A. L. HALEY.

BED.

APPLICATION FILED JULY 30, 1907.

956,339.

Patented Apr. 26, 1910.

3 SHEETS—SHEET 1.

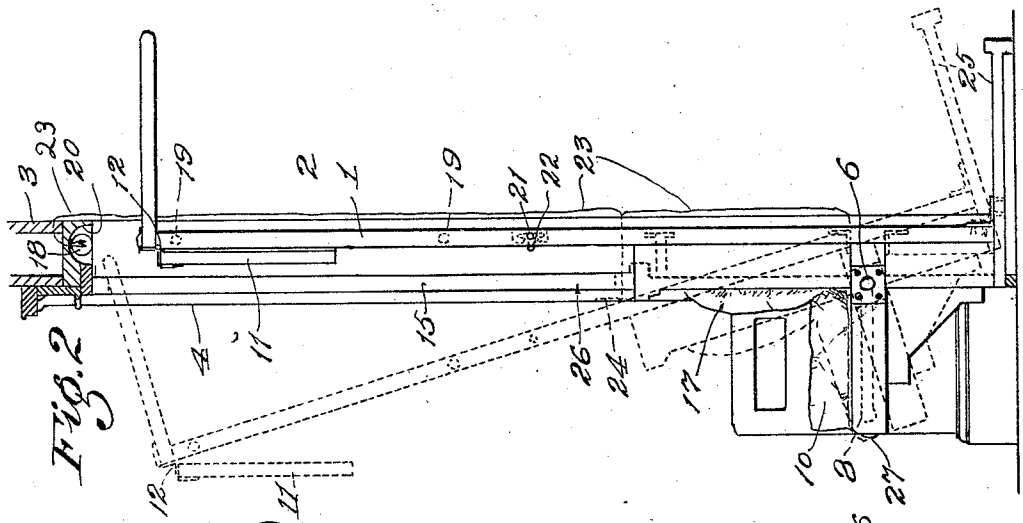

Fig. 2.

