(No Model.)

C. E. WILSON.

COFFIN LIFTER.

No. 270,620. Patented Jan. 16, 1883.

Fig. 1.

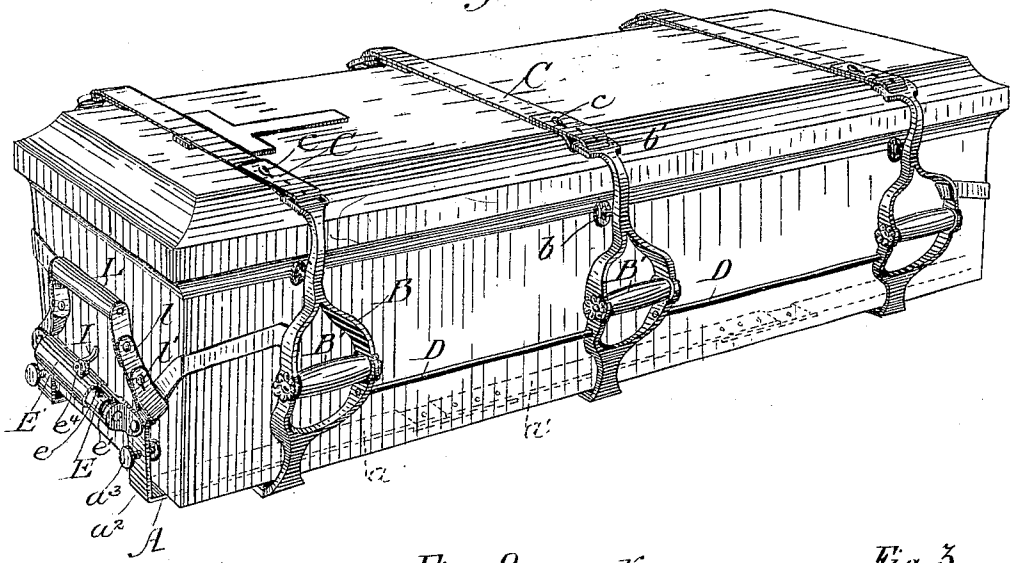


Fig. 2.

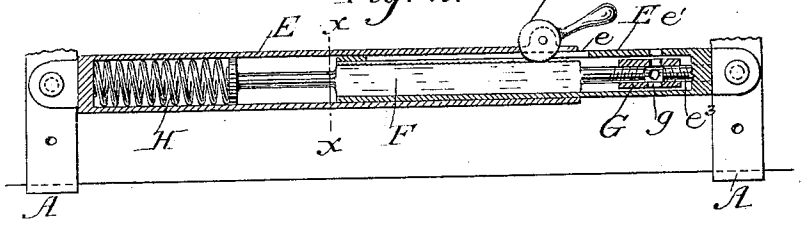


Fig. 3.



Fig. 4.

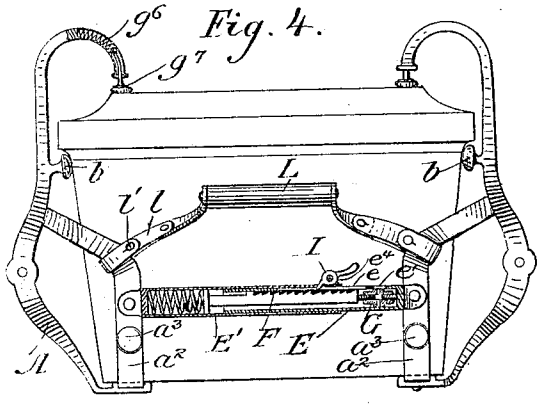
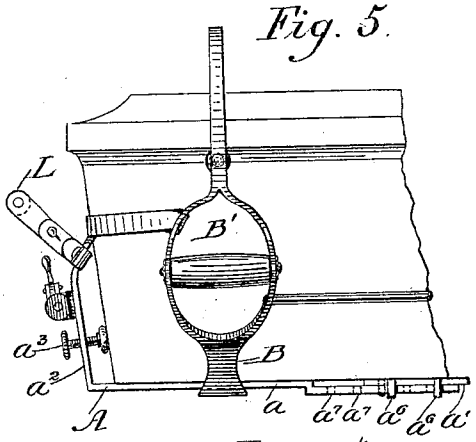


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES E. WILSON, OF CHICAGO, ILLINOIS.

