No. 826,583. PATENTED JULY 24, 1906.

M. S. LEECH.

METHOD OF PRESERVING HUMAN BODIES.

APPLICATION FILED FEB. 6, 1906.

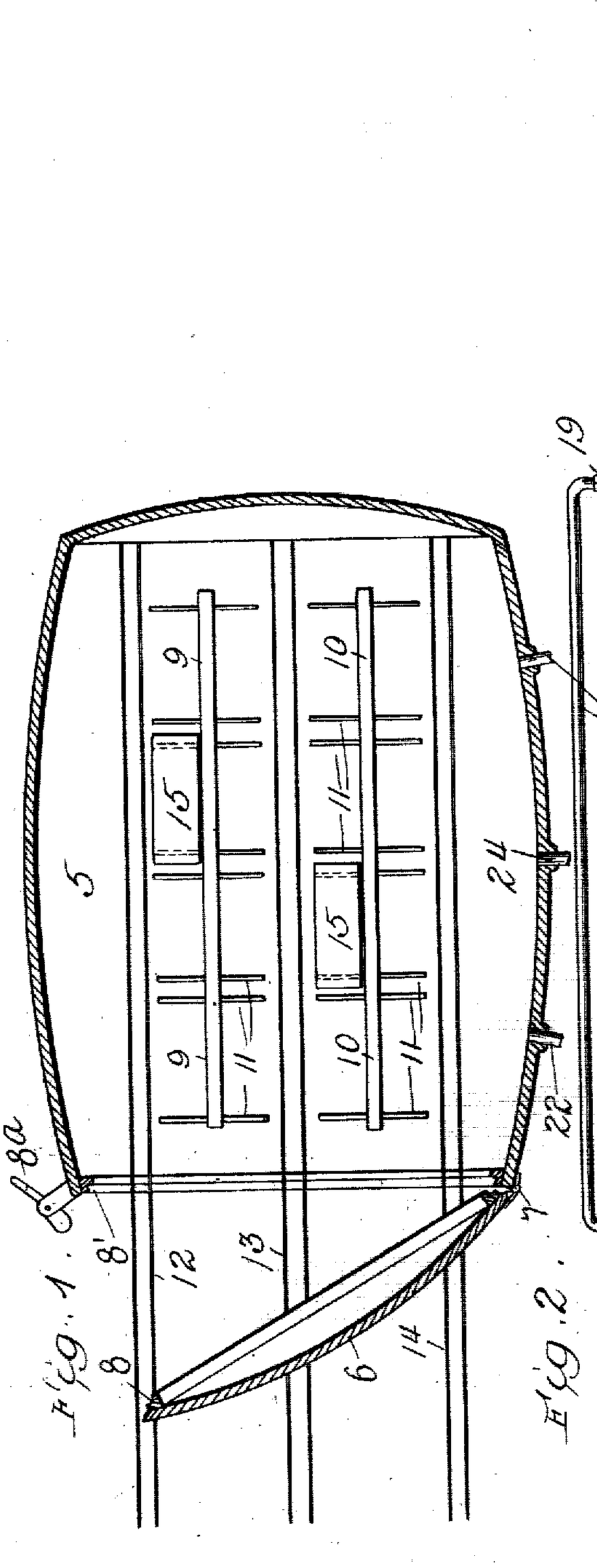

Fig. 1.

