July 31, 1962 A. A. KLEINSCHMIDT 3,047,305

DEVICE FOR MOVING MATTRESSES AND OTHER ARTICLES

Filed June 12, 1958 3 Sheets-Sheet 1

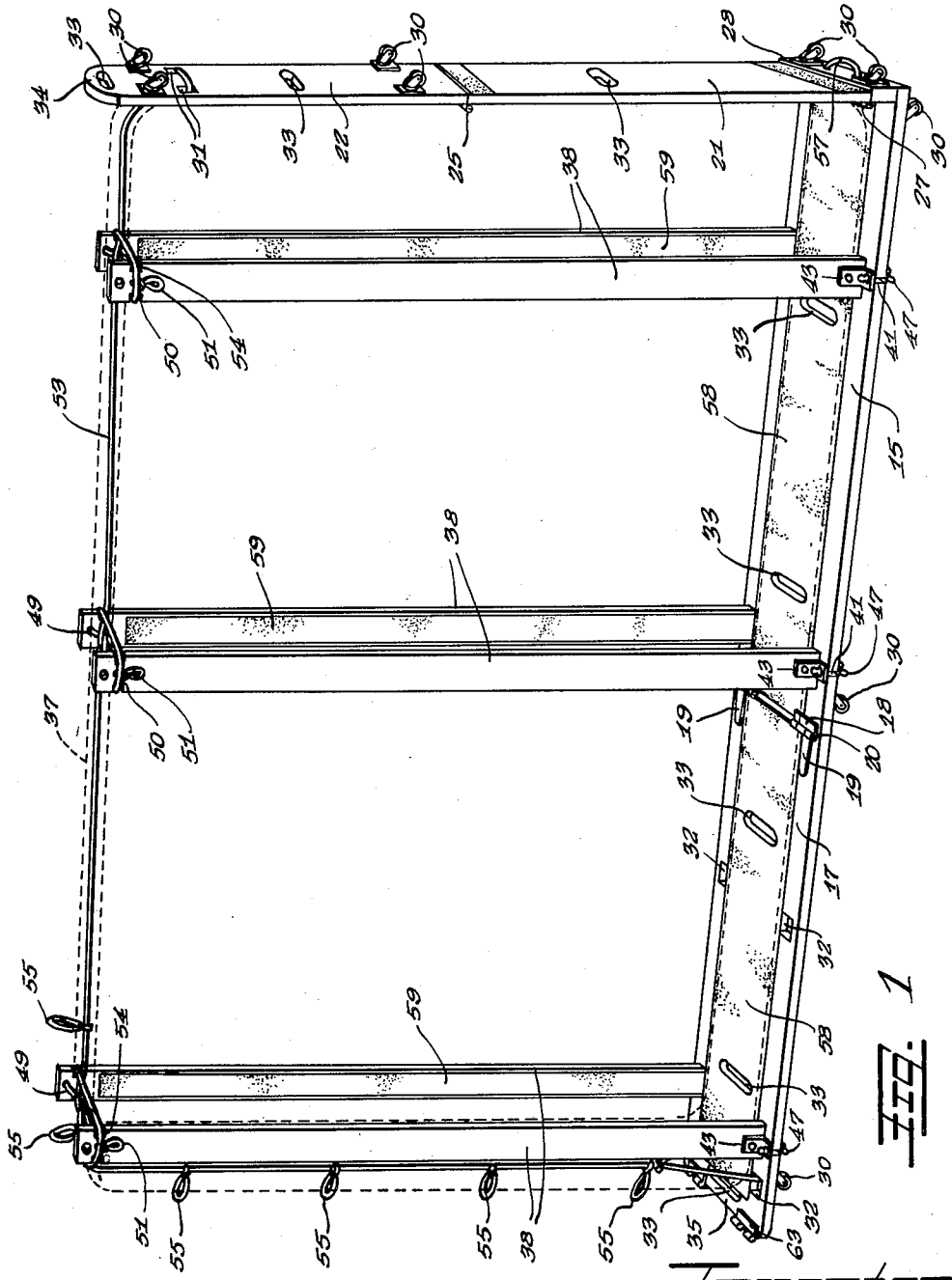


FIG. 1

Inventor
Albert A. Kleinschmidt
Hill, Sherman, Meroni, Gross & Simpson
Attys

By

July 31, 1962 A. A. KLEINSCHMIDT 3,047,305

DEVICE FOR MOVING MATTRESSES AND OTHER ARTICLES

Filed June 12, 1958 3 Sheets-Sheet 2

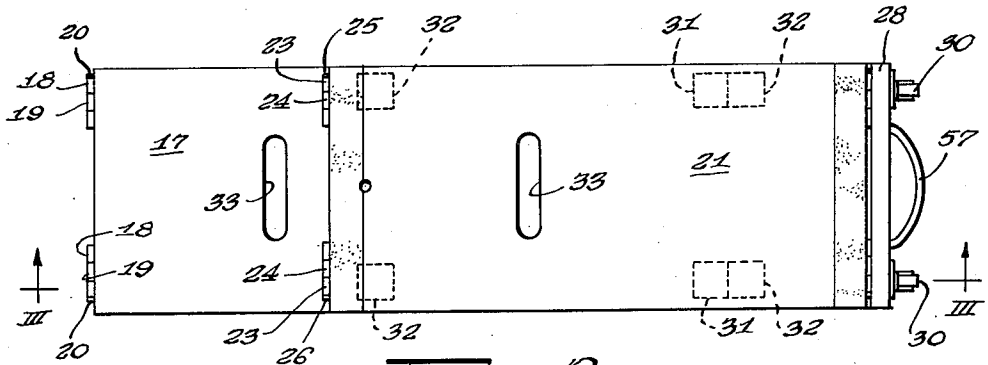


Fig. 2

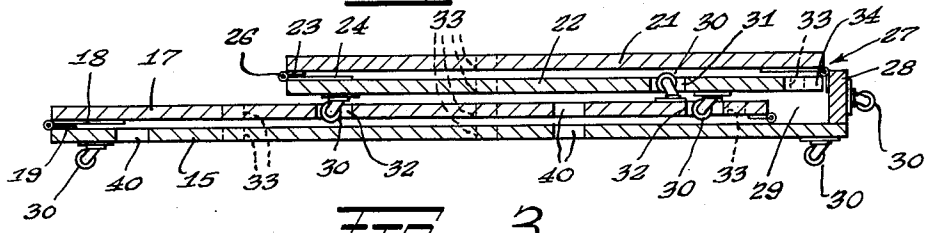


Fig. 3

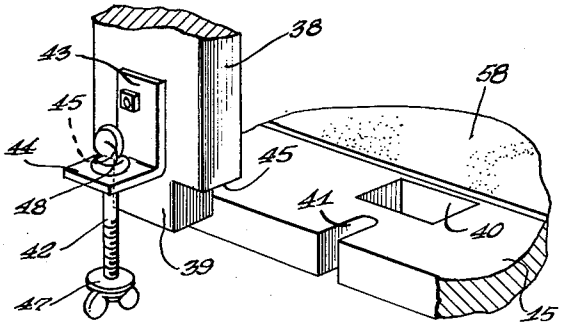


Fig. 4

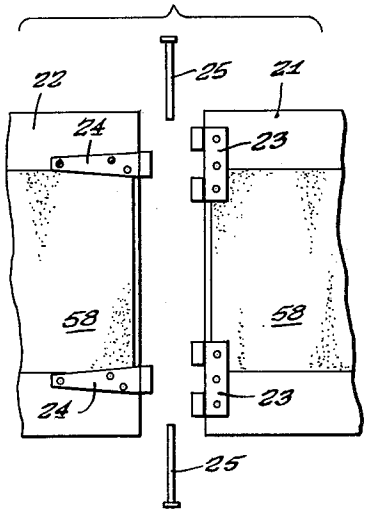


Fig. 6

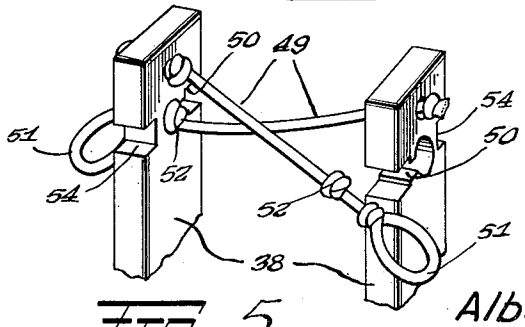


Fig. 5

Inventor

Albert A. Kleinschmidt

By Wick, Sherman, Meroni, Gross & Singer Attys

July 31, 1962 A. A. KLEINSCHMIDT 3,047,305

DEVICE FOR MOVING MATTRESSES AND OTHER ARTICLES

Filed June 12, 1958 3 Sheets-Sheet 3

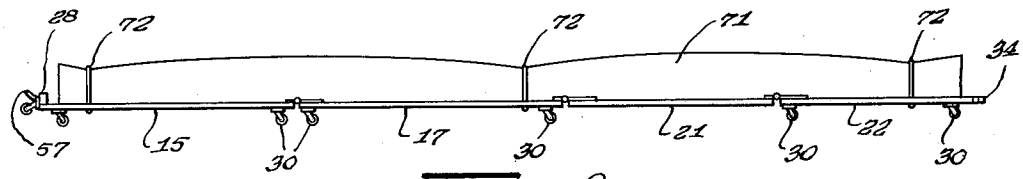


Fig. 8

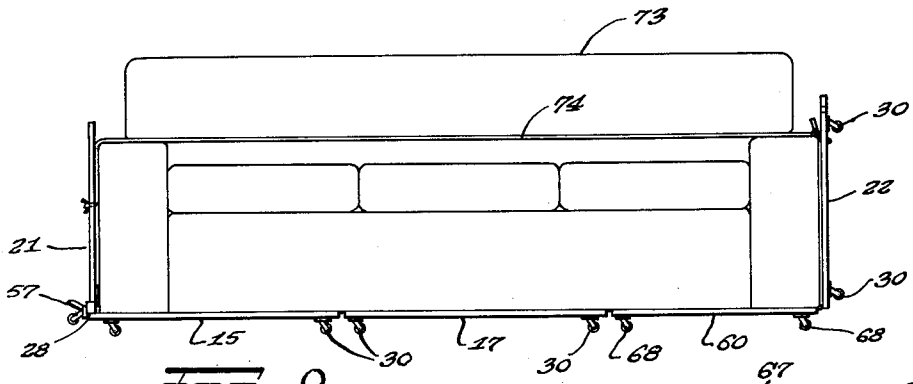


Fig. 9

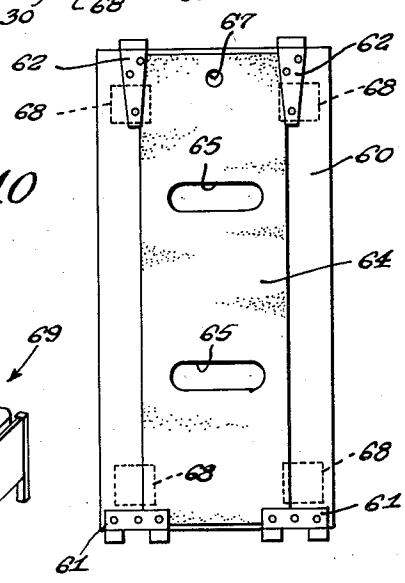
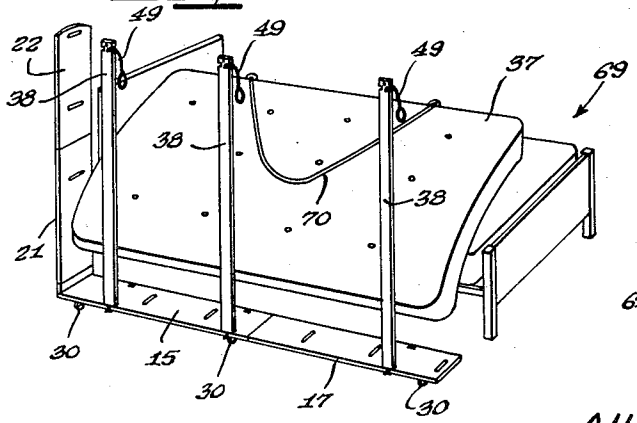


Fig. 10

Fig. 7



Inventor

Albert A. Kleinschmidt

By Kill, Sherman, Meroni, Gross & Griffin

Attys

United States Patent Office

3,047,305
Patented July 31, 1962

3,047,305
DEVICE FOR MOVING MATTRESSES AND OTHER ARTICLES

Albert A. Kleinschmidt, 9 E. Main St., Dundee, Ill.

Filed June 12, 1958, Ser. No. 741,645
10 Claims. (Cl. 280—36)

The present invention relates to improvements in devices especially suitable for moving mattresses but also readily adaptable for moving other articles and more especially furniture items which are rather unwieldy for handling by a lone person or even by a plurality of persons.

