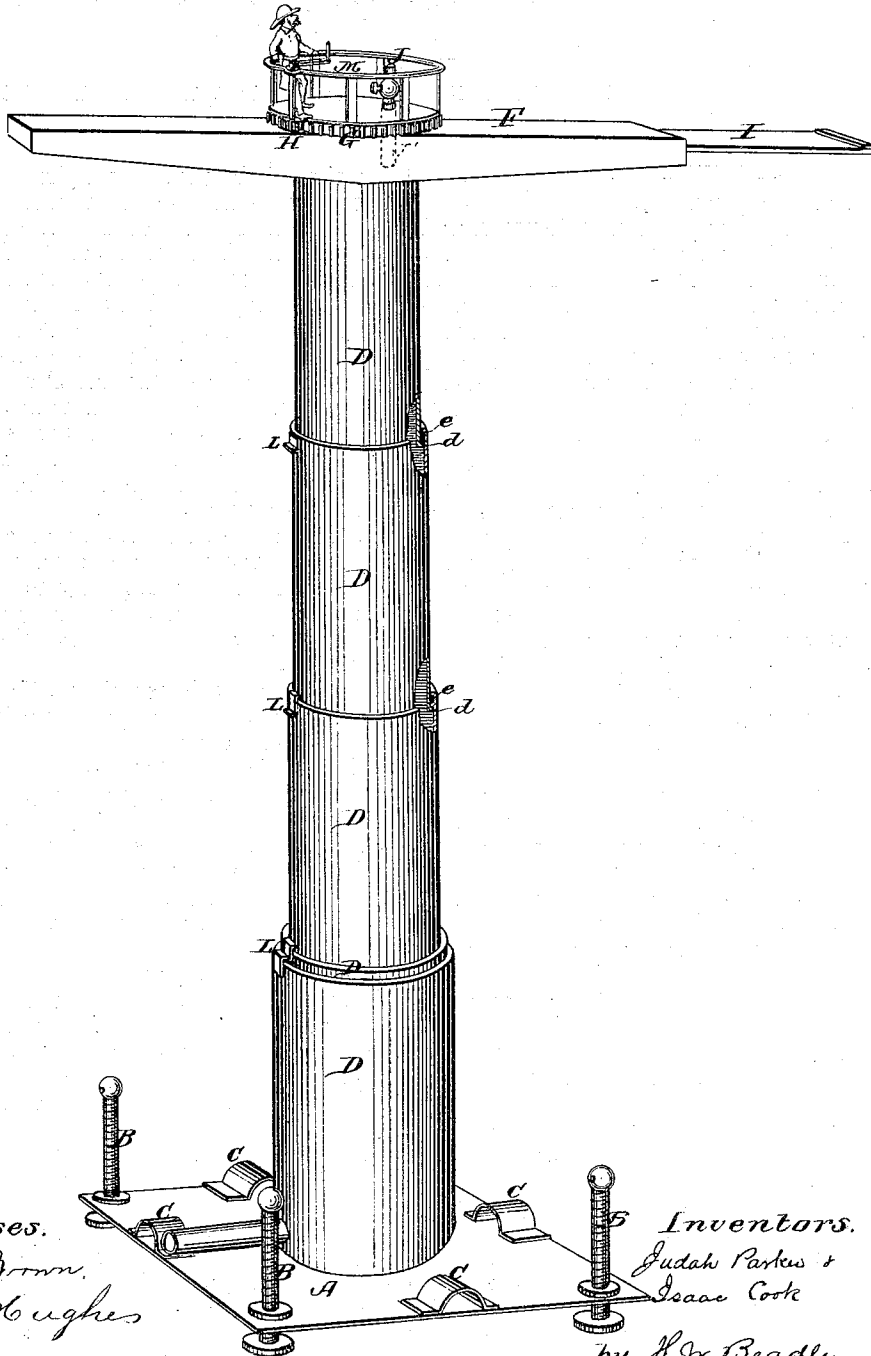


J. PARKER & I. COOK.

Hydraulic Telescopic Platform-Elevator.

No. 129,421.

Patented July 16, 1872.



Witnesses.
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UNITED STATES PATENT OFFICE.

