

No. 631,226.

Patented Aug. 15, 1899.

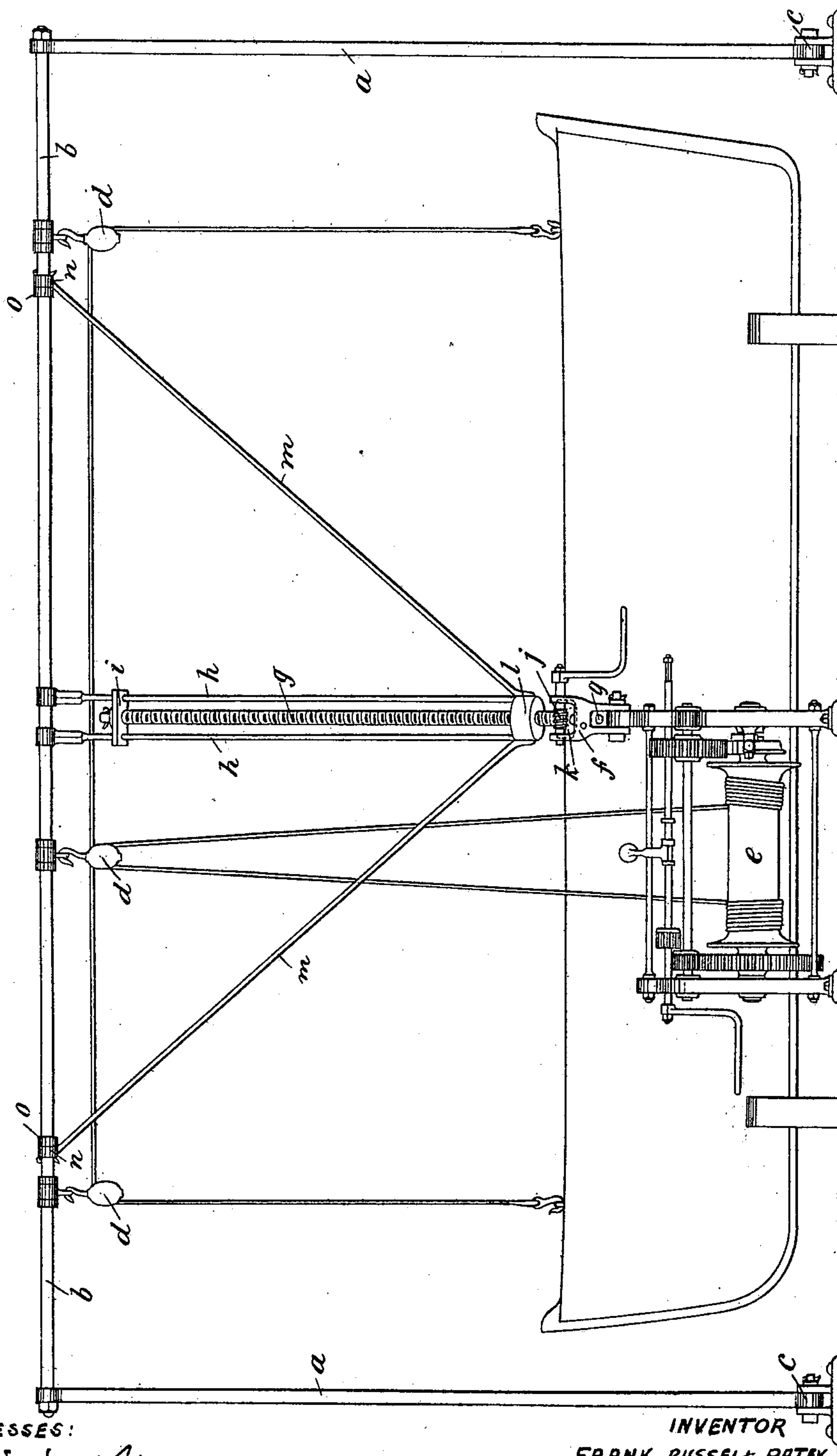
F. R. PATEY.
BOAT LOWERING APPLIANCE.

(Application filed Mar. 3, 1899.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.



WITNESSES:

