N. E. BARNES.

HOT BOX COOLER AND OILER.

APPLICATION FILED SEPT. 26, 1907.

899,939.

Patented Sept. 29, 1908.

2 SHEETS—SHEET 1.

Fig. 1.

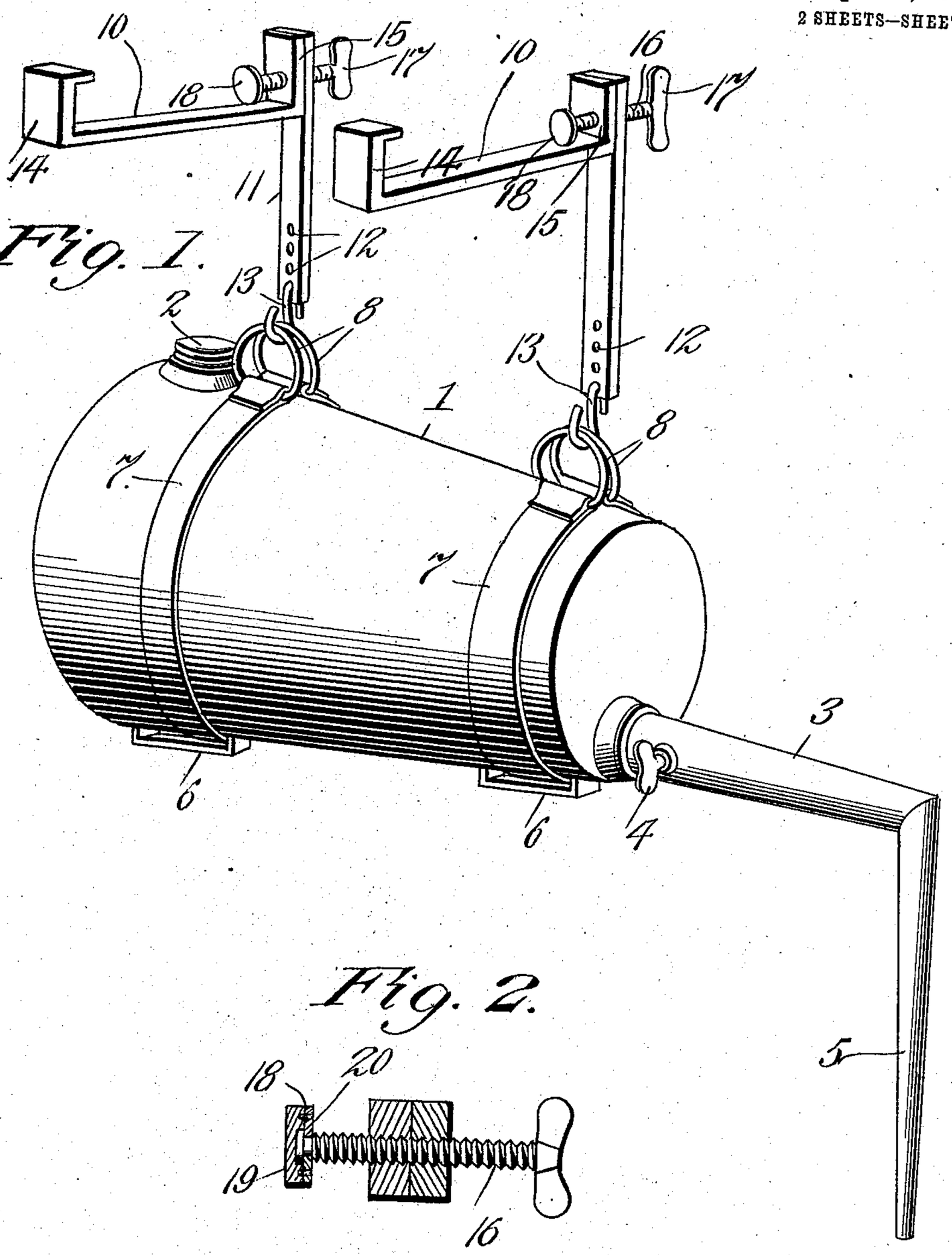

Fig. 2.

