tilted position of the drum, the end **85** of the locking arm **82** is withdrawn from the opening **67** and the foot pedal **71** is moved from under the locking pin **80** to above it so that the pulley **40** will be free to rotate in any direction. Thus, the device serves to elevate the drum and serves to tilt it in either a right or left position and to the desired inclination to permit the drum to be emptied.

If it is desired to support the drum on the supporting member adjacent the lower end of the drum, as shown in FIG. **10**, the drum is first elevated in the manner previously described in connection with FIG. **2** and then a block is placed under the drum in its elevated position and the drum supporting member is released from the drum and the carriage is lowered so that the drum supporting means can engage adjacent the lower end of the drum. By this arrangement it will be seen, as for example in FIG. **10**, that the drum when tilted extends further outwardly or laterally from the sides of the device than that shown in FIG. **3**. In some instances it is preferable that the drum extend when tilted further laterally

from the side to permit the emptying of the drum laterally of the side of the device.

The following illustration is for the purpose of clarity and not a limitation. If the pulley **40** has a circumference of 6 feet, depressing the appropriate foot pedal to tighten the cable around the pulley and then elevating the pulley 1 foot will cause the pulley to rotate or revolve 60°. Raising the pulley 2 feet will produce a 120° revolution of the pulley, and elevating the pulley 3 feet will produce a 180° revolution. To rotate the pulley 360° the pulley is raised 6 feet after the cable has been tightened around the pulley. The revolution of the pulley will appropriately tilt the drum supported on the pulley, or with a complete revolution of the pulley the drum will be completely inverted. In FIG. **3** the drum has been lifted approximately 4 feet or tipped 30° for pouring. The drum may be merely lifted the first or last 2 feet of its travel and the remaining 2 feet of travel rotated 120° by depressing the foot pedal. Depressing both foot pedals and locking them in the depressed position will serve as a safety feature in that the winch will be prevented from operating and the drum cannot be raised or lowered but will remain immobile.

It will be understood that various changes and modifications may be made from the foregoing without departing from the spirit and scope of the appended claims.

I claim:

1. A device for lifting and tipping or tilting drums, said device comprising a base, an upright supported on said base, a carriage member slidable on said upright, a drum supporting member including a pulley rotatably secured to said carriage, said pulley capable of being rotated 360°, said drum supporting member adapted to move vertically with said carriage, means connected to said carriage for raising and lowering said carriage and drum supporting member, a cable operatively connected to said pulley, which cable is adapted to tighten on said pulley when actuated, a foot operated member connected to said cable so that when said foot operated member is depressed said pulley will be rotated when the drum supporting member is moved vertically relative to said upright support for tilting or tipping the drum supporting member and the drum supported thereby, and means for locking said foot operated member in depressed position to maintain the drum supporting member in a fixed upright, tilted or tipped position upon completion of vertical carriage movement.

2. A device as set forth in claim **1** in which the drum supporting member secured to said carriage includes an arcuate-shaped band to engage a portion of the circumference of the drum and in which means are connected to said arcuate-shaped band to engage the remainder of the circumference of the drum to retain said drum.

3. A device as set forth in claim **2** in which the means connected to the band is a flexible member and in which an off center lever is connected to said flexible member to lock said flexible member against the drum to retain said drum.

4. A device as set forth in claim **1** which includes a winch and a cable connecting the carriage for moving the carriage vertically on the upright.

5. A device as set forth in claim **4** in which the upright is formed of a plurality of sections connected together and in which the uppermost section of the upright supports a pulley which in turn supports the cable from the winch to the carriage.

6. A device as set forth in claim **1** in which the carriage which is movable on the upright has roller means engaging the upright.

7. A device as set forth in claim **1** in which the top of the upright has means to which guide cables are secured and in which an outrigger member is secured to the base, with the guide cables secured to the outrigger member to prevent the device from capsizing.

8. A device for lifting and tipping or tilting drums, said device comprising a base, an upright supported on said base, a carriage member slidable on said upright, a drum supporting member including a pulley rotatably secured to said carriage, said pulley operatively connected to a pair of cables for selectively rotating said pulley in either direction for correspondingly tilting the drum supporting member, a foot operated member connected to each cable so that when the foot operated member is depressed the respective cable causes the pulley to tilt the drum correspondingly when moved vertically, said drum supporting member adapted to move vertically with said carriage, and means connected to said carriage for raising and lowering said carriage and drum supporting member.

9. A device as set forth in claim **8** in which the pulley has a pair of grooves, each groove receiving a cable which is connected to the foot operated pedal.

10. A device for lifting and tipping or tilting drums, said device comprising a base, an upright supported on said base, a carriage member slidable on said upright, a drum supporting member including a pulley rotatably secured to said carriage, said drum supporting member adapted to move vertically with said carriage, means connected to said carriage for raising and lowering said carriage and drum supporting member, means for tilting or tipping the drum supporting member and the drum supported thereby, said means for tilting or tipping the drum supporting member including a pair of foot pedals supported on said base, each foot pedal being connected to a cable, which cables are operatively connected to said pulley connected to the drum supporting member so that operation of the foot pedals will cause the pulley to rotate and to tilt the drum supporting member as the pulley is moved vertically with respect to the upright.

11. A device for lifting and tipping or tilting drums, said device comprising a base, an upright supported on said base, a carriage member slidable on said upright, a drum supporting member including a pulley rotatably secured to said carriage, said pulley operatively connected to a cable, which cable when actuated will tighten on said pulley to rotate said pulley for tilting the drum supporting member when the pulley is moved vertically relative to said upright support, said drum supporting member adapted to move vertically with said carriage, means connected to said carriage for raising and lowering said carriage and drum supporting member, said pulley having a disc provided with spaced openings, a locking member secured to the carriage and adapted to engage one of the openings in the pulley for locking the pulley against rotation to maintain the drum supporting member in a fixed upright, tilted or tipped position.

12. A device as set forth in claim **11** in which the locking member secured to the carriage comprises an arm pivotally secured to the carriage and having an outer end substantially at right angles to the axis of the arm, which end is adapted to engage one of the openings in the pulley to lock the pulley against rotation.