

Mr. Brunel's
suggestions are
entirely correct
and will be
of great service
to the Admiralty
K. Brunel, Esq.

7 Portland Street,
(Mrs King's)
Commercial Road East
Tuesday, Mar 30/58.

Sir,

I am exceedingly desirous of a personal interview with you at your offices to-morrow (Wednesday) at any hour you can possibly arrange for such, to show to you certain perfect steam safety valve arrangements I have patented, and concerning which I would prefer the following special remarks. Your compliance will very much and especially oblige -

Sir, Most respectfully
Peter Arrivi.

18 Duke St. Westminster.

Steam Safety Valves.

Boiler Proprietors believe to receive supplied from the engineer and boiler-maker maximum means of safety from safety valves supplied with their boilers; they will receive minimum instead, with the ordinary or common valve, which is single-seated. This patent is, variously arranged, the same valve to act doubly seated, employing the original seat, or, constructs another, a like valve, which seated upon several thin and flat silver rings becomes practically more certain of action than any other two distinctive valves each single-seated; less costly than two such; whilst it fully assures the safety action else of both, more certainly, inasmuch as no ordinary number of valves, which are only the generative steam safety valves, can prevent explosion occurring from the large volumes of steam which may become suddenly generated within the boiler; wherefore we are to suppose then of one perfect valve, one of sufficient capacity is req.

These patent valves then stand upon the undeniable position that every other of valves are imperfect, first, because lacking sufficient seats, and

near the basis of the Flexible Disc's construction for movement, appropriate power for movement unlimited but by expediency. The force is afforded from annular flat silver rings, the latter from the practical application of the well known 'hydrostatic paradox'. As concerns this, the weight of quicksilver or mercury is employed preferably, and the tube of iron 3-8ths of an inch diameter containing the same, as employed for loading the valve, may be conveyed away to any distant locality, or it may be stood upright, and of which the absolute weight of fluid mercury contents equal to resist steam pressure of 25 lb. to the square-inch is 244 lb. only, with the height of 44 1/4 feet above the surface of the flexible disc; and continues so irrespective of any diameter of disc as well as of any diameter whatsoever of the valve. Such valve may be fixed to act wholly inside of the boiler for ships of war, and the tube alone constitutes all of the external arrangement. In the manner the quicksilver is employed it is incapable of overloading and of deterioration.

Peter Arrivi.

March 20/58.

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W. F. Baker & Son
23 March 1858

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