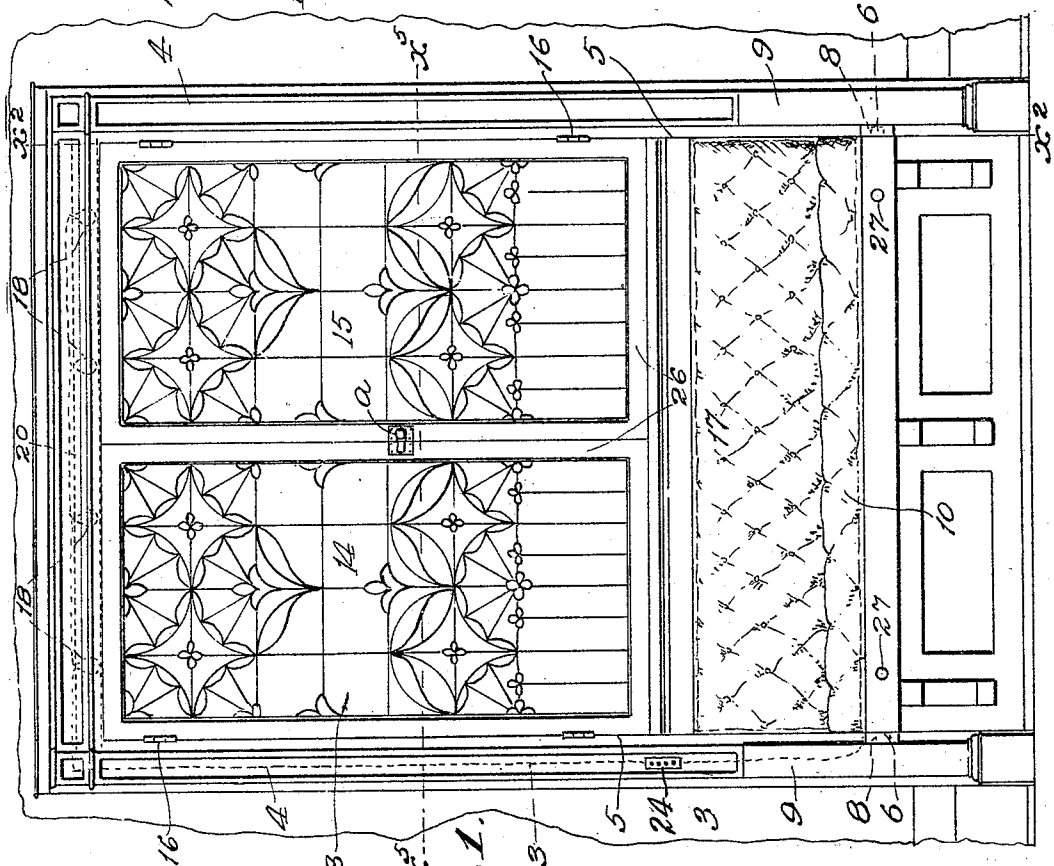

Fig. 1.

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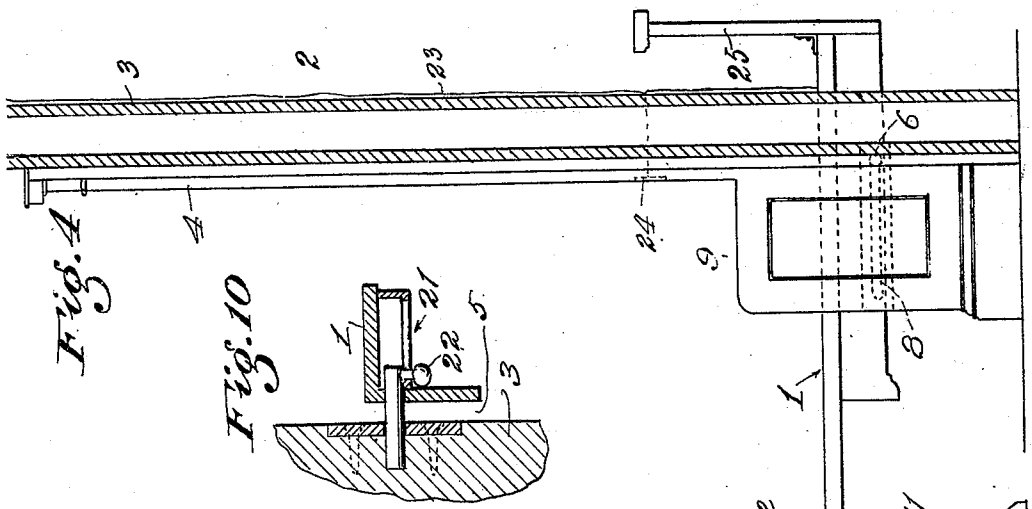