In a household, small store and the like where a person must often rely upon his own manual effort to move unwieldy articles such as mattresses, bed springs, chairs, davenports, rugs, and other utility or furnishing items, problems of unwieldiness and excessive weight are frequently encountered. Mattresses are especially unwieldy for one person to handle and are even awkward for two persons to handle when acting jointly. The same is true of davenports, rugs, large radio cabinets, building materials such as pieces of lumber or trim, wall board panels, and the like where a person is doing his own work and cannot count upon assistance.

However, it is not practical to have a separate moving device for every conceivable type of article to be moved, but it is desirable to be able to use the same device for handling various types of articles.

It is accordingly an important object of the present invention to provide a device of substantial versatility for moving articles of house furnishing type and other types of articles in a manner enabling a person to move such articles from place to place conveniently, unaided by any other person, although more than one person working together may, of course, use the device advantageously.

Another object of the invention is to provide a device which is especially suitable for moving an article having a long and a narrower dimension and which must sometimes be supported on its narrow dimension as well as on its longer dimension in the process of moving.

A further object of the invention is to provide an improved wheeled moving device.

Still another object of the invention is to provide an improved knock-down moving device which can be readily set up for use without any exceptional skill.

It is a further object of the invention to provide a new and improved device for moving mattresses and other articles and which device is readily convertible by reason of a disconnectable sectional arrangement enabling various combinations and relationships of the sections to meet various requirements.

Yet another object of the invention is to provide a sectional, hinged moving device which is adapted to be knocked down into a compact folded package unit for storage purposes.