JUDAH PARKER AND ISAAC COOK, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN HYDRAULIC TELESCOPIC PLATFORM-ELEVATORS.

Specification forming part of Letters Patent No. 129,421, dated July 16, 1872; antedated July 11, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that we, JUDAH PARKER and ISAAC COOK, of San Francisco, in the county of San Francisco and State of California, have invented a new and useful Hydraulic and Pneumatic Tower for Fire and other purposes; and we do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The object of our invention is to provide an improved tower or device for attaining an elevation for the purpose of reaching lofty points in case of fires and for other purposes; and it consists of a series of sections of suitable shape, each one being smaller than the one next below it, so that when put together each section above will slide into the next below, and the whole can be shut or opened like a telescope. The joints are made tight, and when water or air is forced into the machine the sections will be elevated as high as desired. An adjustable bridge is attached to the top, and a suitable nozzle for hose, so that water can be carried directly into any window or upon the roof of a building. It also consists of various operating devices which will be more particularly described hereafter.

In the drawing is represented a perspective view of an improved pneumatic tower.

A is a strong base-plate, which may be made of iron or wood in any suitable manner, and mounted upon wheels for greater convenience of transportation. At each corner of the platform A are leveling-screws B, which are turned down so as to rest upon the ground and level up the platform, besides giving it great steadiness. Midway in each of the sides are sockets C, into which extension bars can be placed, which, reaching out horizontally, serve to give a much larger base and great additional stiffness when required. The tower is made preferably of boiler-iron, in cylindrical sections D, of about seven feet or other convenient length. These sections are made of a decreasing size, so that each section slides into the next below, fitting closely. Flanges *d d* are made upon the sections, which prevent them from being forced entirely apart, and collars are so arranged as to hold packing, as at *e*, to ren-

der the whole perfectly tight. A platform, F, of considerable length, is secured to the top of the smallest of the sections D, so as to extend some distance horizontally each side of the tower, and it is so attached that it can be rotated to point in any direction which may be desired, by means of the gear-wheel G and pinion H. A sliding platform, I, is fitted to be moved out in a line with the platform F, on one side, by means of a rack and pinion, or any well-known device, so that when the tower is at the proper height and the platform pointed in the right direction, this platform I can be extended to the roof or to a window. One or more nozzles, J, for the attaching of hose, arise from the top of the smaller section, and the pipe J' extends down sufficiently to form an air-chamber, both to give a steady stream from the nozzles and to relieve the tower when in operation.

The operation is as follows: The truck having been drawn into the proper position, the machine is leveled and braced sufficiently, and water is then forced into the bottom of the lower section D, through a pipe or pipes, K. The connection may be made with a hydrant or with an engine, so as to get sufficient head, and the sections will rise, the upper one first, and so on until the desired altitude is attained.

A sufficient number of men can ride up on the tower, and they can direct the bridge to the proper point and run out the extension platform I. Hose, which is also carried up, is then attached to the nozzles, and can be carried to any point over the bridge. The guard-rail N, for the safety of the men, may be made hollow and perforated. This can be connected with the interior of the tower, and in case the heat is very intense a spray of water can be thrown from the rail over the men for their protection.

In order to retain the tower at any desired height locks L are made fast to the sections, so that if it be desired to run up only a few of the sections, these locks will hold the others and prevent them from being extended. The tower can be gradually lowered at any time by drawing out the water through a check-valve, and this water can be used by the engines on the embers, so as not to be wasted.

A light tower of this sort might be made available in military operations for a look-out,

and compressed air might be used to elevate it.

When employed for fire purposes the whole tower and appurtenances will not weigh over two tons, and can be elevated in less than five minutes.

By elevating the water in a large body much less hose will be needed, and the efficiency of the water will not be impaired by the friction of a long line of hose.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In combination with the sectional tower as shown, the locking devices L L, substantially as herein described.

2. In combination with a sectional tower as described, we claim the adjustable platform F and the extension bridge I, substantially as herein described.

In witness whereof we have hereunto set our hands.

JUDAH PARKER.
ISAAC COOK.

Witnesses:

GEO. H. STRONG,
JOHN L. SMITH.