Witnesses

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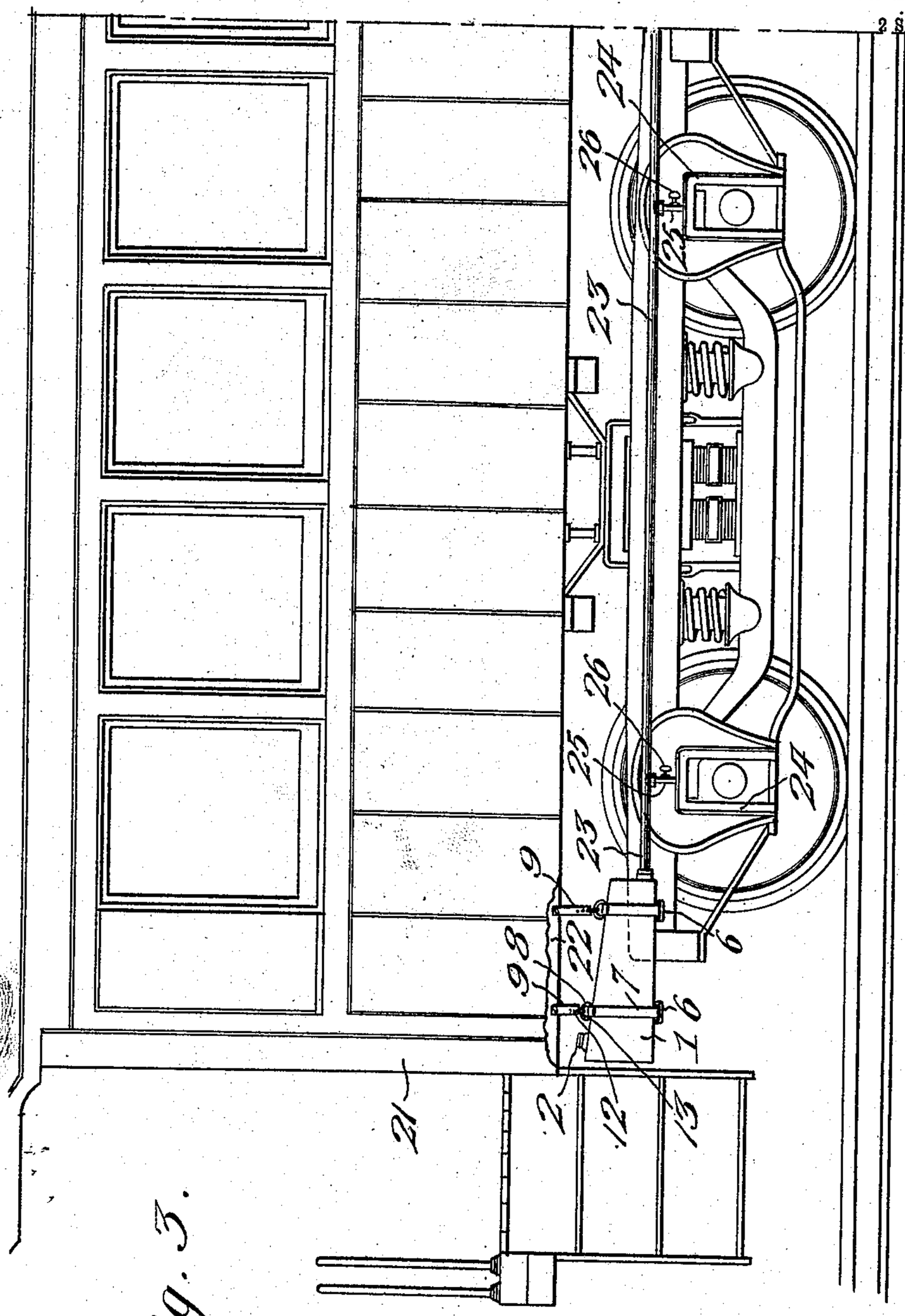

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

NED EASTMAN BARNES, OF WILLIS, TEXAS.

HOT-BOX COOLER AND OILER.

No. 899,939. Specification of Letters Patent. Patented Sept. 29, 1908.

Application filed September 26, 1907. Serial No. 394,770.

To all whom it may concern:

Be it known that I, NED E. BARNES, a citizen of the United States, residing at Willis, in the county of Montgomery and State of Texas, have invented new and useful Improvements in Hot-Box Coolers and Oilers, of which the following is a specification.