A yet further object of the invention is to provide a moving device of the general character described which is readily adapted for handling various size articles and in which for size accommodation disconnectable panels or sections are provided by which the length of the device can be increased or decreased by the number or size of the sections that may be selectively or alternatively used in the assembly.

Other objects, features and advantages of the present invention will be readily apparent from the following detailed description of a preferred embodiment thereof taken in conjunction with the accompanying drawings, in which:

FIGURE 1 is a perspective view of the device as it appears when handling a mattress or like article;

FIGURE 2 is a plan view of the device in collapsed, folded condition;

FIGURE 3 is a longitudinal sectional detail view taken substantially on the line III—III of FIGURE 2;

FIGURE 4 is a fragmentary perspective assembly view of one of the side supporting bars or stakes and a receiving socket portion of the supporting base member or panel of the device;

FIGURE 5 is a fragmentary perspective view of the top portions of two of the opposed supporting stakes and the connecting members therebetween;

FIGURE 6 is an exploded assembly view of two of the disconnectable sections of the device and the readily removable connecting pins;

FIGURE 7 is a more or less schematic perspective view showing how a mattress may be loaded onto or unloaded from the device;

FIGURE 8 is a side elevational view of the device showing it in use to move a rug;

FIGURE 9 is a side elevational view of the device in use to move an article of furniture such as a davenport; and

FIGURE 10 is a top plan view of a supplementary or auxiliary section by which the size of the device may be extended.