Fig. 4

Fig. 10

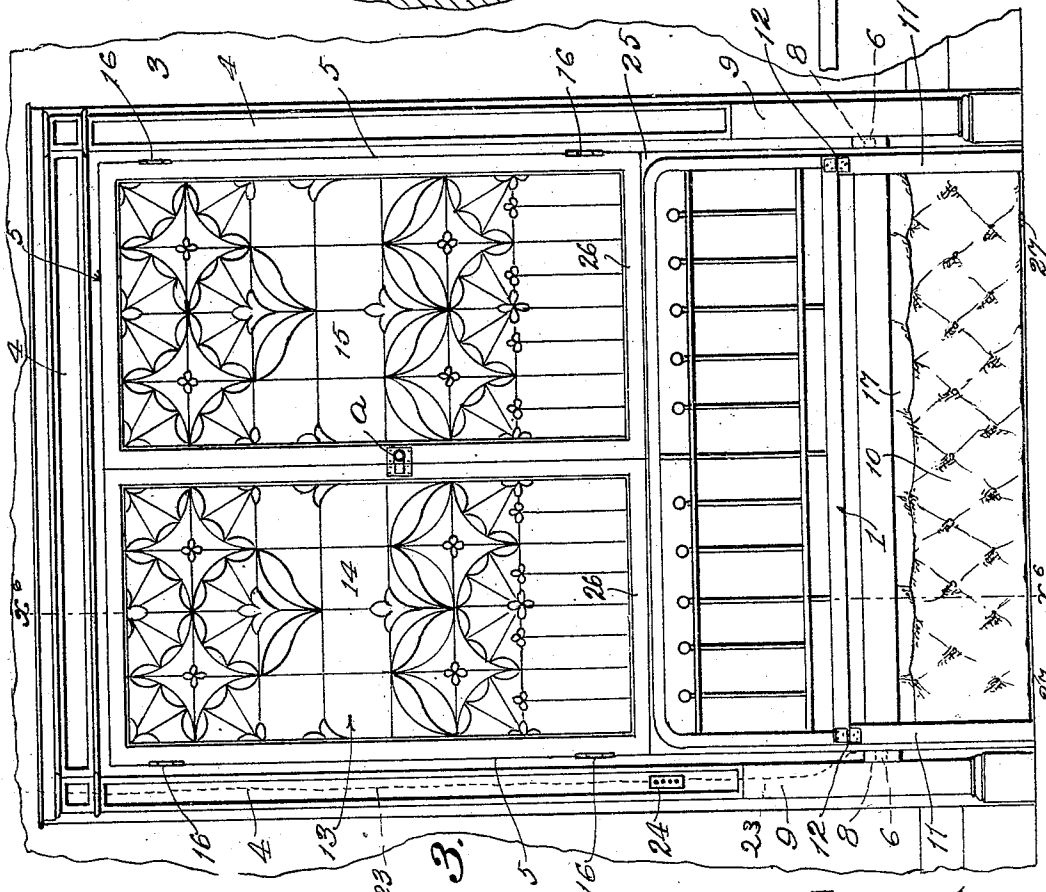

Fig. 3.

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3 SHEETS—SHEET 3.

Fig. 5

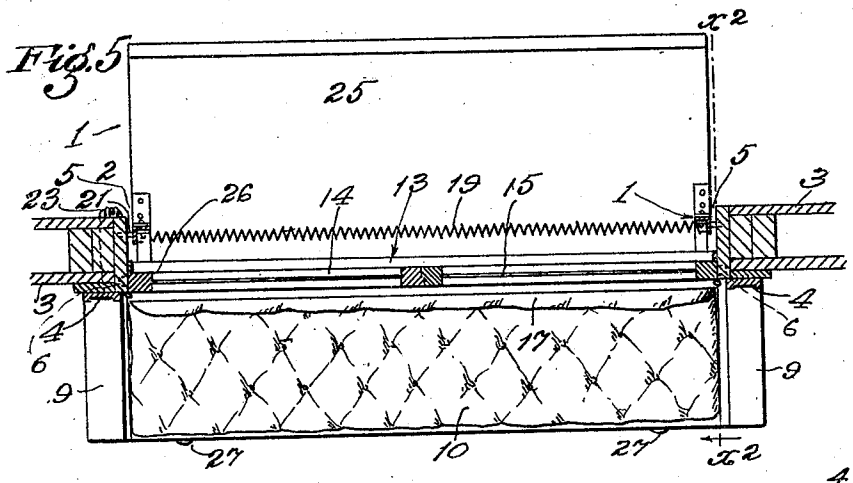
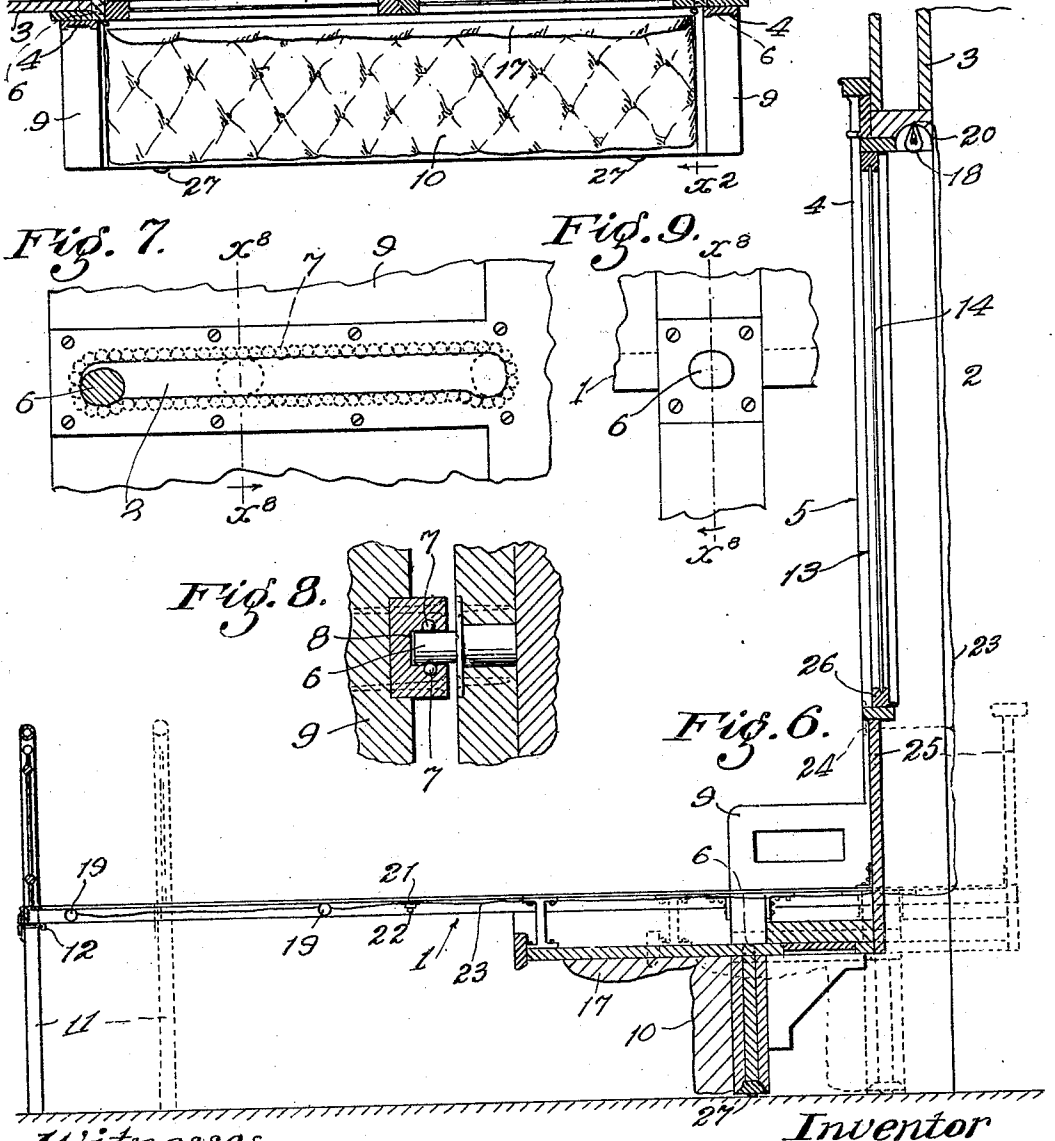


