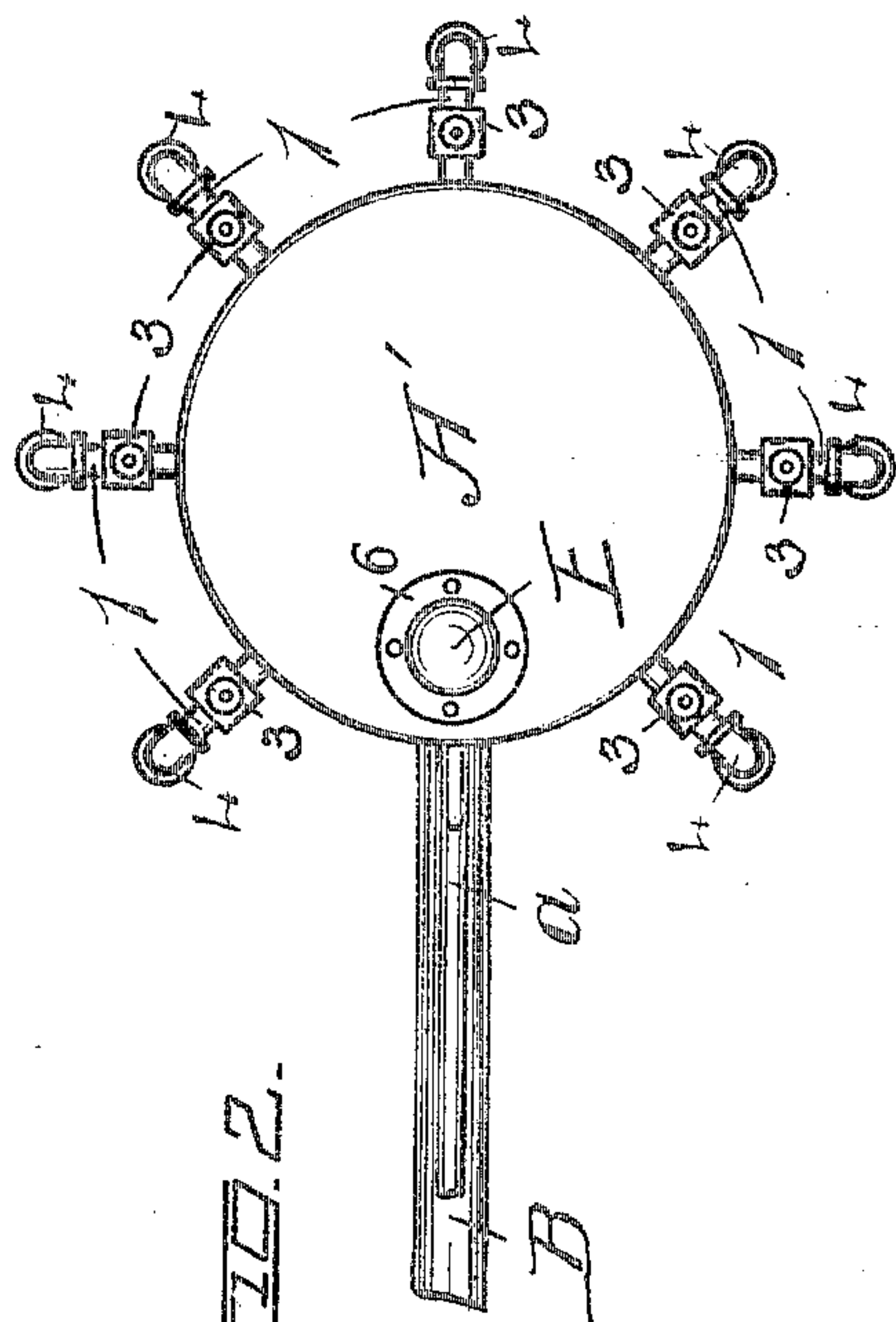