Referring to FIGURE 1, a device embodying the present invention includes an elongated base section 15 in the form of a horizontal panel and serving as the principal or main member of the device to which other members are arranged to be connected. As a base extension from the base member 15 is an elongated similar base section member 17 with the ends of the members adjoining in alignment. Separable hinged connection between the members 15 and 17 is effected by means of coupling structure, in the present instance comprising respective hinge members 18 and 19 having usual complementary aligned hinge curls and with readily removable connecting pins 20 extending through the aligned hinge curls. By having the coupling assemblies on the upper faces of the aligned base panel members 15 and 17, the base panel members are adapted to be folded in collapsed relation upon one another in face-to-face relation as shown in FIGURES 2 and 3.

In a preferred arrangement, the device is of generally L-shape with the base panel sections 15 and 17 providing one arm and on the end portion of the main base panel 15 opposite to the connection with the base panel extension member 17, a right angular upstanding supporting structure providing the other arm and comprising a first elongated panel section member 21 of the same width as the base member 15 and supporting on its upper end a second upright panel section member 22. Hinged, separable coupling of the panel members 21 and 22 is effected similarly as described in connection with the base panel members 15 and 17, as best seen in FIGURES 3 and 6, comprising herein respective hinge sections 23 and 24 and readily removable connecting pins 25 to extend through the complementary aligned hinge curls. A similar disconnectable hinge coupling structure 27 is utilized to connect the lower end portion of the upright member 21 to a supporting and spacer bar 28 carried fixedly upon the adjacent end portion of the base panel 15 and of sufficient width to enable folded collapsed disposition of the panel upright members 21 and 22 upon the folded base panel member 17 as best seen in FIGURES 2 and 3, with the

upright panel 22 folded in upon the inner face of the panel 21 and then the two upright panel members folded down upon the member 17, with all of the members lying substantially parallel in the folded relationship. Since the upright dimension of the device need not be as long as the base dimension, the two upright panel members 21 and 22 may be shorter and of substantially the same length as shown. By having the base extension member 17 a little shorter than the main base member 15, a limited space or gap is afforded between the free end of the member 17 and the supporting and spacer bar 28 to provide a storage space 29 within the collapsed device.

To facilitate movement of the device, it carries wheel means, herein in the form of transversely aligned pairs of casters 30. By preference the main base panel member 15 has secured to its undersurface adjacent to its opposite ends respective pairs of the casters 30, while the extension base member 17 carries on its underface adjacent to its free end a pair of the casters 30, the remaining, attached end of the extension base member in this instance relying upon the adjacent set of casters on the base member 15 for rolling support through the hinge connection between the two base members.

In order to enable the device to be up-ended for rolling support on the uprights 21 and 22, a pair of the casters 30 is carried by the outer side of the supporting and spacer bar 28, and the upper of the uprights 22 carries respective pairs of the casters 30 adjacent to its opposite ends and attached to its outer face. The lower of the upright panel members 21 could also be supplied with such casters but that is not necessary since rolling support is afforded by the casters adjacent to the opposite ends thereof on respectively the spacer bar 28 and the upper of the members 22.

In order to enable as flat as possible collapsing of the several members of the device, provision is made for receiving of the casters 30 on the base member 17 within respective clearance apertures 31 in the upper of the upright members 22 (FIGS. 1 and 3), and the casters 30 on the folded-under upright member 22 are received through clearance apertures 32 in the folded base member 17.

For convenience in handling the device both in its set up utility condition or in its collapsed condition, the several panel members are provided with suitable transverse hand hole slots 33. These slots are so disposed on the several panels as to be in registration in the collapsed condition of the panels as shown in FIGURES 2 and 3. In addition, the free end portion of the upright panel member 22 is provided with one of the hand hole slots 33 to provide a convenient handle 34 on the free end of the member. Adjacent to its free end, the base extension panel member 17 is also provided with one of the hand hole slots 33 to afford a handle 35.

In the exemplary form shown, the device is dimensioned for conveniently supporting and moving a standard double bed mattress 37 shown in phantom outline in FIGURE 1. For this purpose, the combined length of the base members 15 and 17 is preferably slightly greater than the total length of such a mattress and the total length of the upright members 21 and 22, together with the supporting base bar 28 is preferably slightly greater than the transverse, narrower dimension of the mattress and the mattress is adapted to be supported on edge on the base members and against the upright members.

For retaining the mattress 37 upon the device and against collapsing, removable upright supporting bars or stakes 38 are provided. These are constructed and arranged for removable attachment to the base members 15 and 17 so that not only may the base members be used as supporting dolly type wheeled carriages without the stakes, but the stakes in preferred number may be mounted in a preferred relationship on the base members and in relation to one another selectively.