This invention relates to devices for cooling and lubricating the journal boxes of railway cars, and embodies in its organization a supply tank or vessel adapted to contain a cooling and lubricating liquid and having a discharge pipe through which the liquid is delivered to the journal box or boxes.

The invention has for its objects to provide a comparatively simple, inexpensive device of this character which may be readily installed for use, one wherein the liquid will be delivered directly onto the journal or journals for oiling and cooling the same, thus to relieve or prevent what are known as hot boxes, and one in which the discharge of the liquid may be readily controlled and be directed to one or more of the journal boxes, as circumstances require.

With these and other objects in view, the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings: Figure 1 is a perspective view of a device embodying the invention. Fig. 2 is a detail view partly in section and on an enlarged scale of one of the clamping screws. Fig. 3 is a view showing a modified embodiment of the invention and illustrating the device applied for use.

Referring to the drawings, 1 designates a tank or vessel preferably composed of sheet metal and of trunco-conical form diminishingly tapered from its rear toward its forward end and having in its upper wall adjacent its rear end an inlet opening closed by a screw cap 2, there being provided at the forward end of the vessel and in substantial alinement with its bottom wall a discharge spout 3 equipped with a cut-off valve 4 and terminating at its outer end in a vertical depending portion 5, while formed on the lower side of the tank at points adjacent its ends are a pair of loops or bails 6 through which are threaded straps or bands 7 adapted to encircle the vessel and having at their meeting ends pivoted suspending members or rings 8 for a purpose which will presently appear.

The tank 1 is supported by a pair of brackets 9 each comprising a horizontal portion 10 and a separable vertically depending portion 11 provided at its lower end with a vertically spaced series of openings 12, one of which receives an engaging member or hook 13 adapted for engagement with the adjacent pair of rings 8 for suspending the tank 1, there being formed on the outer end of the bracket portion 10 an L-shaped engaging portion 14 and on its inner end a bearing portion 15 to which the upper end of the vertical portion 11 is connected by means of a clamping screw 16 having at its outer end a finger piece 17 and at its inner end a bearing head 18 swiveled onto the screw and having applied to its active face a covering 19 of leather or other friction material secured to the head by screws 20.

In practice, the tank or vessel 1 is filled with a mixture of oil and water or other suitable cooling and lubricating liquid and suspended from the brackets 9 with the portion 5 of the discharge spout positioned over and for delivering the liquid onto the journal, it being understood that the brackets 9 are previously arranged upon a portion of the truck frame and clamped thereto by means of the screws 16, which it will be observed perform the further function of connecting the vertical bars 11 with the horizontal portions of the bracket. When it is desired to deliver liquid from the tank onto the journal the valve 4, which remains normally closed, is opened and the liquid in flowing onto the journal cools and lubricates the same for preventing the formation of or relieving a hot box. It will be understood that the tank may be filled by removing the cap 2 and that when the rings 8 are engaged with the hooks 13 the straps are held in place on the tank and the latter removably suspended from the brackets.

In Fig. 3 the device is shown applied to a car 21 by engaging the brackets 9 with one of the longitudinal sill beams 22, there being also shown in this view a slight modification of the invention, wherein the discharge spout leading from the tank 1 is in the form of a pipe or duct 23 of a length to extend the entire length of the car for supplying the cooling and lubricating liquid to all of the journal boxes 24, with which the pipe 3 is connected through the medium of vertically depending portions or tubes 25 equipped with cut-off valves 26. In the operation of this form of the device, one or more of the valves 26 are

opened for controlling the supply of liquid from the tank 1 to one or more of the boxes 24 for the purpose of cooling and lubricating the journal, as before explained. In other respects the construction and operation are identical with that above described.

Having thus described my invention, what I claim is:

A railway car journal cooling and oiling device comprising a vessel to contain a cooling liquid and having a discharge spout comprising a portion disposed parallel with the axis of such vessel, and projecting from one end thereof and a vertically downwardly extending portion, such spout having a valve, brackets for engagement with a truck frame and having depending arms provided with adjusting openings and means including hooks to connect such vessel to such arms, such hooks engaging certain of such adjusting openings.

In testimony whereof, I affix my signature in presence of two witnesses.

NED EASTMAN BARNES.

Witnesses:
J. FRAMPTON,
J. S. HULOW.