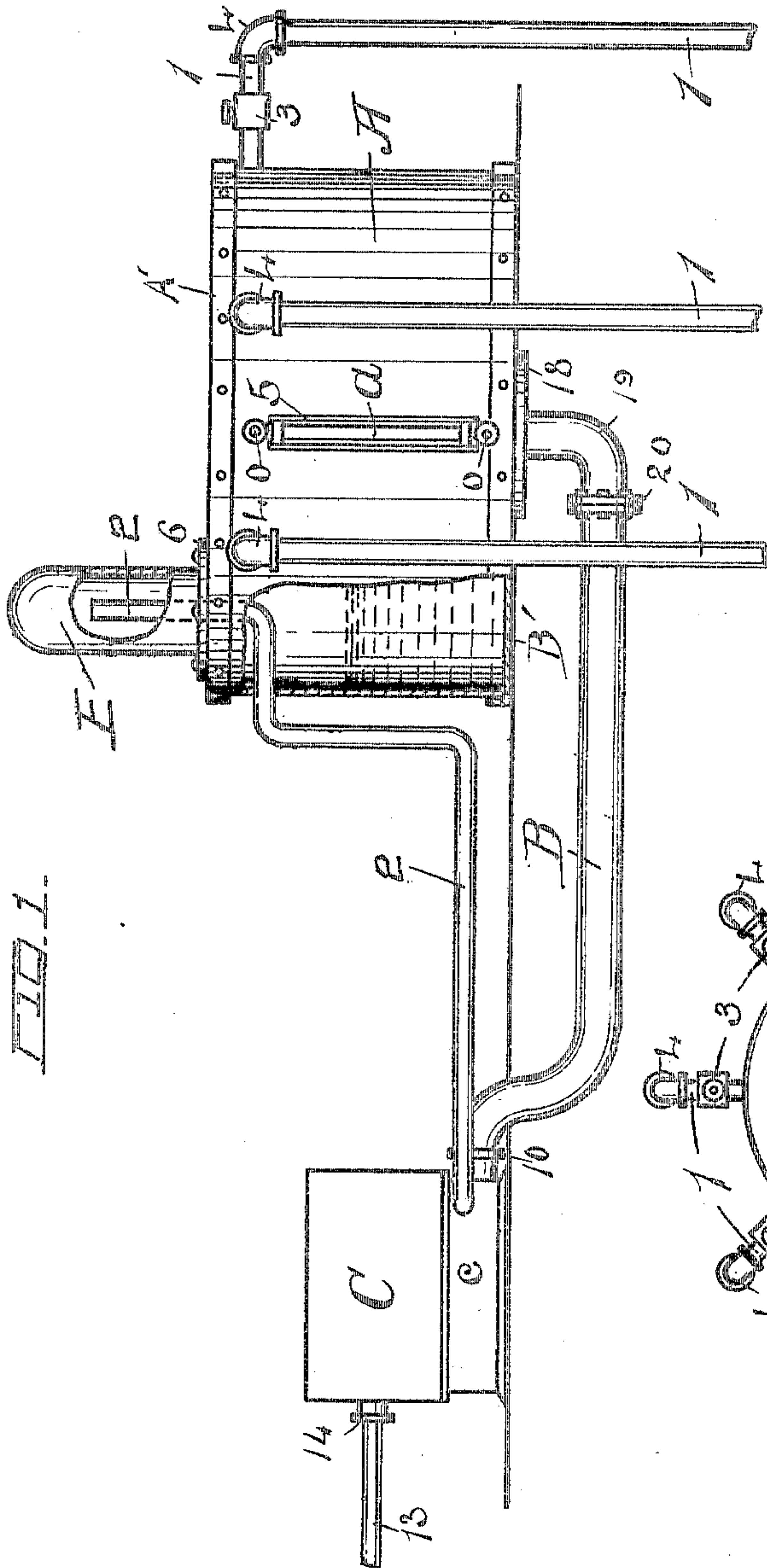