One desirable manner of detachably but firmly securing the respective stakes 38 to the base members as best shown in FIGURES 1 and 4, comprises the provision on the lower end of each stake 38 of a reduced width limited length downwardly projecting base end tenon, tongue, stem or boss 39 engageable in a complementary mortise-like socket hole 40 provided in the respective base member margin suitably spaced from the adjacent edge of the base member to afford an intervening solid area of sufficient width to accommodate a latch notch 41 opening through the base member edge and of a depth to receive the shank of a latching member such as a screw 42 carried by an angle bracket 43 suitably secured to the outer face of the stake 38 immediately above the tenon stem 39. An outwardly projecting foot flange 44 on the bracket 43 carries the latch bolt or screw member 42 pendently and is preferably disposed with its lower face plane substantially aligned with seating shoulders 45 on the base end of the stake 38 at opposite sides of the depending stem extension 39. Thereby, when the stake stem extension 39 is inserted into the complementary though reasonably freely receptive socket 40, the shoulders 45 solidly engage the underlying upper face portions of the base member at each side of the socket 40 while the foot flange 44 engages the base member on the intervening marginal portion between the edge of the base member and the socket. Then, by drawing up a thumb nut 47 on the lower end portion of the threaded shank of the latch bolt 42 to thrust against the underface of the base panel member at opposite sides of the bolt clearance slot 41 within which the bolt shank is engaged, the head of the latch bolt 42 draws the foot flange 44 into tight, stake-stabilizing engagement with the underlying upper face of the base member at the opposite sides of the clearance slot 41. The stake is thus held effectively against any substantial movement in any direction relative to the base member. To facilitate drawing up tightening of the latch bolt 42, the head may be provided with an upstanding thumb wing 48 engageable between the thumb and forefinger of one hand while the thumb and forefinger of the other hand run the thumb nut 47 up the latch screw shank. Conversely, of course, the latch bolt may be tightened by turning the bolt through the wing head 48 while the nut 47 is held stationary. By having the shank portion of the latch bolt 42 loosely rotatably extending through the foot flange 44, and by having the dimensional relationship between the walls of the socket 40 and the opposing faces of the stem extension 39 sufficiently free, easy assembly and disassembly of the stake base with respect to the supporting base member is afforded.

By preference, provision is made for connecting the stakes 38 by opposed pairs to the respective base member 15 or 17, with one of the stake members of each pair located on each opposite longitudinal margin of the base member. In a convenient arrangement for multiple utility, two longitudinally spaced pairs of the stake members 38 are arranged to be supported by the main base panel member 15, while one pair of the stake members 38 is arranged to be supported by the extension base panel member 17. Thus, the main base member 15 supports one of the pairs of stake members 38 adjacent to one end of the base member and the other pair of stake members thereon adjacent to the opposite end while the pair of stakes 38 carried by the extension base member 17 are supported near its free end and thus suitably spaced from the nearest pair of stakes on the base panel member 15. This affords desirable support for the opposite broad faces of the mattress 37 adjacent to its opposite ends and also adjacent to its middle, retaining the mattress against buckling or snaking but maintaining it centered on the median vertical plane of the mover device. On the other hand, where panel material shorter than a mattress and requiring only use of the main base panel member 15 is to be handled, so that the extension base panel 17 is disconnected, the two longitudinally spaced pairs of stakes 38 carried by the main panel member 15 afford

effective support for the opposite end portions or side margins, as the case may be, of the panels supported vertically therebetween on the moving device.

While the mattress 37, or other article or articles to be moved may effectively be supported on the moving device between the stakes 38 without any connection between the upper ends of the stakes, it is desirable, especially where the mattress or other article is to be moved a substantial distance and possibly through a more or less irregular passage or up and down stairs or through doorways where the device must be up-ended to wheel the same on the casters carried by the upright end panel members 21 and 22 and the spacer bar 28, to provide hold-down and latching means for at least the up ended longitudinal edge of the mattress or other article and preferably also for the free end thereof which extends up from the free end portion of the extension base panel member 17. To this end, referring to FIGURES 1 and 5, cross-over quick-releasable latching means are provided to extend between and connect the upper end portions of the respective pairs of stakes 38. In one desirable form, such latching means comprise respective flexible rope-like latching members 49 suitably secured at one end portion to the associated stake adjacent to the upper extremity of the stake and of a length to extend across the gap between the upper end portions of the pair of stakes and engage latchingly in a laterally opening latch slot or notch 50 formed in the vertical edge of the opposing stake below and adjacent to the point at which the companion flexible latch member 49 is attached. On their free end portions, the flexible latch members 49 are provided with respective handles 51 which conveniently may be in the form of a loop as shown, with suitable light-frictional-resistance means located adjacent to the loop in each instance for engagement with the surface areas adjacent to the notch 50 into which the free end portion of the latch member is engaged. In a desirable form, such friction means comprises a pair of longitudinally spaced enlargements or knots 52 related to the thickness of the engaged stake to have sufficient light frictional grip on the portion of the stake therebetween when the length of the latch member between the knots is engaged within the respective notch 50, thereby retaining the free end portion of the flexible latch member against unintentional displacement. While perhaps one flexible latch member 49 between each pair of stakes would be sufficient for most purposes, by having a pair of such latch members with one carried by each of the stake end portions and disposed to be latchingly related in crossing relation as shown and with the retaining notch 50 in each instance disposed on the respectively opposite side of the confronting stake member, double assurance against unintentional unlatching is had since even though one of the latch members 49 may slip out of its latching notch 50, the remaining latch member will adequately hold the latching, retaining relationship.