Fig. 7.

Fig. 9.

Fig. 8.

Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR L. HALEY, OF LOS ANGELES, CALIFORNIA, ASSIGNOR TO A. L. HALEY ARCHITECT INCORPORATED, OF LOS ANGELES, CALIFORNIA, A CORPORATION OF CALIFORNIA.

BED.

956,339. Specification of Letters Patent. Patented Apr. 26, 1910.

Application filed July 30, 1907. Serial No. 386,313.

To all whom it may concern:

Be it known that I, ARTHUR L. HALEY, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Beds, of which the following is a specification.

This invention in some respects is applicable to beds of various kinds, but in its most complete embodiment it appertains to wall beds and to ornamental means for concealing the presence of the same.

An object of this invention is to provide a bed of superior hygienic qualities suitable for home, hospital, hotel, and other uses.

Another object is to provide ornamental concealing means adapted for use with beds in elegant apartments.

Heretofore, various devices for concealing beds have been made, and in some of such devices the bed is made to tilt up into a recess in a wall where it is housed until desired for use. The bottoms of beds of this kind have been provided with ornamentation of various kinds, or with concealing means.

An object of this invention is to provide a superior means for ornamentation which will afford a wider range for artistic treatment than any of the concealing means heretofore employed with wall-beds, and in carrying out the invention I propose to combine with this superior ornamentation a novel utility whereby the bed is at once made more beautiful when out of use and more comfortable when in use.

The accompanying drawings illustrate the invention.

