

E. TOMER.
 SPRINKLING MACHINE.
 APPLICATION FILED SEPT. 6, 1910.

984,455.

Patented Feb. 14, 1911

2 SHEETS—SHEET 1.

Fig. 1

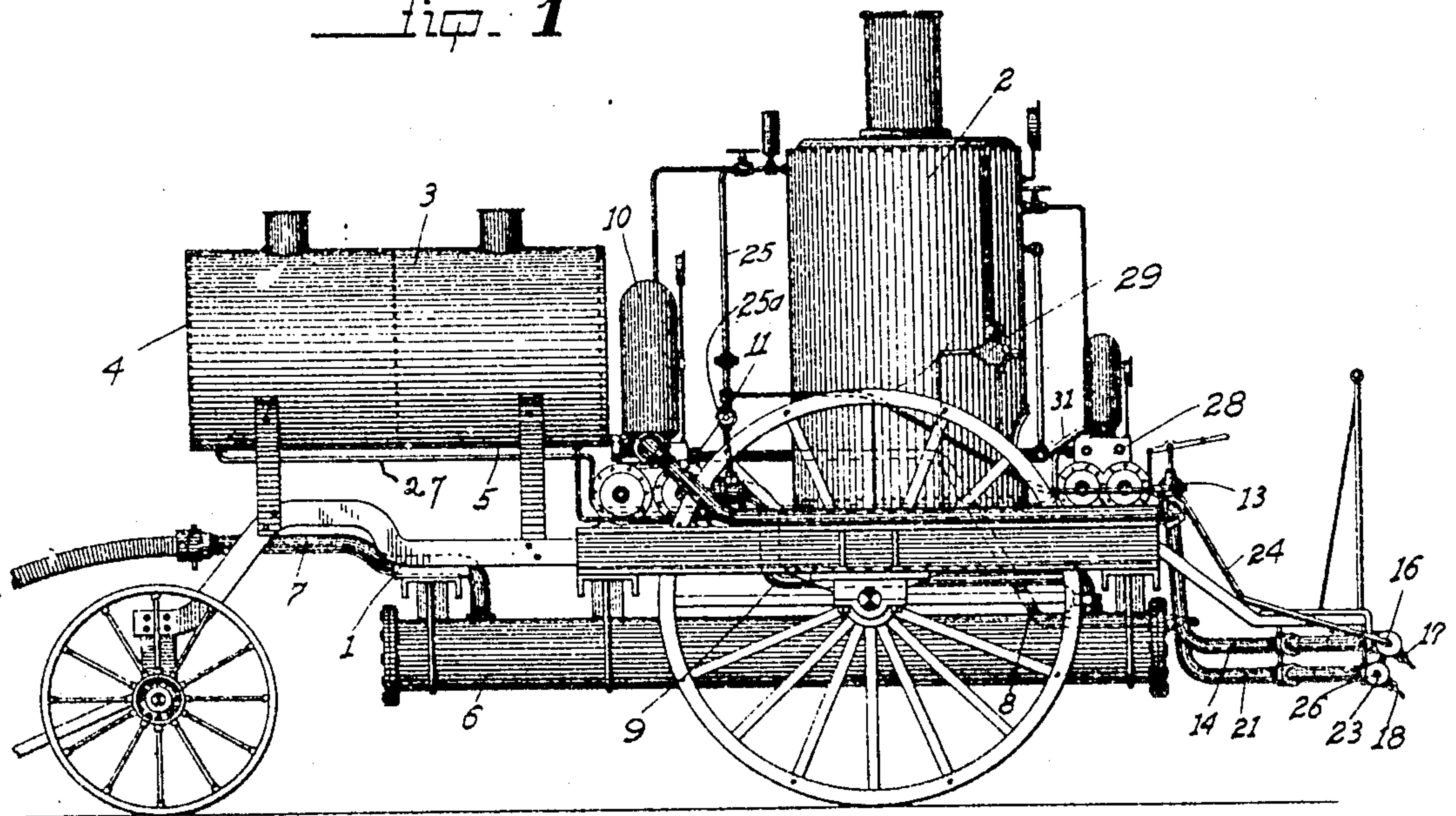


Fig. 2

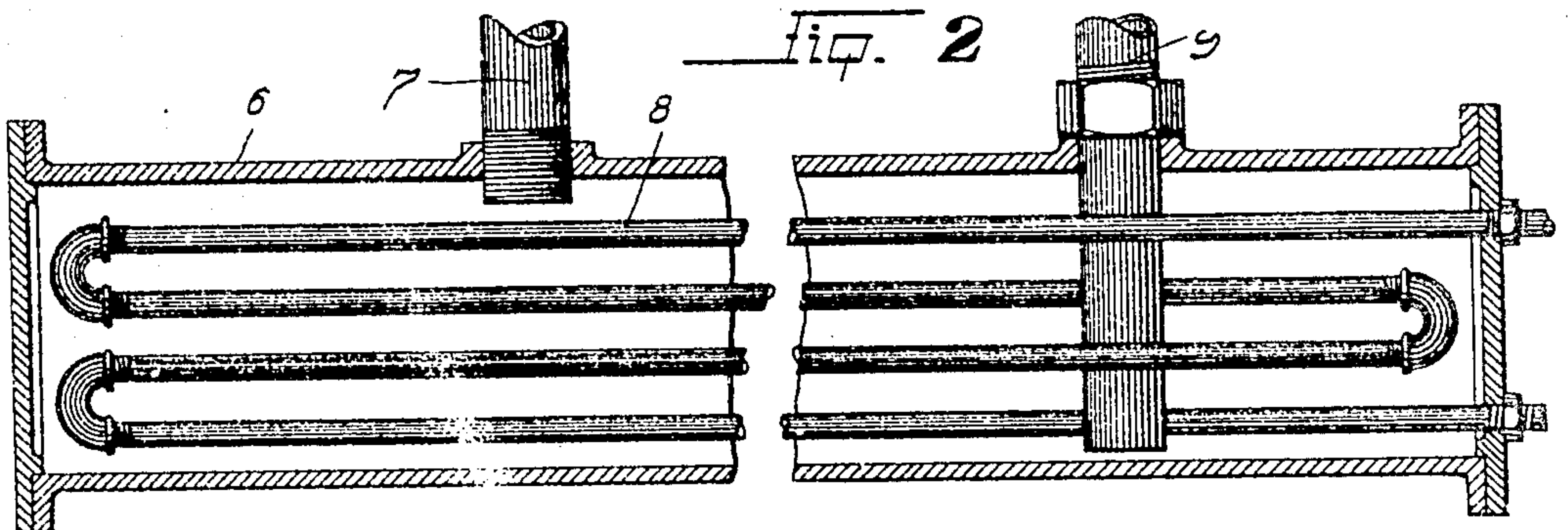