Additional retaining means, where desired, may comprise a flexible retaining strand member 53 which may be of rope-like form to extend between the upper end portion of the upright member 22 at one end of the device and over the mattress or other article and down along the opposite end of the mattress and secured to the free end portion of the base panel extension member 17 as shown in FIGURE 1. Attachment of the retaining member 53 to the upright panel member 22 may be by looping the associated end of the member 53 through the handle hole 33 or around under the adjacent casters 30, or as shown through the adjacent caster clearance apertures 31. Thence the retaining member 53 is carried over the mattress 37 longitudinally and may be looped around the upper or head end portion of the stakes 38 as shown with respect to the two center stakes in FIGURE 1, the loop being engaged within the mouth end portions of the latch notches 50, and in suitable retaining notches 54 in the opposite respective edges of the stakes. From there the retaining member 53 is carried over the upper edge of the mattress 37 and may be directed diagonally thereacross to the upper or head end portions of the stakes 38 carried by the base panel member 17 where the retaining member 53 is again looped around the stake heads in the notches 50 and 54 thereof and may be looped over and under the crossing flexible latch members 49 and then carried on down over the free end of the mattress and secured to the adjacent end portion of the extension base panel member 17 as for example by looping the end portion of the member 53 through the adjacent caster clearance apertures 32, as shown. By looping the retaining rope-like member 53 about the head portions of the stakes 38 as described, of course, the associated flexible latch members 49 are locked against any possibility of unintentional release until the loop of the retaining member 53 is unwound from the stake heads and more particularly out of the notches 50 and 54.

While the handles 34 and 35, as well as the hand holes 33 in the upright end members 21 and 22 and the hand holes 33 in the base members 15 and 17 are available for gaining convenient hand hold upon the device for manipulating the same, loaded or unloaded, additional handle means may be provided, such as a spaced series of handle loops 55 on the portion of the retaining member 53 which extends over the outer end portion of the mattress. Additionally, a suitable handle 57 may be provided on the outer side of the vertically disposed end spacer bar 28.

As a further aid in maintaining the supported article on the device, suitable friction facing material may be carried by the article engaging faces of the several components of the device. For example, on the article supporting faces of the base panel members 15 and 17, friction material in the form of a longitudinal strip 58 may be applied in a width that leaves the opposite margins of the base panel members free substantially as shown. Similar strip frictional facing material 59 may be carried by the article opposing faces of the stakes 38. Similar frictional facing material may be carried by the article opposing faces of the upright panel members 21 and 22. A suitable soft rubber or rubber-like material of high coefficient of friction may be used. Although such material may be supplied in strip form and adhesively secured in place, a suitable painted or sprayed on friction facing material may be employed.

In order to increase the versatility of the device, one or more auxiliary extension panel members 60 (FIG. 10) may be provided and adapted to be connected as an extension from the free end of the base extension panel member 17, or connected between the panel members 15 and 17 of the base structure, or connected between the upright end panel members 21 and 22 or between the upright panel member 21 and the spacer and supporting bar 28. Where a set of selectively usable auxiliary length-increasing panel members 60 is provided, they may be of graduated lengths from, for example, one-half foot section up to three or four foot sections. On the article opposing face of the panel sections 60, hinge plate or leaf portions 61 are secured at one end and the complementary strap or leaf portions 62 are secured at the opposite end and such hinge portions are complementary to the hinges on the panel section components of the carrying device for interchangeable connection therewith. For example, the hinge portions 61 are complementary to and adapted to be connected to the hinge portions 19 of the base panel section 17 while the hinge portions 62 are complementary to and adapted to be hingedly connected to the hinge portions 18 on the main base panel section 15. At the free end of the base panel extension section 17 the hinge portions 62 are engageable with suitable complementary hinge sections 63 by means of removable pins such as the pins 20, 25 or 26 hereinbefore described.

On the article opposing face of the auxiliary panel sections 60 suitable frictional facing material 64 may be provided. Convenient longitudinally spaced and parallel

hand hole slots **65** may be provided through the auxiliary panel section. At one end, a small size hole **67** may be provided whereby the panel section can conveniently be hung on a supporting bracket or nail on a wall when not in use. Where the auxiliary panel section **60** is over one foot in length, it may be provided with suitable casters **68**, similar to the casters **30**, on its floor opposing side.

An important advantage of the article moving device of the present invention resides in the facility with which it can be loaded or unloaded by an individual with a minimum of physical effort. This is especially important for persons who suffer some physical disability or impairment which precludes any heavy lifting.