COFFIN-LIFTER.

SPECIFICATION forming part of Letters Patent No. 270,620, dated January 16, 1883.

Application filed May 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. WILSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coffin-Lifters, of which the following is a specification.

It has heretofore been customary to provide coffins with a series of handles rigidly fastened to the sides of the same, whereby they could be lifted. These handles, which are usually of an ornamental character, are expensive, and in attaching them to the coffins, as is generally done, by screws or bolts, holes are formed through which air and water may enter, thus occasioning a more rapid decomposition of the body than would occur were the coffins perfectly tight. Especially objectionable is the use of the customary form of handles upon coffins made of marble or cement, as in fastening the handles thereto it is necessary to bore holes through the sides, in which are placed the retaining-screws, usually connected to wooden strips upon the inside of the coffin. It is somewhat difficult to obtain a perfectly tight and durable joint between the marble or cement and the screws; and, moreover, the wooden strips in a short time rot away, allowing the handles to drop off and the air and water to enter through the screw-holes.

The object of my present invention is to provide a device of such construction as will render the ordinary handles unnecessary, and will afford a ready means for lifting and moving coffins. This object of my invention I have accomplished by the mechanism hereinafter described, particularly claimed, and illustrated in the accompanying drawings, forming part of this my specification.

Figure 1 represents a perspective view of a coffin with my improved lifter in place thereon. Fig. 2 is an enlarged sectional view of a slightly-modified construction of end clamp. Fig. 3 is a cross-sectional view upon line *x x* of Fig. 2, showing also the milled eccentric wheel in position. Fig. 4 is an end view of a coffin with my lifter in place, the handles being of modified construction. Fig. 5 is a side view of a portion of a coffin with lifter thereon.

Like letters of reference designate corresponding parts in the several views of the drawings.

A designates the sustaining-strips of the skeleton frame, which extend under the bottom of the coffin, lengthwise of the same, and are formed of the separable parts *a* and *a'*. The parts *a* are bent upwardly, as shown, and are curved in such manner as to form the angular portions a^2, which are securely connected to the handles B. The opposite ends of the parts *a* are bent, as shown, to pass through the loops a^6, formed on the parts *a'*. The parts *a* and *a'* are each furnished with the series of holes a^7, through which suitable pins are passed to hold the parts together. The handles B are attached at their bottoms to the sustaining-strips A, project upwardly therefrom, and are provided with the bowed portions, as shown, in which are fastened the cross-pieces B', to be grasped by the hand. To these handles are attached the padded lugs *b*, which bear against the side of the coffin and prevent any scratching of the same.

In the upper ends of the handles, which are slightly curved, are formed the loops *b'*, through which pass the straps C, furnished each with a button or hook, *c*, and a series of holes, by means of which the handles may be connected together. These straps may be formed of rubber, or of leather or other suitable material, and the function of the series of holes is to permit of the adjustment of the straps to coffins of different sizes.

To the sides of the handles B are removably connected, by suitable screw-joints, the rods D, a set of such rods being used with each size of coffin.

The angular portions a^2 of the strips A are furnished with the padded adjusting-screws a^3, which serve to guard the coffin against any longitudinal displacement. Above the screws a^3 are attached, by suitable hinged connections, the mechanism for clamping the two main parts of the skeleton frame together. This clamping mechanism, located at each end of the coffin, consists of the tubes E and E', arranged to slide the one within the other. The tube E is provided with the axial slot *e* and the broad circumferential slot *e'*, and its end is partially closed, as shown in Fig. 3, to form the slot through which passes the ratchet-bar F. This ratchet-bar has a screw-threaded shank at one end, which fits into one of the screws of the right-and-left-hand female screw-

nut G, the opposite end of which works over the screw-threaded lug e^3, fixed to the base of the tube E'. A spiral spring, H, having one end fastened to the base of the tube E, is attached to the ratchet-bar F, and tends to draw the tubes E and E' constantly together. The nut G, furnished with perforations g, lies under the broad slot e', and is operated by a wrench-bar inserted through said slot. The tube E' is provided with a slot on its top, upon the side of which slot are formed lugs e^4, which constitute the journal-bearings of the pawl I, by means of which any backward movement of the ratchet-bar is arrested.

