## GEORGE SEWELL. Improvement in the Method of Reducing Pressure in Steam-Boilers.

Patented April 25, 1871 No. 114,052. Fig. 1 Fig. 2.

## Anited States Patent Office.

## GEORGE SEWELL, OF BROOKLYN, NEW YORK.

Letters Patent No. 114,052, dated April 25, 1871; antedated April 22, 1871

## IMPROVEMENT IN THE METHODS OF REDUCING PRESSURE IN STEAM-BOILERS.

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

To all whom it may concern:

Be it known that I, GEORGE SEWELL, of Brooklyn, in the county of Kings and State of New York, have made a new and useful Method of Reducing Pressure in Steam-Boilers; and I hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawing which forms a part of this specification, in which—

Figure 1 is a plan view.

Figure 2, an elevation, partly in section.

The object of my invention is to prevent the necessity of blowing off steam to reduce excessive pressure in steam-boilers.

This I accomplish by injecting as often as required a jet of cold water into the steam-space of a boiler, thereby reducing the pressure.

As now constructed the blowing off of steam to reduce pressure in the boiler is a necessity.

On shipboard the noise from the blowing off of steam is exceedingly annoying, and for the time being seriously interferes with the giving and receiving of orders.

On river and ferry-boats the unearthly noise frightens horses, besides annoying passengers.

By my invention this nuisance is abated and the necessity of a safety-valve dispensed with.

My invention is shown in the annexed drawing.

A A is the steam-boiler.

B, steam-pump.

C C, a chest containing a common check-valve and cork, the valve being above the cork to prevent the steam from getting to the pump.

D D, pipe for delivering the water into the steamspace of the boiler, either in the form of spray or in a body.

F F, pipe leading water from pump to pipe D D through valve-chest C C.

Instead of passing the water through pipe D D into the steam-space it may enter beneath the surface of the water in the boiler, as shown in pipe I I

the water in the boiler, as shown in pipe I I.

The pipes D D and I I may also be used for supplying feed-water.

The pressure-gauge will always indicate when it is

necessary to inject water.

The pressure in the boiler may also be made to op-

The pressure in the boiler may also be made to operate automatically, at any given pressure, the valve for the introduction of cold water.

Having described my invention,

What I claim, and desire to receive by Letters Patent of the United States, is—

The method of reducing pressure in a steam-boiler, consisting in the introduction of cold water into the steam-space, substantially as set forth.

GEO. SEWELL.

Witnesses:

HENRY H. PRENTISS, JOHN A. WALLACE.