Fig. 3

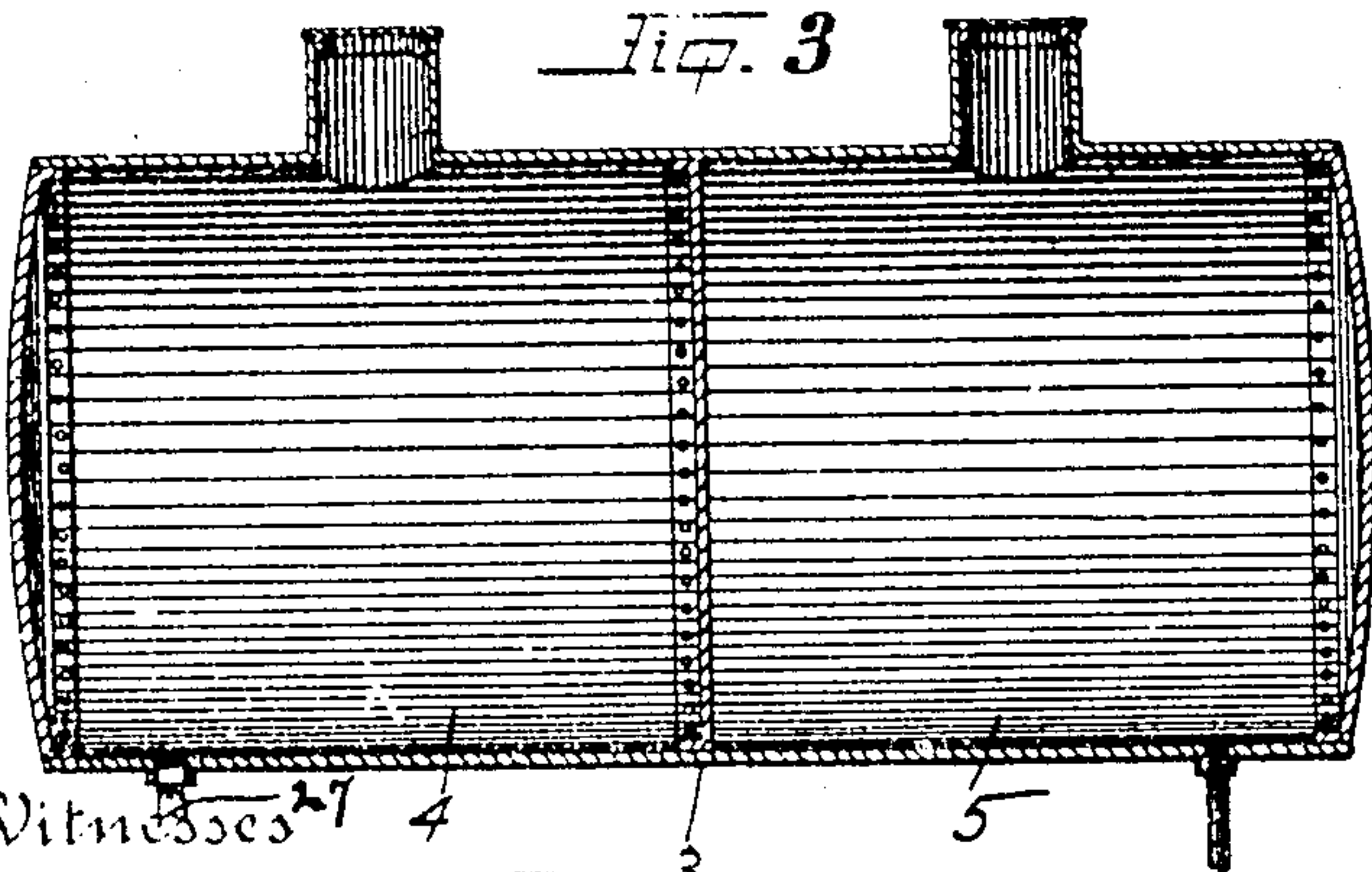
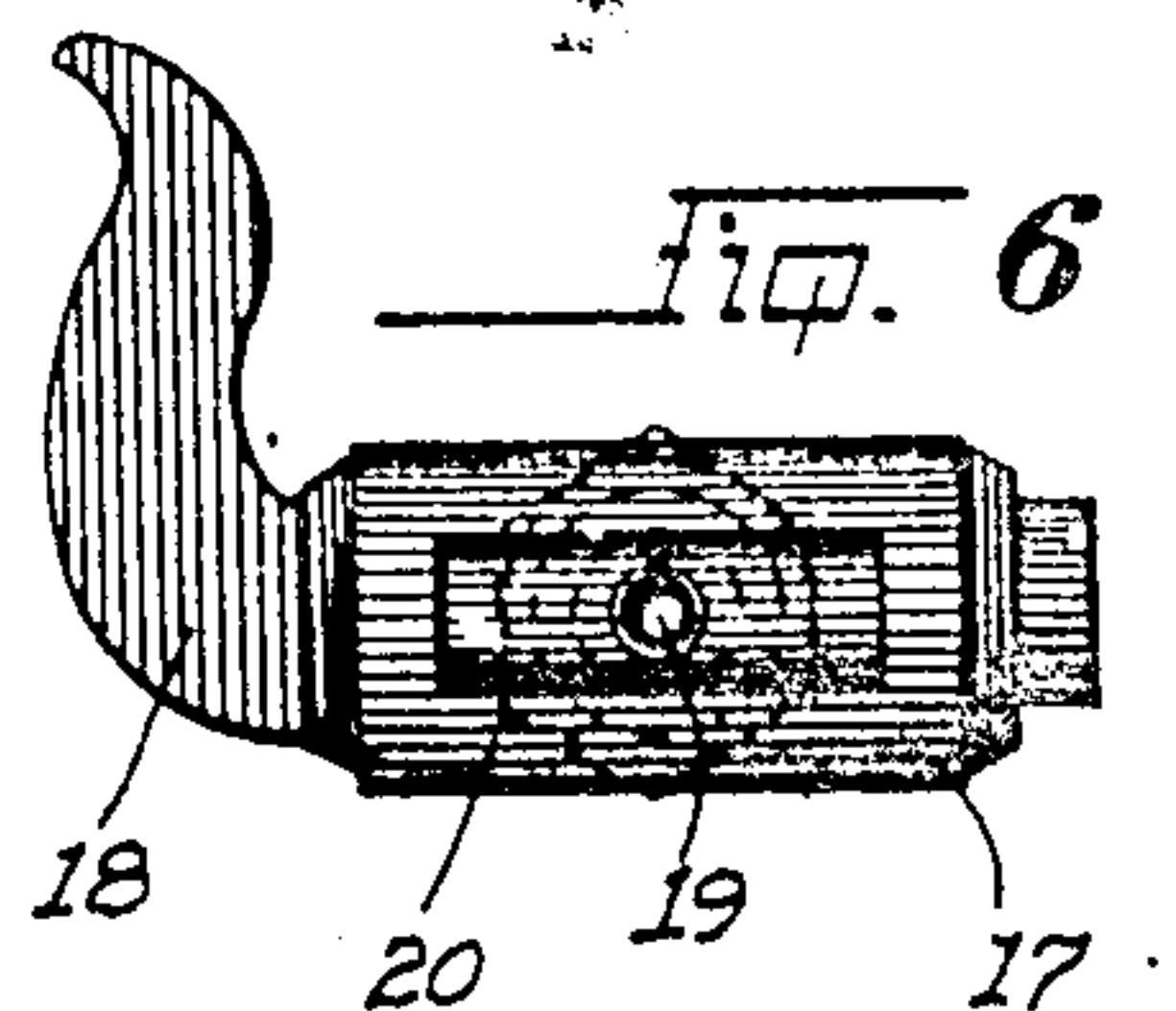


