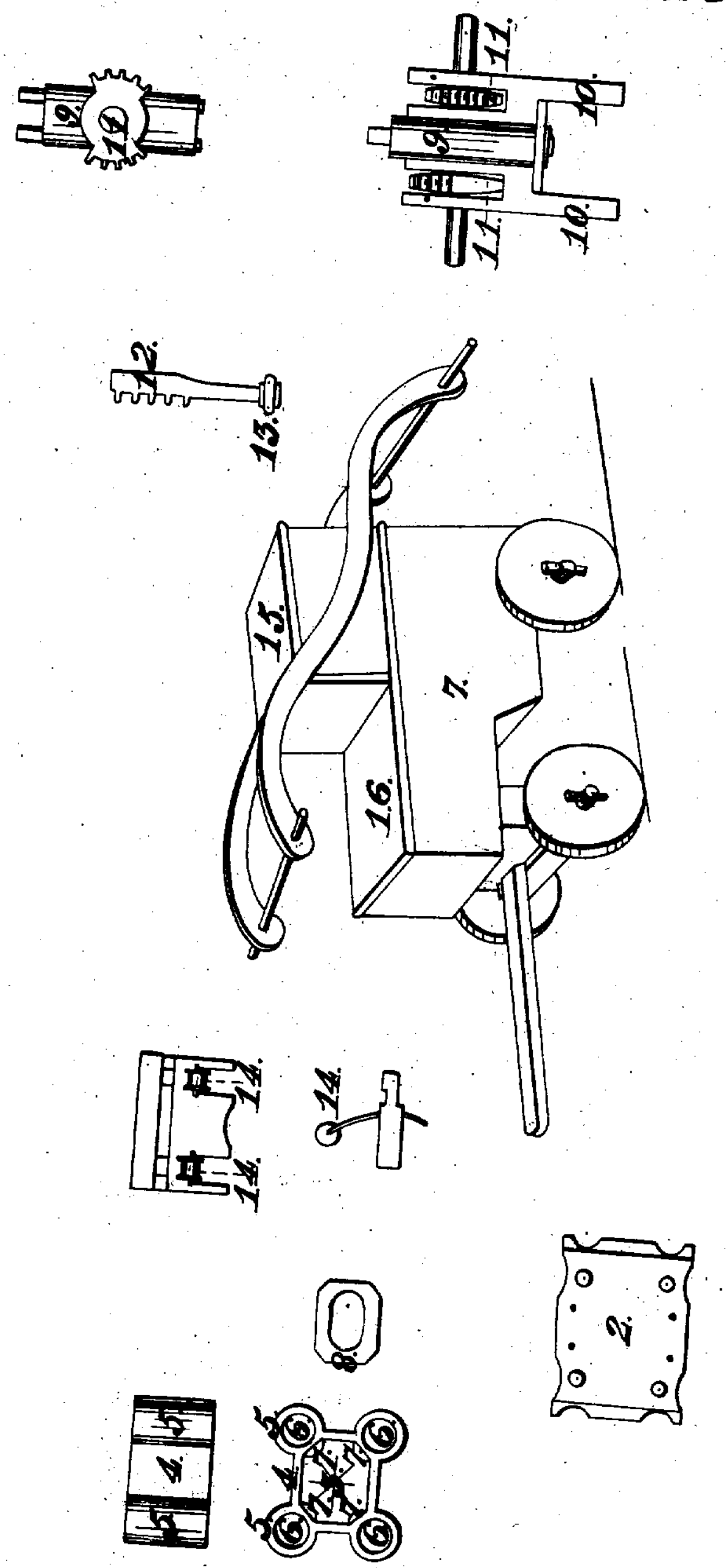
8351X

T. A. Chandler,

Fire Engine,

Patented Aug. 9, 1834.




N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

Aug. 9. 1834

69.