Instead of forming the upper portion of the handles with loops to receive straps, as shown in Fig. 1, these handles may be extended upward and curved over, as shown in Figs. 4 and 5, in which event the ends of the curved portions will be made hollow to receive the spiral springs g^6 and the shanks of the padded rods g^7, which are forced normally outward by the springs. Suitable flanges are formed on the shanks of the rods g^7 and ends of the curved portions of the handles to prevent the withdrawal of the rods.

In the modification of clamping device shown in Figs. 2 and 3 the pawl used in connection with the ratchet-bar is replaced by an eccentric milled wheel, K, furnished with a suitable handle for operating the same.

In some instances, as in carrying a coffin down stairs, it becomes necessary to employ end handles, and for this reason I have provided the removable end handles, L. These end handles are furnished with the flexible straps l, having suitable hooks or buttons, l', and holes for the same, and can be readily attached to and removed from the angular portions a^2, as shown.

From the above-described construction it will be seen that when a coffin is to be lifted the two main parts of the skeleton frame are drawn apart against the action of the spiral springs H a sufficient distance to enable the sustaining-strips A to be passed over the sides and under the bottom of the coffin. The parts are then drawn together by the springs, and in this action the ratchet-bars F pass freely under the pawls I, which serve effectually to prevent their backward movement. In order to clamp the parts more tightly to the coffin, the nut G is turned by a wrench-bar inserted through the broad slot e' and into the perforations of the nut G. When the milled eccentric wheel shown in Fig. 2 is employed in clamping the parts the teeth of the ratchet-bar are made very small, and the wheel is arranged in such manner as to permit of the forward and arrest the backward movement of the ratchet-bar.

The lifter can be readily adjusted to coffins of different lengths by means of the pin-holes a^7 on the parts a and a' of the strips A, and by employing movable rods D of suitable lengths.

It is obvious that the clamping mechanism is of such construction as to readily adjust itself to coffins of any width.

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

1. A coffin-lifter comprising a skeleton frame provided with sustaining-strips, and with clamps for attaching the same to the coffin, and provided with a series of handles, substantially as described.

2. A coffin-lifter having strips for sustaining the coffin, adjustable clamping mechanism for connecting said strips, and a series of handles, substantially as described.

3. A coffin-lifter comprising a frame having strips for sustaining the coffin, said strips being adjustable, substantially as described.

4. A coffin-lifter having adjustable strips for sustaining the coffin, a series of handles extending upwardly from said strips, and side rods removably connected to said handles, substantially as described.

5. A coffin-lifter having strips for sustaining the coffin, a series of handles extending from said strips, clamps for connecting said strips, and straps for connecting the handles, substantially as described.

6. In a coffin-lifter, the combination, with the sustaining-strips, of the clamps for connecting said strips, having their ends hinged to the strips, substantially as described.

7. In a coffin-lifter, the combination, with the sustaining-strips A, of spring mechanism for drawing said strips together, substantially as described.

8. In a coffin-lifter, the combination, with the sustaining-strips A, of the tubes B and C, the ratchet-bar E, and the pawl C', substantially as described.

9. In a coffin-lifter, the combination, with the sustaining-strips A, of the tubes B and C, the ratchet-bar E, the pawl C', and the adjustable nut D, substantially as described.

10. In a coffin-lifter, the combination, with the sustaining-strips A, having upturned ends, of the adjusting-screws a^3, substantially as described.

11. In a coffin-lifter, the combination, with the sustaining-strips, of the removable handles L, substantially as described.

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