Fig. 6



Witnesses
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2 SHEETS—SHEET 2.

Fig. 4

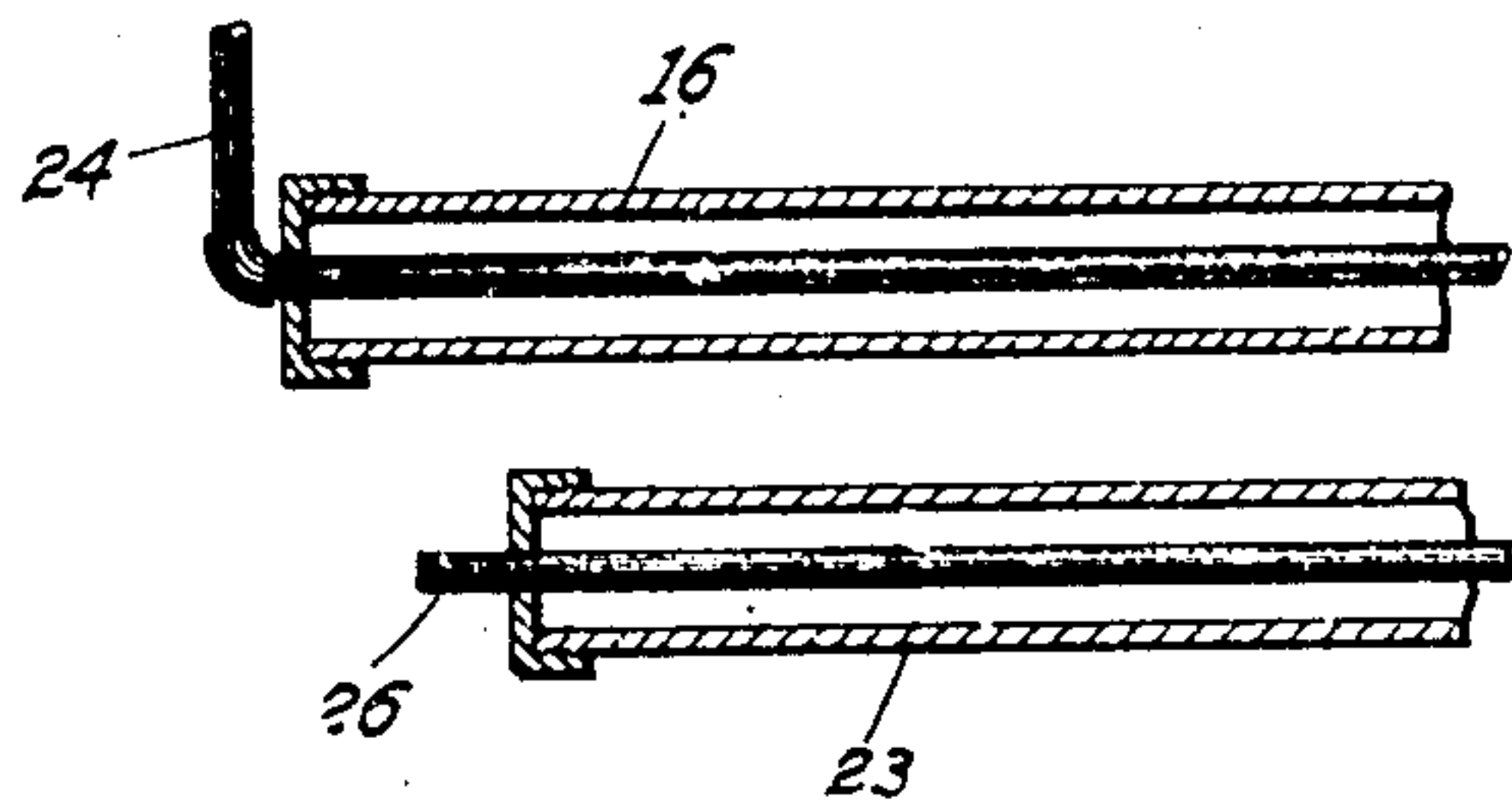
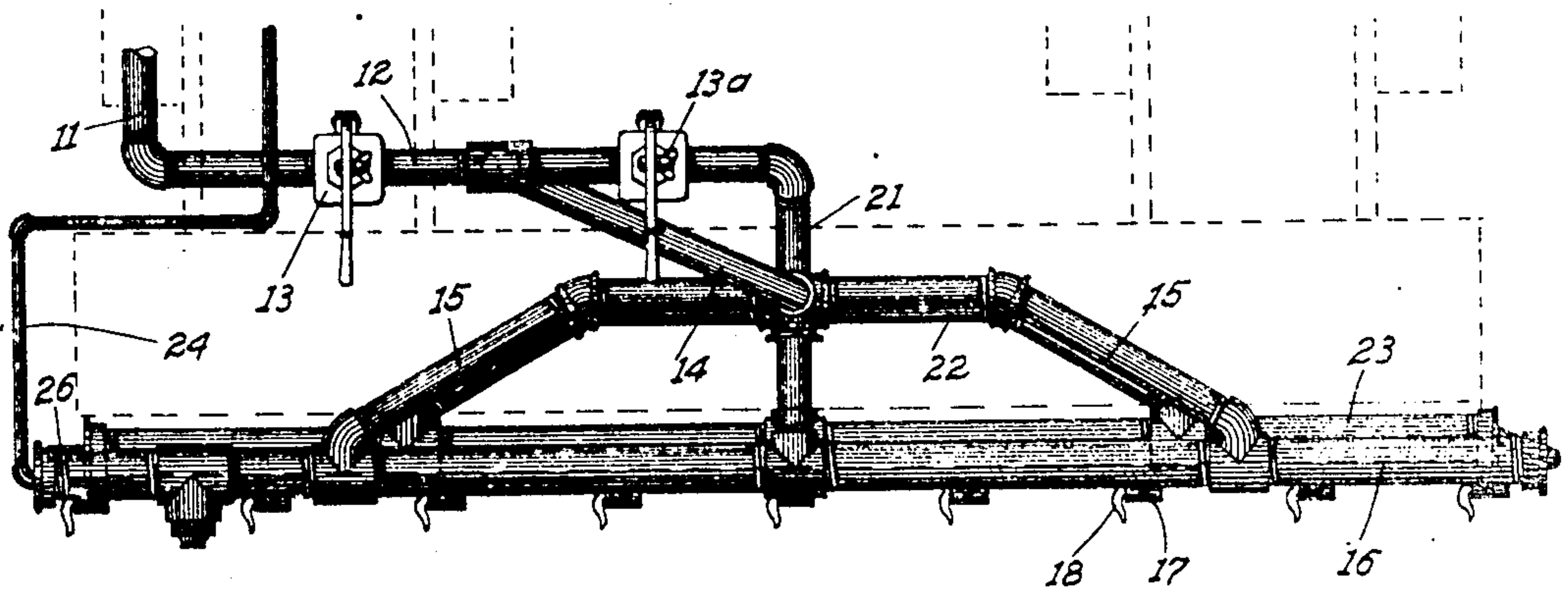


