J. HALL.

Stove-Pipes for Vessels. No. 142,567. Patented September 9, 1873. Fig. 2. John Hall. Witrieses By-his attorney

## UNITED STATES PATENT OFFICE.

JOHN HALL, OF QUINCY, MASSACHUSETTS, ASSIGNOR TO LOUISE I. HALL, OF SAME PLACE.

## IMPROVEMENT IN STOVE-PIPES FOR VESSELS.

Specification forming part of Letters Patent No. 142,567, dated September 9, 1873; application filed July 23, 1873.

To all whom it may concern:

Be it known that I, John Hall, of Quincy, of the county of Norfolk and State of Massachusetts, have made a new and useful invention or Improvement having reference to Stove-Pipes for the Decks of Navigable Vessels; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a vertical section, of a stove-pipe and its deck-supporter with my invention

applied thereto.

On April 27, 1869, Letters Patent No. 89,403 were granted to me on an invention of like character, which consisted in connecting the stove-pipe or thimble thereof, above the deck, with a fixed pipe or supporter, by means of helical springs, in order that, should the pipe part above the deck be struck by a boom or other means and thrown out of its normal position, the springs would allow it to give way under the blow, and subsequently return it to such position. In using springs it was discovered that the great heat to which they were subjected soon deprived them of their temper or elastic property, in which case they become for all practical purposes inoperative.

In carrying out my present invention I dispense with such springs, and employ in lieu thereof a single tubular weight, a suspension-chain, and one or two perforated diametric bars, applied to the stove-pipe, or such and

its supporter.

In the drawings, A denotes the pipe-supporter, which, being of cast metal, is fixed in and to the deck of the vessel or roof of the galley, as the case may require, it being of the ordinary form, or provided with a concentric space or trough, a, for holding water. A section, b, of the stove-pipe extends down from this supporter. Another section of the pipe or a thimble, d, for supporting such a section, rests on the top of the supporter A, or in a circular groove, d', thereof, in manner as shown. There is extended diametrically across the thimble or pipe section d a bar, i, to whose middle a chain, g, is fixed. This chain de-

pends through the supporter, and is fastened to a tubular weight, B, arranged within the pipe-section b. This weight should have an external diameter nearly equal to the internal diameter of the pipe-section b. I also provide the pipe-supporter at its upper part with a bar, f, going across it diametrically, and perforated at its middle, so as to allow the chain to pass freely down through the bar. This latter bar serves to prevent the weight from being tipped by the chain, so as to bind within the pipe. The weight should be sufficient to draw the upper pipe-section into an upright position, after it may have been deflected therefrom. I would remark that the part d, which I term the thimble, is in fact a short section or part of the stove-pipe, though usually made of cast-iron. This may be used with a longer or additional pipe extending above the deck, or such longer section may at once be stepped into the supporter.

From the above it will be seen that, should the thimble or part of the pipe extending above the deck be struck by a boom while it may be swaying across the deck, such part will give way or be deflected into an inclined position, until the boom may have passed over and beyond it, when it will at once be restored by the weight to its upright or vertical position, and this in whatever direction the de-

flection may take place.

The weight, its supporting-chain, and center bar, to which such chain is fastened, are free from the difficulty above mentioned as incident to springs, which are also liable to become choked by soot or oxidated by the smoke or pyroligneous acid thereof.

I claim as my invention as follows, viz:

The pendent tubular weight B and its supporting-chain g, and the perforated diametric bars bi, arranged and combined with the two sections of stove-pipe and the supporter A thereof, all substantially as and to operate as specified.

JOHN HALL.

Witnesses:

R. H. Eddy,

J. R. Snow.