No. 797,513.

PATENTED AUG. 15, 1905.

C. H. GODFREY.
WATER SUPPLYING APPARATUS.
APPLICATION FILED DEC. 29, 1904.



WITNESSES:

W. J. Larson.
Graves E. Gatewood.

INVENTOR:

By, *Charles H. Godfrey*
Esq.

Attorney:

UNITED STATES PATENT OFFICE.

CHARLES H. GODFREY, OF OMAHA, NEBRASKA.

WATER-SUPPLYING APPARATUS.

No. 797,513.

Specification of Letters Patent.

Patented Aug. 15, 1905.

Application filed December 29, 1904. Serial No. 238,848.

To all whom it may concern:

Be it known that I, CHARLES H. GODFREY, a citizen of the United States, and a resident of Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Water-Supplying Apparatus, of which the following is a specification.

The aim of my invention is to provide an apparatus whereby water drawn through drive or tubular wells or from any other source of supply may be lifted to any desired elevation.

In the accompanying drawings I have shown in Figure 1 a side elevation of an apparatus embodying my invention with a portion broken away, while Fig. 2 shows a top view of the tank as used in my invention, disclosing the position of the pipes, vacuum-chamber, and supply-pipes.

In carrying out the aim of my invention I use a suitable tank of any desired capacity and material, comprising the bottom B', the main body portion A, and the top A'. The top A' of the tank is perforated to receive the receptacle E, forming a vacuum-chamber in communication with the tank A. This tank A is provided with a suitable water-gage *a*, having the guard 5 and the usual valves *o*. Entering this tank near the upper edge thereof are a plurality of well or supply tubes 1, each provided with a gate-valve of any suitable construction, the pipes 1 forming a continuation, being provided with suitable elbows and led to the source of water-supply. Any suitable number of these well or supply tubes are used, and by means of the valves 3 any one or more of the tubes may be shut off.

Used in connection with the supply-tank is a suction-pump C, provided with the usual piston-rod 13 and stuffing-box 14, this pump being of any approved construction and sufficient capacity. Extending from the water-box *c* of the suction-pump C and connected by means of the union 10 is the suction-pipe B, which by means of the flange 20 is secured to the elbow 19, which by means of the plate 18 is secured to the bottom B' of the supply-tank, so that there is free communication between the supply-pipe and suction-pump through this suction-pipe B. Extending through the upper part within the vacuum-chamber E is the air-supply pipe 2, which is led into and communicates with the water-box *c*, as shown. Now when the pump C is started the action of the pump will create a vacuum both within the supply-tank A and the vacuum-chamber

E, and the pressure being removed from within the supply-tubes 1 these will begin to gush, and as the operation of the pump continues and the water accumulates sufficient to prevent the air from going through the suction-pipe B the vacuum will be maintained by means of the air-pipe 2, which is shown as terminating within the vacuum-chamber E. From this it will be noticed that the pump performs a double function, in that it not only draws the water from the supply-tank, but simultaneously creates a vacuum within said supply-tank. A further advantage is found in that each of the supply-pipes 1 is made to enter the supply-tank at the highest possible point, so that the tank A will always hold a suitable supply of water and the weight of water will in no way be transmitted to the water within the supply-tubes. A further advantage is that when the suction-pipe is stopped the water will not flow back through the supply-tank into the supply-pipes, thereby always leaving a reserve of water to start the pump on, this system eliminating the need of an independent air-pump.

It is of course understood that changes could be made in this arrangement without departing from the spirit of my invention.

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

1. The combination with a suitable chamber, of a plurality of supply-pipes extending from near the highest point within said chamber, a suction-pump in connection with said chamber, a vacuum-chamber communicating with said first-mentioned chamber, and an air-pipe extending from said vacuum-chamber to said pump.

2. The combination with a suitable tank, of a plurality of supply-pipes entering said tank near the highest point, a suction-pump, a suction-pipe extending from said pump to the bottom of said tank, a vacuum-chamber secured adjacent the highest point of said tank and communicating with said tank, and an air-pipe extending from said vacuum-chamber and led to said pump, all arranged substantially as and for the purpose set forth.

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

CHARLES H. GODFREY.

Witnesses:

CHARLES A. SALTER,
JOHN W. SIMPSON.