For example, the ease with which the mattress **37** can be loaded into or unloaded from the moving device is schematically illustrated in FIGURE 7. Thus, the moving device with one or more of the stakes **38** attached to only one margin of the base assembly is wheeled into position alongside a bed **69** from which the mattress **37** is to be removed or onto which the mattress is to be placed. Because the overall width of the moving device is only a little greater than the thickness of the usual mattress, the device can be moved into position in what may be a very narrow space between the bed and an adjacent wall. In any event, after the device has been placed in position with the stakes **38** carried thereby on the margin remote from the bed, the mattress can easily be slid off of the bed until the edge of the mattress nearest the moving device tilts down onto the base members **15** and **17** of the device. Since this action is primarily a dropping or gravity induced action, only the moderate effort to slide the mattress off the bed is required. Then, when the adjacent longitudinal edge of the mattress has come to rest upon the base structure of the device, the remainder of the mattress can be easily tilted over into upright position against the one or more stakes **38** opposing the same. To facilitate such final movement of the mattress into upright on-edge position on the device, a pull rope **70** may be secured at its ends to the usual side carrying handle loops of the edge of the mattress to be up ended and by pulling on such rope the mattress can be brought to its upright plane against the supporting stake or stakes **38** and then by looping the rope **70** over the stakes the mattress can be held in position until the stakes **38** have been attached to the opposite margin of the base members **15** and **17** of the device and thus fully support the mattress in its upright on-edge position on the device. Of course, return of the mattress **37** to the bed after airing, cleaning or the like involves merely a reversal of the procedure just described. If at this time it is desired to have the mattress in reverse or turned over position relative to that from which it was removed from the bed, that can easily be done by placing the moving device on the opposite side of the bed and placing in down position on the bed that face of the mattress which was up at the time the mattress was removed from the bed.

In FIGURE 8 is shown how the device can be used for moving an elongated article such as a rug **71**. Assuming the rug **71** to be longer than the extended combined length of the base members **15** and **17**, either one or more of the auxiliary sections **60** may be connected as extensions from the free end of the base member **17**, or the end upright members **21** and **22** still connected together, but detached from the spacer bar **28** may be connected to the free end of the base member **17** as shown thus providing a multi-section base or dolly of a length sufficient to support the rug **71** adequately for handling. At suitable intervals, tie-on ropes **72** may be tied around the rug **71** and to the underlying sections of the moving device. By virtue of the hinged articulated connection of the several sections, it will be apparent that in moving the rug should it be necessary to go through an angular passage or entry way or down a stairway having periodic landings, the device may be hinged and the rug bent to clear the same through the passageway or around a bend in the stairs.

In FIGURE 9 is shown how a rather bulky and generally unwieldy article of furniture such as davenport **73** is adapted to be carried for movement by the moving device of the present invention. For this purpose, the upright panel section **22** of the device may be detached from the lower upright panel section **21** and attached to one of the auxiliary panel sections **60** of suitable length which in turn is connected to the free end portion of the base extension panel section **17**. The base panel sections **15** and **17** and the extension section **60** are maneuvered into position under the davenport and such maneuver requires only minor effort to tilt the davenport **73** rearwardly, for example to raise the bottom thereof sufficiently to clear the moving device section or some other equally simple and easy procedure. Then the section **22** is swung up along one side of the davenport while the section **21** stands upright along the opposite side of the davenport. If desired, means such as a rope **74** may be secured between the now opposite end sections **21** and **22** in order to hold the davenport down on the rolling sections. If it is necessary to up-end the davenport to get it through a doorway or a narrow angular passageway, that can readily be done and the rollers or casters **30** on the panel section **22** utilized to roll the assembly.

Since the casters **30** or **68**, as the case may be are on the usual swivels, it will be apparent that the device, irrespective of the article supported can be rolled in any direction, or can be rolled in any direction in maneuvering the device into position relative to an article to be supported.

When the device is to be put away or stored, it is readily collapsed into the folded condition shown in FIGURES 2 and 3 wherein it provides a compact package which can be placed in a small storage space. Any loose ropes can be accommodated in the storage space **29** within the folded unit. By using headed pins to connect the several connecting and hinge sections, easy manual removal or replacement of the pins can be effected with respect to the hinge sections.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

I claim as my invention:

1. In combination in a mattress mover, an elongated wheeled base panel structure for supporting a mattress on edge thereon, an upstanding end panel structure carried by one end of the base panel structure against which an end edge of the mattress is engageable, said upstanding panel structure having wheels thereon so that the mattress can be shifted to be wheeled on end on the device, separable stakes mounted in longitudinally separated relation on the respective margins of said base panel structure to engage the respective opposite faces of the mattress, flexible latch members carried by the upper end portions of the stakes and separably connecting said upper end portions over the upper edge of the mattress on the device to retain the mattress against escape, and a flexible retaining member connected to said upstanding end panel structure and to the upper end portions of the stakes, locking said flexible latches against opening, and anchored to the end portion of the base panel structure opposite to said upstanding end panel structure.

