G. H. Corliss

Pressure Regulator

No. 85,506. Patented Jan. 5, 1869.

Witnesses.

Inventor.

G. H. Corliss

By

Attorney.
The stem of the valve \( w \) thus extends from the side \( a \) through the vessel and port \( I \); and when the port is closed by the expansion of the vessel \( A \), the valve and its stem subserve the purpose of a tie or stay, and form a rigid and firm connection between the sides of said vessel, thus limiting their outward movement, and preventing any liability of damage to the vessel by an accidental increase of pressure.

The apparatus thus forms an automatic steam-regulator, controlling the flow of steam through the eduction-pipe, and rendering the reduced pressure uniform.

To facilitate the adjustment of the valve to any required pressure, it is, as shown in the drawing, screwed upon its stem, and may be held firmly in any position by a check or jam nut.

I do not, however, limit myself to any particular method of adjusting the position of the valve, but may use any available means that will answer the purpose.

It is evident at a glance that while this apparatus is perfectly self-regulating, its simplicity of construction is such as to render it inexpensive and durable to a degree not attained in any other device hitherto constructed for the same purpose.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A vessel with flexible sides, when the same is constructed and arranged substantially as herein shown and described.
2. The combination and arrangement of vessel \( A \), valve-stem \( w \), and valve \( w \), whereby to limit the outward movement of the flexible sides of the vessel \( A \), substantially as described.
3. The construction and arrangement of the vessel \( A \) and valve \( w \), whereby the combined pressure in chamber \( B \) and vessel \( A \) shall operate to close the valve, substantially as set forth.

GEO. H. CORLISS.

Witnesses:
HENRY MARTIN,
JOHN C. PUREKES.