Fig. 5

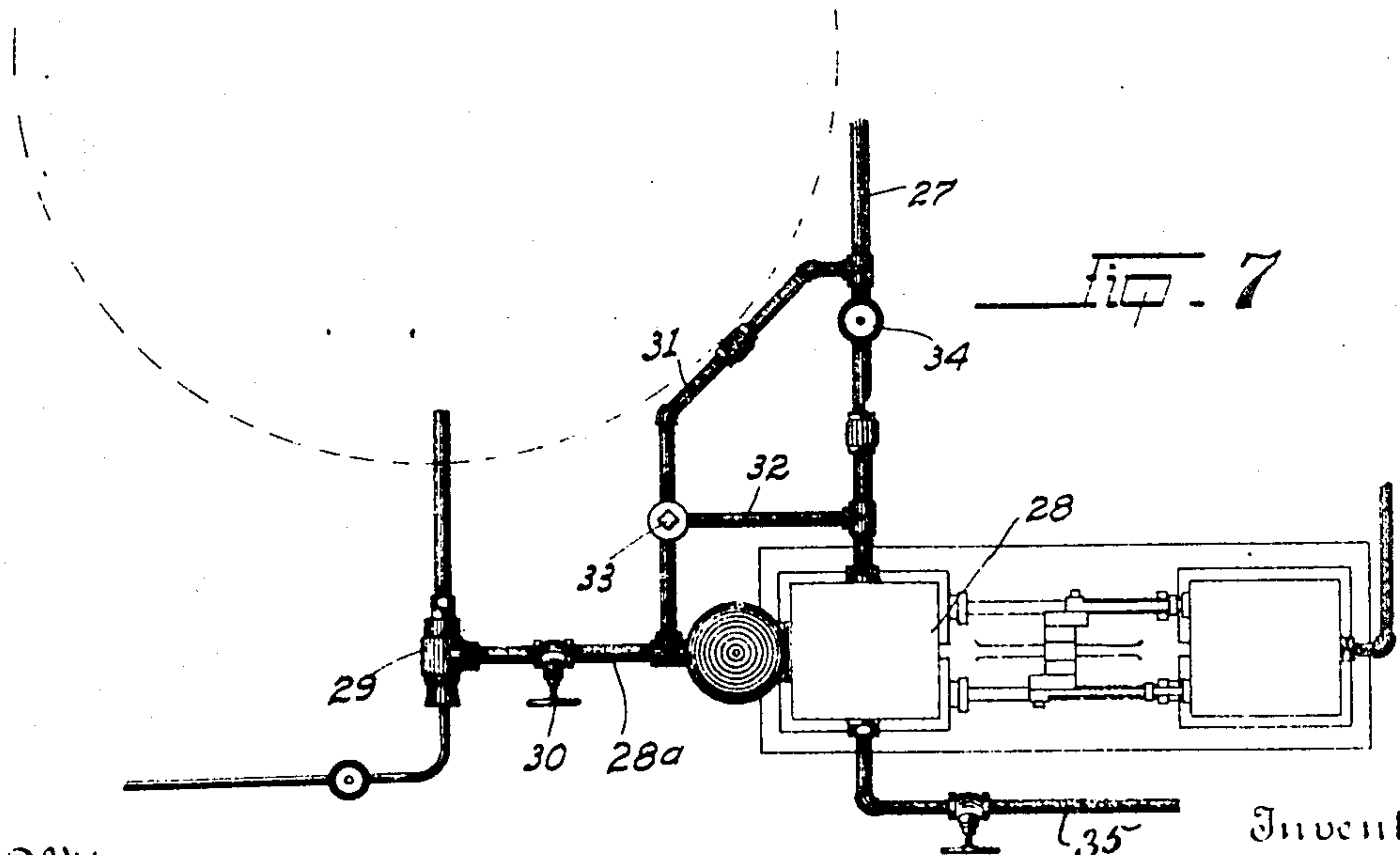


Fig. 7

Witnesses

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UNITED STATES PATENT OFFICE.

ELLIS TOMER, OF VISALIA, CALIFORNIA.

SPRINKLING-MACHINE.

984,455.

Specification of Letters Patent.

Patented Feb. 14, 1911.

Application filed September 6, 1910. Serial No. 580,707.