2. In an article moving unit, a horizontal wheeled elongated panel member, an upright panel member hingedly attached to one end portion of the horizontal panel member and foldable onto the horizontal panel member when it is desired to collapse the unit for storage purposes and arranged to be swung up from folded relation to the horizontal panel member for article moving purposes, and a plurality of upright supporting members removably attachable to the longitudinal margins of said horizontal panel member for retainingly engaging the sides of an article in upright position on said horizontal panel member and between said upright members and

with the swung-up upright panel member opposing an end of the article, said horizontal member having roller means on its lower face and said swung-up panel member having roller means on its outer face so that the unit with an article supported thereby can be rollably moved either on said horizontal member or on said swung-up panel member.

3. An article moving unit as defined in claim 2 including an elongated flexible member including means to connect it to the upper end portion of said upright panel member and to the opposite end portion of the horizontal panel member and engageable with the end opposite the upright panel member and the top of an article supported by the unit and coacting with the upright supporting members to retain the article against escape from the unit.

4. An article moving unit as defined in claim 3 wherein said elongated flexible member has handle loops thereon engageable for assisting in manipulating the unit with an article supported thereby.

5. In an article moving unit, a horizontal wheeled panel member, an upright panel member hingedly attached to one end portion of the horizontal panel member and foldable onto the horizontal panel member when it is desired to collapse the unit for storage purposes and arranged to be swung up from folded relation to the horizontal panel member for article moving purposes, a plurality of upright supporting members removably attachable to the margins of said horizontal panel member for gripping an article in upright position therebetween on said horizontal panel member and between said upright members and with the upright panel member opposing the article, and means connected to the upper end portion of said upright members and said upright panel member for securing the article against escape from between said upright panel member and said upright members, said upright panel member having wheels on its outer face and said horizontal wheeled panel member having wheels on its lower face so that the unit with an article supported thereby can be rollably moved either on said horizontal wheeled panel member or on said upright panel member.

6. An article moving unit as defined in claim 5 wherein said means connected to the upper end portion of the upright members comprise flexible latch elements permanently attached to the upper end portions of certain of the upright members and interlock means on the upper end portions of others of the upright members and on the flexible latch elements releasably interengageable for retaining the latch elements.

7. An article supporting unit as defined in claim 5 wherein said means connected to the upper end portion of said upright members comprise a plurality of flexible latch elements and an elongated flexible securing member attached to the upper end portion of the upright panel member and extending across the upper side of an article supported by the unit and coacting with said latch elements to retain them in latching position, said elongated flexible member extending in retaining relation along the end of the article remote from said upright panel and being attached to the opposite end portion of the horizontal panel from its attachment to said upright panel.

8. In an article moving unit, a horizontal wheeled elongated panel member, an upright panel member releasably hingedly attached to one end portion of the horizontal panel member and foldable onto the horizontal panel member when it is desired to collapse the unit for storage purposes and arranged to be swung up from folded relation to the horizontal panel member for article moving purposes, a plurality of upright supporting members removably attachable to the longitudinal margins of said horizontal panel member for retainingly engaging the sides of an article in upright position on said horizontal panel member and between said upright members and with the swung-up upright panel member opposing an end of the article, said horizontal member having roller means on its lower face and said swung-up panel member having roller means on its outer face so that the unit with an article supported thereby can be rollably moved either on said horizontal member or on said swung-up panel member, and hinge means on the opposite end portion of said horizontal member to which said upright panel member is releasably hingedly attachable after it has been released from said one end portion of the horizontal panel member whereby said upright panel member is adapted to become a horizontal extension of said horizontal member.

9. In an article moving unit a horizontal wheeled elongated panel member, a fixedly disposed upwardly projecting spacer bar on one end portion of said horizontal member, a first upright panel member hingedly attached at one end to said spacer bar, a second upright panel member hingedly attached to the opposite end of said first upright panel member, said second panel member being foldable onto the inside face of the first panel member and the thus folded first and second panel members being foldable onto the horizontal panel member and said spacer bar providing a space between the horizontal panel member and the first panel member whereby all of the panel members when folded together are substantially parallel to one another for efficient collapsed storage purposes but from which folded together relationship the first and second panels are readily swung up into aligned upright position relative to the horizontal member, and a plurality of upright supporting members removably attachable to the longitudinal margins of said horizontal panel member for retainingly engaging the sides of an article in upright position on said horizontal panel member and between said upright members and with the aligned swung-up upstanding panel members opposing an end of the article, said horizontal member having roller means on its lower face and said second panel member and said spacer bar having roller means on their outer faces so that the unit with an article supported thereby can be rollably moved either on said horizontal member or on said second panel member and said spacer bar.

10. In an article moving unit, a horizontal wheeled elongated panel member, an upright panel member hingedly attached to one end portion of the horizontal panel member and foldable onto the horizontal panel member when it is desired to collapse the unit for storage purposes and arranged to be swung up from folded relation to the horizontal panel member for article moving purposes, a plurality of upright supporting members removably attachable to the longitudinal margins of said horizontal panel member for retainingly engaging the sides of an article in upright position on said horizontal panel member and between said upright members and with the swung-up upright panel member opposing an end of the article, said horizontal member having roller means on its lower face and said swung-up panel member having roller means on its outer face so that the unit with an article supported thereby can be rollably moved either on said horizontal member or on said swung-up panel member, said horizontal member and said upright supporting members having on the article-opposing faces thereof frictional material to prevent slipping of the article supported thereby, and means acting on said upright supporting members to hold them against the article.

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