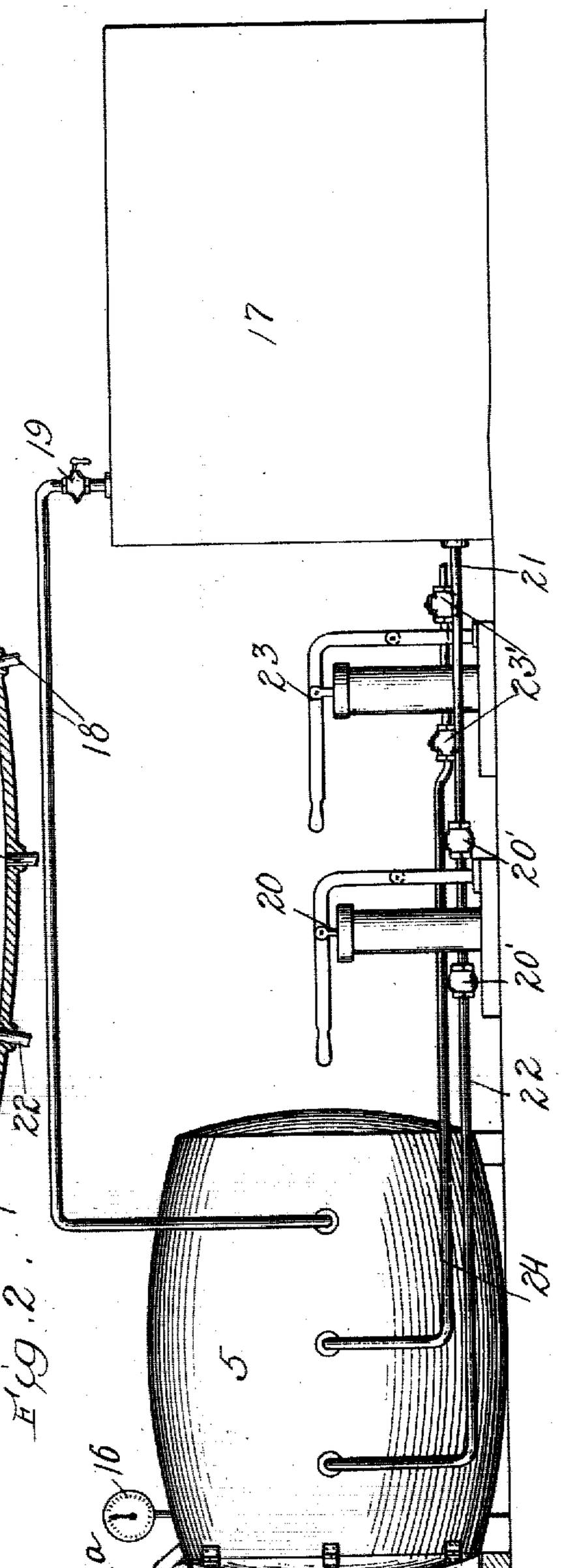

Fig. 2.

Witnesses:
Harry R. Lubke
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UNITED STATES PATENT OFFICE.

MONROE S. LEECH, OF CHICAGO, ILLINOIS.

METHOD OF PRESERVING HUMAN BODIES.

No. 826,583. Specification of Letters Patent. Patented July 24, 1906.

Application filed February 6, 1906. Serial No. 299,682.

To all whom it may concern:

Be it known that I, MONROE S. LEECH, 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 Methods of Preserving Human Bodies, of which the following is a specification.

My invention relates to an improved method of treating human bodies after death to preserve them.

One of the objects of my invention is to subject the body to the effect of a suitable germicide to kill the bacteria therein and then to deposit the body in a receptacle in which it is to remain and to then seal the said receptacle to prevent evaporation of the liquids of the body, whereby it will be preserved for all time and will retain its life-like appearance.

In the drawings I have shown an apparatus by the use of which my new and improved method may be carried into effect, in which—

Figure 1 is a plan view showing the receptacle in horizontal section. Fig. 2 shows an elevation of the receptacle and its associated apparatus.

Throughout the drawings like numerals of reference refer always to like parts.

The receptacle 5 is made, preferably, of boiler sheet-iron or steel plates of a form such as shown, adapted to withstand considerable pressure. To avoid the necessity of internal bracing, the receptacle is preferably made in cylindrical or oval shape. The closure or door 6 partakes of the same general form, being hinged, as at 7, and provided with broken-joint ledges, as at 8, arranged to coact with similar ledges 8′, provided in the open end of the main structure, whereby substantially air-tight contact may be had therewith when said door is tightly closed and further clamped and held by means of the cam-levers 8^a 8^a, of which there are a sufficient number placed, preferably, equisdistant apart around the edges of the opening for firmly holding the door closed. Racks 9 and 10, preferably several tiers high, having rests or brackets 11 11, are arranged within the receptacle upon which the open caskets 15 15 or other holders supporting or containing the bodies are to be supported during treatment. Any desired number of racks or tiers of shelves for the purpose may be provided. Railroad-tracks 12, 13, and 14 are laid parallel within the corridors between the racks, and a car, such as illustrated and described in my application for Letters Patent of the United States for improvements in mausoleums, filed August 21, 1905, Serial No. 274,998, may be provided for transporting the bodies to and from the receptacle and for raising them up to the desired bracket upon the racks and for removing them therefrom.