To all whom it may concern:

Be it known that I, ELLIS TOMER, a citizen of the United States, residing at Visalia, in the county of Tulare, State of California, have invented certain new and useful Improvements in Sprinkling-Machines; and I do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in sprinkling wagons of all kinds and particularly to oil spraying or sprinkling wagons the object of the invention being to produce a simple and effective means for thoroughly heating and liquidizing the oil for the purpose of spraying it out in a fine liquid spray whereby it will be more quickly and easily discharged and more readily absorbed by the road or other surface upon which it is sprayed. These objects, I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a side elevation of my complete sprinkling machine. Fig. 2 is a sectional view of a heating drum. Fig. 3 is a sectional view of an oil and water reservoir. Fig. 4 is a top plan view of a spray nozzle system. Fig. 5 is a sectional view of a heating means for distributing pipes. Fig. 6 is a front elevation of the spraying nozzle and control thereof. Fig. 7 is a top plan view of a pump control mechanism.

Referring now more particularly to the characters of reference on the drawings 1 designates the main frame of my improved sprinkler the same carrying a steam boiler engine 2 and a supply tank 3 divided into two compartments 4 and 5 for oil and water respectively. Disposed beneath the frame 1 is a long drum or tube 6 adapted to be connected by flexible hose or pipes 7 with an oil tank wagon or other reservoir means to which my improved sprinklers may be attached. Through this drum 6 a steam pipe 8 is disposed, such steam pipe being connected with an exhaust of a steam pump 10

whereby the steam, passing through such pipes 8, thoroughly heats the oil, which passes from said drum 6 through a pipe 9 to the pump 10; thence it is pumped into a pipe 11 to a pipe 12 at the rear of the sprinkling wagon, such pipe 12 having two adjustable cocks or valves 13 and 13^a; such cock 13 controlling the flow of the oil through a pipe 14, thence through distributing pipes 15 into a main spraying pipe 16 having a plurality of discharge spray nozzles 17, which have respective control valves 18; the valves proper having a small round hole 19 and the outer casing of the valve having an elongated slot 20 which serves to readily distribute the oil.

The valve 13^a controls the flow of oil from the pipe 12 through a pipe 21 to lower distributing pipes 22 into a lower spraying pipe 23 provided with spray nozzles 17—18 the same as those on the pipe 16.

A steam pipe 24 leads from the steam pipe 25, through the pipes 16 and 23 and thence into the air, thus heating the oil right up to the time of its discharge through the nozzles 17. The oil from the oil chamber 4 leads through a pipe 27 to the oil pump 28, thence to an ejector 29 to the firebox of the boiler. Between the pump 28 and ejector 29 is a control valve 30. From the pipe 28^a a pipe 31 leads back to the pipe 27; and a pipe 32 connects the pipe 27 with the pipe 31 through a check valve 33. When the pump 28 pumps more oil than will be admitted through the valve 30, then it pumps the same through the pipe 31 and check valve 33 back into the pipe 27. This enables the oil to be pumped from any reservoir into the chamber 4 by means of the following structure: When the oil is low in the tank 4, I then shut a valve 34 in the pipe 27 between the pipes 31 and 32 and also shut the valve 30 and then the operation of the pump 28 pumps the oil from the supply reservoir through a pipe 35 through the pipe 27 to the pipe 32 through check valve 33 and pipe 31 and then through the pipe 27 into the chamber 4. When it is desired to clean the pump and pipe lines out, steam is turned into the pipe 9 by opening the valve 25^a below check valve in pipe 9. This steam thus enters the pump 10 cleaning it out thoroughly and going out through the discharge pipe 11 and the spray nozzles 17, cleaning them out also. From the foregoing description it will readily appear that I have produced such a

device as substantially fulfils the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention.

10 Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

15 A sprinkler comprising a frame, a steam engine on said frame, a pump on said steam engine, a drum suspended beneath said frame, a flexible pipe leading into said drum, a union in said pipe, steam pipes leading from said engine and through said drum, a pipe connecting from said drum to said pump, a pipe disposed across said frame at

the rear end thereof and connected with said 20 pump, a pair of adjustable valves in said last named pipe, a plurality of distributing pipes leading from between said valves, a main spraying pipe communicating with such plurality of distributing pipes, a plurality 25 of discharge spray nozzles on said main spraying pipe, another series of distributing pipes leading from one side of the last one of said pair of valves to another spraying pipe, and a plurality of independent spray 30 nozzles on such last named spraying pipe as described.

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

ELLIS TOMER.

Witnesses:

PERCY S. WEBSTER,
FRANK H. CARTER.