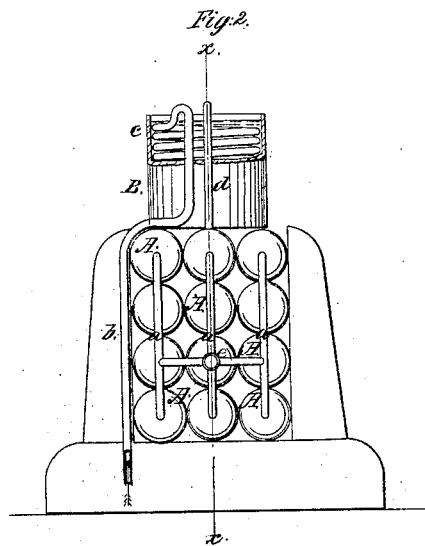
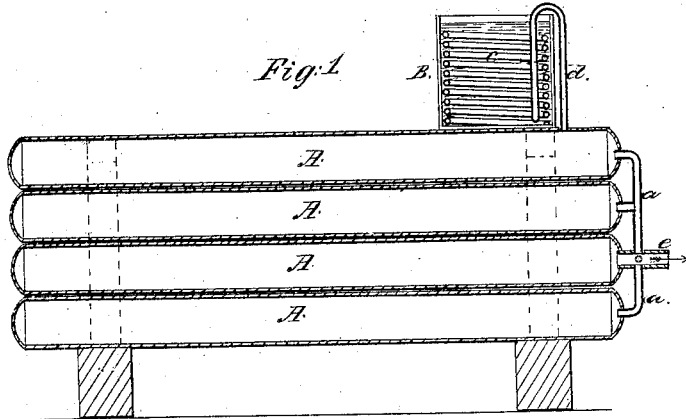


*L. Ransom,*  
*Compressing Air.*

*N<sup>o</sup> 49,787.*

*Patented, Sep. 5, 1865.*



*Witnesses:*  
*Wm Deane Overell*  
*Geo Busch*

*Inventor:*  
*L. Ransom*  
*per Mundt & Co*  
*Attorneys*

# UNITED STATES PATENT OFFICE.

LOUIS RANSOM, OF LANSINGBURG, NEW YORK.

## IMPROVEMENT IN RESERVOIRS FOR COMPRESSED AIR.

Specification forming part of Letters Patent No. 49,787, dated September 5, 1865.

*To all whom it may concern:*

Be it known that I, LOUIS RANSOM, of Lansingburg, in the county of Rensselaer and State of New York, have invented a new and Improved Reservoir for Compressed Air; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal vertical section of this invention, the line *x x*, Fig. 2, indicating the plane of section. Fig. 2 is an end view of the same, partly in section.

Similar letters of reference indicate like parts.

This invention relates to a receiver or reservoir which is designed to receive the air from a condensing-engine, and from its large radiating-surface give off the heat which by compression is liberated from the air, while to facilitate the operation of cooling, the tube leading from the condensing-engine is immersed in water and the air forced through it into the tubes or vessels constituting the receiver. The air compressed into this receiver is designed to propel street-cars, other vehicles, and machinery.

A represents a series of vessels, made of iron or any other suitable material, in the form of cylinders or any other desirable form or shape. These vessels are placed close together, and they are connected with each other by means of pipes *a*, as clearly shown in Fig. 2.

The air from the condensing-engine enters

through the tube *b*, which terminates in a coil, *c*, situated in a vessel, B, that is filled with cold water, so as to facilitate the operation of cooling. After having passed through the coil *c* the air passes through the pipe *d* into the vessels A, and a pipe, *e*, leading from said vessels serves to conduct the compressed air to the place where it is to be used.

I use comparatively small tubes for the vessel A and coil *c*, and also for the connecting-pipes *a*, on account of their great power of resisting internal pressure and the facility with which the air in them may be cooled.

My reservoir is constructed of a series of vessels, so that it can be easily repaired. If one of the vessels sustains an injury, it can be readily removed and replaced by a sound one without disturbing any of the other parts.

It is obvious that the number of the vessels A used in my reservoir may be increased to any desired extent, according to the quantity of air to be compressed, and from said reservoir the compressed air can be conducted to a long distance by suitable air-tight pipes, and a source of power is obtained which is cheap and reliable.

I claim as new and desire to secure by Letters Patent—

The coil *c*, immersed under water, in combination with the supply-pipe *b* and reservoir A, constructed and operating as and for the purpose set forth.

LOUIS RANSOM.

Witnesses:

EUGENE HYATT,  
ALFRED SEAMAN.