Figure 1 is a front elevation of a bed embodying this invention in a form I at present deem most desirable. Fig. 2 is a vertical section of the same in line x^2—x^2, Figs. 1 and 5. Fig. 3 is an elevation looking toward the bed lowered in position for use. Fig. 4 is a fragmental elevation from plane indicated by x^4—x^4, Fig. 3, showing the bed simply lowered and not drawn out. Fig. 5 is a plan section on line x^5—x^5, Fig. 1. Fig. 6 is a sectional elevation on line x^6—x^6, Fig. 3, looking to the left and showing the bed fully extended for use. Fig. 7 is a fragmental detail of one of the anti-friction bearings of the bed in the side of the buttress that forms the arm of the seat. The bed-supporting-pivot is shown in section. Fig. 8 is a cross-sectional detail on line indicated by x^8—x^8, Fig. 7. Fig. 9 is a detail showing the end of one of the bearing-pins and a fragment of the bed. Fig. 10, (Sheet 2), is a fragmental, sectional detail of the fastening means for holding the bed in the recess.

1 designates the bed-frame adapted to extend horizontally and to stand upright in a recess or closet 2 in a wall 3. 4 is the casing for said recess, the same being made to represent a window-casing. The bed-frame is made to fit into the opening 5 in said casing, and to swing forward and down on pivots 6 that are arranged to travel on balls 7 in antifriction ways 8 in the buttresses 9 which form an apparent support for an upholstered seat 10 which is fixed to and projects forward from the bottom side of the bed-frame at the lower end thereof when the bed is in its upright or closed position.

11 designates two legs secured by hinges 12 to the upper portion of the bed-frame at the outer edges thereof to support the foot of the bed when the bed is lowered. 13 designates an imitation art-glass window which may consist of two leaves 14, 15, respectively, hinged by hinges 16 to casing and secured by a lock *a*.

The upholstered seat may have an upholstered back 17, and the parts of the bed which have been enumerated are all arranged so that when installed the effect is given of an art-glass window with a window-seat. This form of ornamentation is capable of a wide range of artistic treatment, the glass of the imitation window being colored or stained so as to exclude a view of what the inmate of the room might assume to be the outdoors.

In order to highten the attractive and illusive effect of the concealing means, and also to add to the sanitary character of the bed, illuminating and heating means in the form of one or more electric lamps 18 may be mounted at the upper part of the imitation window at that portion of the bed-frame which will be the foot of the bed when the bed is lowered into position for use as a bed. Such illuminating and heating means may be supplemented by electric resistance-coils 19 arranged at other portions of the bed-frame underneath the bed, so that when the bed is lowered for use the same

may be heated by turning on an electric current to the heating means. In the case of the resistance 19, the heat from the same when the bed is lowered for use will warm the foot of the bed, thus relieving the occupant of the bed of any trouble from cold feet. This feature is peculiarly acceptable for hospital or home use where it is often desired to keep the temperature of the room cool although at the same time it is desired to keep the feet of the occupant of the bed warm. By this arrangement the necessity of using water-bottles may be dispensed with.

20 designates a reflector for increasing the illuminating effect, the same being adapted to throw rays of light onto the art-glass of the window to give the effect or appearance of the sun shining thereon, when the bed is in its upright or housed position. At the same time, the heat from the lamps will serve to produce a ventilating current of air for sanitary purposes inside the closet in which the bed will be housed, and which will be upwardly open sufficiently to allow ventilation.

A suitable fastener 21 operated by a slide or handle 22 may be provided for holding the bed in upright position and to release the same in order that it may be lowered for occupancy.

23 indicates the electrical conductors, and 24 switch means therefor to turn on and off the electric current for heating or illuminating the bed and its window.

The resistance coils may be of any desired size and number, and may be disposed at different places to warm different parts of the anatomy.

The usual wiring and switches may be employed to conduct and to control the electric current.

I do not propose to limit the invention in every instance to the use of the imitation art-glass windows, but in some instances I may substitute mirrors for the hinged windows shown in the drawings, or I may substitute tapestry or paintings therefor, the upholstered seat projecting between the buttresses remaining the same.

