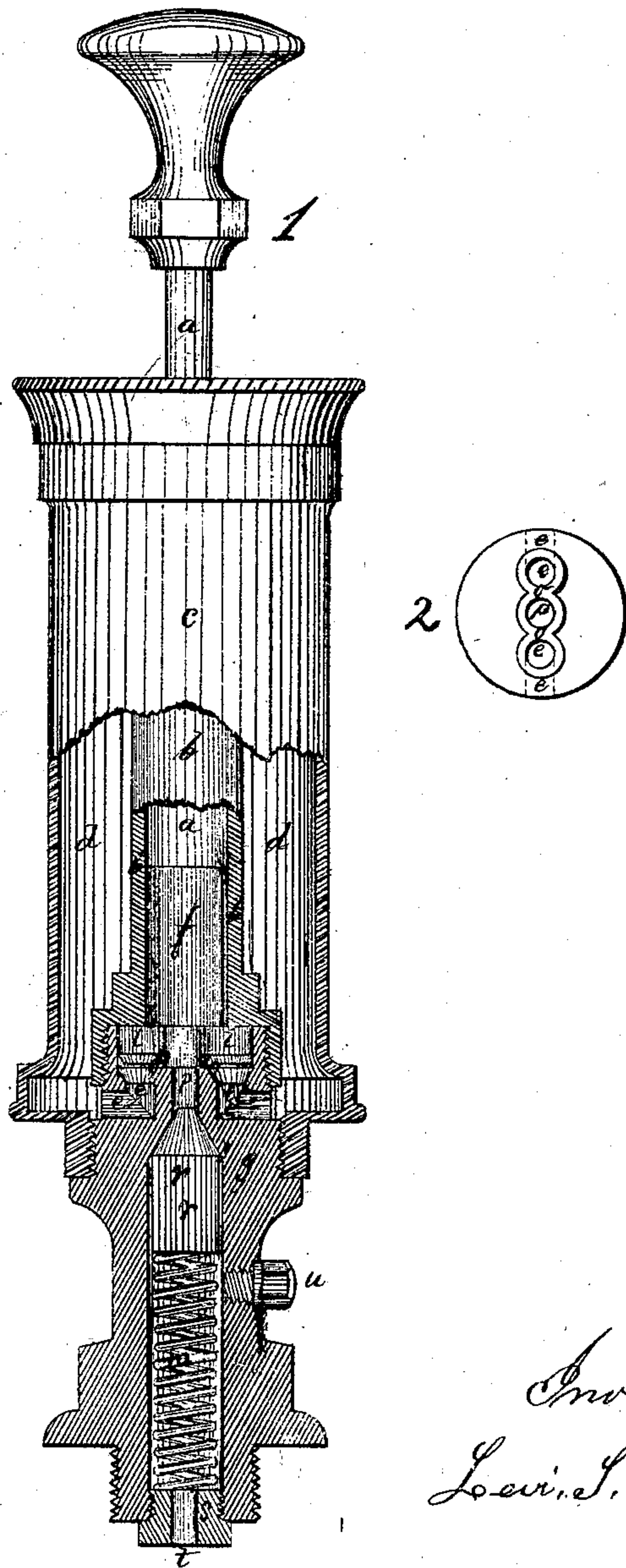


L. S. Lapham.

Oil Pump.

No. 104,168.

Patented June 14, 1870



Witnesses
A. B. Potter
H. H. Brown

Inventor
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LEVI S. LAPHAM, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO MARY S. BROWN, OF SAME PLACE.

Letters Patent No. 104,168, dated June 14, 1870.

IMPROVEMENT IN OIL-PUMPS.

The Schedule referred to in these Letters Patent and making part of the same.

I, LEVI S. LAPHAM, of Providence, in the county of Providence and State of Rhode Island, have invented certain Improvements in Oil-Pumps for Lubricating Steam-Engines and Machinery, of which the following is a specification.

Nature and Objects of the Invention.

My invention relates to the arrangement of the valves in the pump, in such a manner that the pump may be readily filled with oil from the reservoir without, and then injected into the steam-chest or cylinder of an engine, without the necessity of opening or shutting any cock or valve, as has heretofore been necessary in all other pumps, to prevent the escape of steam or the blowing out of the heated oil.

Description of the Accompanying Drawing.

Figure 1 is a side elevation of the pump, with the lower portion in section, showing the working parts.

Figure 2 is a plan of the base, showing the location of the valves.

General Description.

a a is the piston of the pump.
b b is the cylinder of the pump.
c is the reservoir for the oil, surrounding the pump proper.
d d is the space to be filled with oil for use.
e e are two passages in the base *g*, through which the oil passes into the pump proper.

i i are two valves, which prevent the return of the oil to the reservoir without.

p is the passage from the pump to the outlet.

r is a valve, which prevents the oil from returning to the pump after having once passed it.

w is a spring, which serves to keep the valve *r* closed when no pressure is on the pump.

s is a plug, which serves as a seat for the spring, through which is an opening, *t*, for the passage of the oil.

u is a plug, which may be removed and the oil taken from the side instead of the bottom.

The oil, in passing from the reservoir to the engine, is drawn by the piston *a* through the passages *e e*, lifting the valves *i i*, passing through the passages *o o*, in fig. 2, into the space *f*, left by the piston *a*. By a reversed motion of the piston, the oil in the space *f* is forced down the passage *p*, opening the valve *r*, and thence out at the opening *t* or *u*, as the case may be.

Claim.

I claim as my invention—

The combination of one or more valves, as *i i*, and the valve *r*, together with the passage *o*, arranged substantially as and for the purpose herein set forth.

LEVI S. LAPHAM.

Witnesses:

D. B. POTTER,
H. H. BROWN.