P. W. Wright.
L. C. Connor.

INVENTOR

FRANK RUSSELL PATEY

BY *Howson and Howson*
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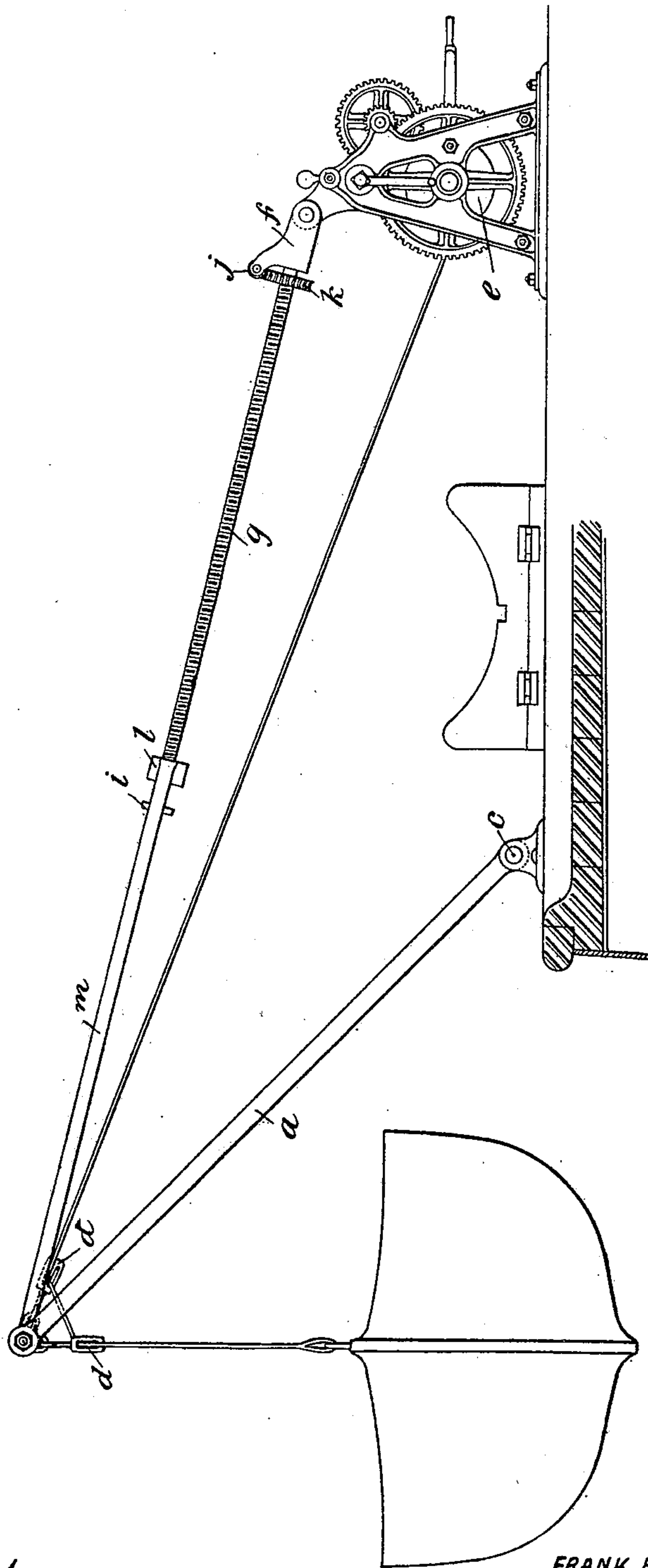
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FIG. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK RUSSELL PATEY, OF BELFAST, IRELAND.

BOAT-LOWERING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 631,226, dated August 15, 1899.

Application filed March 3, 1899. Serial No. 707,633. (No model.)

To all whom it may concern:

Be it known that I, FRANK RUSSELL PATEY, a subject of the Queen of Great Britain and Ireland, and a resident of Belfast, in the county of Antrim, Ireland, have invented certain new and useful Improvements in Boat-Lowering Appliances, of which the following is a specification.

This invention has reference to improvements in boat-lowering appliances more particularly adapted for use on board ship, and has for its object to enable a boat to be lowered into the water with ease and safety even though the ship should have a considerable list or inclination to one side and without requiring a large crew to effect this.

Referring to the drawings which form part of this specification, Figure 1 is a side view from amidships of the appliance, showing the boat resting in its chocks; and Fig. 2 is an end view showing the boat raised from its chocks and suspended ready for lowering.

According to this invention when applied on board ship the boat is suspended from an oscillating framework instead of the ordinary davits, constructed and operated all as follows:

The framework consists of two vertical standards *a*, connected at their tops by a horizontal transverse bar *b* or stay, or it may be made in one piece of a bar bent into the requisite form. The vertical standards are jointed to the deck near the ship's side at *c* at a distance apart to allow of the boat passing between in a manner to permit of an oscillating movement outward and inward. The boat is suspended from the horizontal bar *b* of frame by ropes passing through blocks *d*, secured to the bar and carried to the drum *e* of an ordinary winch erected on the deck near the boat or boats and furnished with a brake and which may be actuated by hand, as shown, or otherwise. To the winch or other convenient part a small oscillating part or frame *f* is jointed, and rotating in this frame *f* is mounted one end of a long screwed spindle *g*, held in position by a pin engaging with a groove on its end and supported by the parallel rods *h* and cross-head *i*, sliding thereon. The screwed

spindle *g* is rotated by means of a hand-actuated screw-worm *j* and worm-wheel *k*, or bevel-wheel gearing may be used. The screwed spindle *g* screws into a nut *l*, secured to the ends of two angled stays *m*, which are connected to the horizontal bar of the framework by eyes *n*, stops *o* being provided on the bar *b* to obviate any tendency to convergence of the angled stays.

The action is as follows: When it is desired to lower a boat over the ship's side, the boat is first raised off its chocks by the winch and the oscillating framework and boat is gradually pushed outward by rotating the screwed spindle until the maximum distance from the ship's side is reached or preferably when the oscillating frame forms an angle of forty-five degrees with the deck, when the boat is lowered into the water.

With this arrangement two boats may be used in conjunction with one lowering appliance, one boat being carried on the deck inside of the other, or three may be used, one carried suspended to the oscillating frame.

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

1. In a boat-lowering apparatus the combination of an oscillating frame, from which the boat may be suspended, with a screwed spindle controlling the movement of said oscillating frame, worm-wheel gearing for operating said screwed spindle, and means for raising and lowering the boat on the frame, substantially as described.

2. In a boat-lowering apparatus, the combination of an oscillating frame pivoted at its lower end to the deck, with a nut, means connecting said nut to the upper part of the frame, a screwed spindle working in said nut, worm-wheel gearing to operate the spindle and means for raising and lowering the boat on the frame.

3. A boat-lowering apparatus having an oscillating frame, a nut and angle brace-bars connecting said nut and the frame, in combination with an operating screwed spindle working in said nut, substantially as described.

4. A boat-lowering apparatus having an oscillating frame, a nut connected therewith, a screwed spindle working in said nut and an oscillating part *f* carrying said spindle and
5 means for operating said spindle, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

FRANK RUSSELL PATEY.

Witnesses:

ARTHUR GEORGE HARRIS,
CHAS. B. FREWOOD.