The pivots 6 of the bed serve a double purpose; namely,—to enable the attendant to tilt the bed into its lowered and into its upright positions, and to allow the bed to be drawn forward out of the recess sufficiently to bring the head-board 25 directly beneath the hinged frame 26 of the closure for the recess out of which the bed has been drawn. Said head-board 25 and the seat-back 17 are respectively of such dimensions as to close the space below the frame 26 when brought into position for that purpose; that is to say, the back 17 of the seat which is underneath the bed-frame when the bed is lowered into position shown in Fig. 6, closes the space below the hinged frame 26 when the bed is stored on end in its recess, and the head-board 25 of the bed will occupy a like position when the bed is lowered and drawn out. This will be clearly understood by comparison of Figs. 2 and 6. When the bed is upright the head-board 25 rests flat on the floor of the recess, as shown in Fig. 2.

The standard height of a bed is 22 inches from the floor to the top of the bed-frame, and the pivots of the bed are arranged at approximately 22 inches from the floor so that when the bed is lowered in position, the ends thereof sustained by pivots will be at an appropriate height corresponding to the height of the legs of the bed.

In order to close the space in the wall below the pivot while the bed is stored, the seat 10 is made to project forward from the pivot a considerable distance to cover the ways 8 when the bed is in upright position, and the back of the seat extends downward from said pivot a sufficient distance to close the opening below the pivot when the bed is in its stored position.

The head 25 of the bed extends at right angles to its downward extension of the back 17 of the seat.

In practical operation, to lower the bed for use, the frames 26 will be thrown open, thus to expose the bottom of the bed which is erect in the recess, as indicated in Fig. 2. Thereupon the bed will be tilted forward, as indicated by dotted lines in Fig. 2, and will be brought down into position shown in dotted lines in Fig. 6, in which position the head of the bed will project into the recess. The bed may now be drawn forward from the recess until the head-board 25 thereof is brought flush with the casement, whereupon the frames 26 may be closed, as indicated in Fig. 6, and the bed is ready for occupancy.

The pivots 6 are preferably oval or elliptical, having their major axes lengthwise of the bed so that when the bed is in its lowered position the pivots will offer to the anti-friction balls of the ways a considerable surface to extend over two or more of such balls while the bed is being drawn out.

Although I may use portions of my invention in combination with mirrors, paintings, tapestries, and the like, the same will not serve the desirable object in view of impressing the observer with the suggestion that the wall which is actually occupied with a bed is an exterior wall that conceals no house-keeping appliance, and I propose that the art-glass of the imitation window shall be opalescent straw-colored glass capable of transmitting the light in such manner as to give the appearance of a burst of actual sunlight in day-time and of moonlight at night.

The edge of the seat is provided with one or more projecting glass or other antifriction balls or projections 27 to run smoothly on a carpet or other floor-covering when the bed is lowered to be drawn out.

The seat-back is of a definite height when the bed-frame is upright, and the head-board is of a like height when the bed-frame is lowered, so that the ornamental means for closing the space above the seat-back and the head-board will fit and tightly close the space above the head-board and above the seat-back as the case may be. The head-board may be made of considerable thickness so that it will form a projection in front of the closure, thus to give to the bed the appearance of a piece of furniture set against the wall.

I claim:

1. An apartment wall provided with a recess, a bed adapted to be contained within the recess, a seat forming a part of the bottom of the bed and constituting a seat when the bed is in the recess, a translucent panel to conceal the recess when the bed is in use, and means for illuminating the panel while the panel conceals the recess and its contents.

2. A recessed wall, buttresses at opposite sides of the recess and a bed-frame adapted to be extended in horizontal position and to stand upright in the wall and provided at the upper end with hinged legs, and provided between the buttresses with a seat the front edge of which is equidistant from the top of the frame when the bed is lowered, with the ends of the hinged legs, so as to serve as a partial support for the bed-frame when the bed is lowered, and to form with the buttresses an armed seat when the bed is upright.

3. A recessed wall, buttresses at opposite sides of the recess and a bed-frame adapted to be extended in horizontal position and to stand upright in the wall and provided at the upper end with legs, and provided between the buttresses with a seat the front edge of which is equidistant from the top of the frame when the bed is lowered, with the ends of the legs, so as to serve as a partial support for the bed-frame when the bed is lowered, and to form with the buttresses an armed seat when the bed is upright.

In testimony whereof, I have hereunto set my hand at Los Angeles California.

ARTHUR L. HALEY.

In presence of—

JAMES R. TOWNSEND,

JULIA TOWNSEND.