8351X

# Thomas A. Chandler of Norfolk, New York,

## Letters Patent.

The schedule referred to in these Letters Patent and making part of the same, containing a description in the words of the said Thomas A. Chandler himself of his improvement in an Engine for elevating and throwing water and compressing and expanding water and air

To all to whom these presents shall come

Be it known that I Thomas A. Chandler, of Norfolk in the county of St. Lawrence and State of New York, have invented a new and useful improvement in an Engine for elevating and throwing water, and compressing and expanding water and air and that the following is a full and exact description of the construction and operation of the said Machine as invented or improved by me the Model and drawing now presented to the Patent Office will show the different parts numbered as follows viz, — No 1 The receiver or reservoir which is made of wood, — No 2. The bottom of four piston stocks with a hole under each to let in the water, and valves to stop the water and force it into the main stock with a falling piston made of wood — 3 The bottom of the main stock (is used) covered with leather, the ends turned inward and forming valves to cover the holes from the four piston stocks to the main stock to keep the water from returning 4. The main stock into which the water is forced from the piston stocks this is made of copper brass or other metal, 5 The piston stocks with holes at the bottom to let the water into the main stock and valves to prevent the water from returning made of copper brass or other metals, and ought to be cast with No 2.

6. The valves on the bottoms of piston stocks which are copper,

Drawing

brass, or other Metal covered and hung with leather on the fore side to stop the hole tight

7. The valves covering the holes leading from piston stocks to the main stock which are made as the valves before described No. 6.

8. The cap of the main stock which is to be made fast with bolts and screws, or cast with it, same metal as No. 4

9. The air chest which is hollow, (of copper or brass) with two pipes of same metal passing through to discharge the water having screws at the top for hose to be screwed on, in order to throw water in two different ways, or both one way as may be required or a cap instead of one pipe in case one stream of water only is wanted, in which case the water pipe having the cap on will serve as an additional air chest, the air chest No 9 is open at the bottom and fastened to the cap of the main stock No. 8, and serves to regulate and keep steady the stream or streams of water by the elasticity of the air, One of these water pipes may have a hose of any length to convey water in the insides of the building while the other with a short hose and discharge pipe will throw water on the outside or in any other direction at the same time,

10 The harness for hanging the brake for working the pistons which should be made of iron, which is a bench with a hole through to receive the air chest and setting closely upon the cap of the main stock No 8 with four legs the whole length and close to the main stock at the bottom of which are four feet turned square out and through the feet are bolts with screws to fasten through the bottom of the receiver or reservoir No 1 which makes the whole Machinery firm and solid. On the top of this bench raises two posts with a mortice in each at the top through which hangs and plays the cog wheels the ends of these standing supporting these axles, the whole of the harness should be cast together 11 The cog wheels for raising and falling the pistons, on the ends of which the brakes are

fastened which should be made of iron or brass, the brakes are of iron

12. The piston stems with cogs to match the cog wheels No. 11. should be made of iron or brass one on each side of each cog wheel making four in number

13. The pistons (are (copper or brass) having a moveable cap at the bottom which is fastened with copper or brass bolts and screws to the upper part of the piston to secure and tighten the packing so that by turning the screws you may tighten or loosen the piston at pleasure

14 The friction pulley, iron or brass, to keep the piston stems geared, which are at the top of iron posts setting on and firmly secured to the deck No. 16.

15 The case to cover the harness is wood, a box with four sides and a top, through the top is holes for the pistons to pass and a railing round to prevent the foot from slipping when a man stands up there to direct the water and two doors on the sides one fore, the other aft, for the purpose of opening and viewing, repairing or oiling the Machinery.

16 The deck which is a cover to the receiver No. 1 with a trap door before and another behind the Machinery, hung on hinges at one end and the other end fastened down with a hook to open for the purpose of securing in water with buckets or a hose,

The Machine will receive and discharge twice the quantity of water in the same length of time with half the manual labor of the common fire engine and can be built with much less expence

I claim the arrangement of the several parts so as to produce the engine herein described

Witness

John Taylor

Jacob Stockton

Thomas A Chandler

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Exd Stgl