16 is a vacuum and pressure gage.

17 is a reservoir for containing a germicide gas, such as sulfur dioxid or the like, connected with the receptacle 5 by means of a pipe 18, containing a stop-cock 19. A pressure-pump 20 is connected to the reservoir 17 by means of a pipe 21 and to the receptacle by means of the pipe 22. A vacuum exhaust-pump 23 is connected to the receptacle 5 by means of the pipe 24. Suitable check-valves 20′ and 23′ are associated with the respective pumps.

In the practice of my invention the following is the preferred mode of procedure: The receptacle 5 is opened and the desired number of bodies are placed upon the brackets, each in a suitable receptacle, preferably individual caskets, which are left open, leaving the body preferably nude and freely exposed to the effect of the gases. The door 6 is then closed and tightly clamped in position by means of the eccentric clamp-levers 8^a, the ledges 8 coacting with similar ledges 8′, breaking joint and affording a means for securing a practically air-tight closure. Exhaust-pump 23 is now slowly set into operation, and most of the air and other gases within the receptacle 5 are gradually pumped out, after which stop-cock 19 is opened, when the germicide gas contained in the reservoir 17, which may be at atmospheric pressure or slightly above, if desired, will enter the receptacle 5 through the pipe 18. Then cock 19 is closed and pressure-pump 20 is started, by means of which a portion of the contents of reservoir 17 may be forced into the receptacle 5 until the pressure-gage 16 shall preferably indicate one hundred to one hundred and fifty pounds per square inch. The apparatus is left in this condition for a period of time, preferably from six hours to twenty-four hours, sufficient for the gas to thoroughly permeate the entire body structure, and thus destroy all of the bacteria of the body. It must be borne in mind that it is highly desirable to apply this high pressure very gradually to prevent collapse of the tissues. After sufficient time

has elapsed to accomplish the desired object the stop-cock 19 is opened and gas from the receptacle 5 will return to the reservoir 17 until their respective pressures equalize, or, if desirable, the pressure-pump may be used to return practically all of the gas down to atmospheric pressure in the receptacle 5 into the reservoir 17. The door 6 is then opened and the bodies within the receptacle 5, which have undergone treatment, are each placed in air-tight individual caskets and then hermetically sealed. Before sealing, the germicide gas may be pumped into the casket under a slight pressure. The special reason for sealing the casket is to prevent the evaporation of the liquids of the body, so that the body will retain its natural appearance.

While I have shown a single embodiment of a means for carrying my invention into effect, it is obvious that many changes may be made in the apparatus disclosed without in any manner departing from the spirit and scope of said invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A method of treating the human body after death, which consists in placing the body in a receptacle, then substantially extracting the air and other gases from said receptacle, then admitting a germicide into said receptacle, then subjecting the contents of said receptacle to a pressure equal to one or more atmospheres above normal, then reducing the pressure to normal, and then transferring the body to another receptacle, and finally hermetically sealing the latter receptacle.

2. A method of treating the human body after death, which consists in placing the body in a receptacle, then substantially extracting the air and other gases from said receptacle, then admitting a germicide into said receptacle, then subjecting the contents of said receptacle to a pressure equal to one or more atmospheres above normal, then reducing the pressure to normal, and then transferring the body to another receptacle, then substantially filling the latter receptacle with a germicide, and finally hermetically sealing said receptacle.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

MONROE S. LEECH.

In presence of—
FORÉE BAIN,
MARY F. ALLEN.