shall be removed. The owner or master of the steamboat shall see that these requirements are complied with before applying for inspection;

Defects to be made good.

In any case in which the test is not satisfactory, the defects must be made good and the boiler re-tested satisfactorily, before a certificate shall be granted; and—

Boiler to be lifted if necessary.

When the outside of the bottom of a boiler cannot be otherwise perfectly inspected, the boiler shall be lifted for inspection once at least in every four years;

Maximum working pressure for new iron boilers.

Ratio of test to working

pressure.

3. In subjecting boilers made of iron plates to the hydrostatic test aforesaid, the Inspector shall assume one hundred pounds to the square inch as the maximum pressure allowable as a working power for a new boiler forty-two inches in diameter, made of the best refined iron, at least one-quarter of an inch thick, in the best manner and of the quality herein required,—and shall rate the working pressure of all iron boilers, whether of greater or less diameter, according to this standard; and in all such cases the test applied shall exceed the working pressure allowed, in the ratio of one hundred and fifty pounds to one hundred, using the water in such tests at a temperature not exceeding sixty degrees Fahrenheit;

Maximum working pres-

sure for new

steel boilers.

4. In subjecting boilers made of steel to the hydrostatic test aforesaid, the Inspectors shall assume one hundred and twenty-five pounds as the maximum pressure allowable as a working power for a new boiler forty-two inches in diameter, made in the best manner, of the best quality of steel plates, at least one-quarter of an inch thick, with all the rivet holes drilled in place, the plates being then taken apart and the burrs removed, the longitudinal seams in the shell being fitted with double butt steel straps cut across the grain of the plate, and each of five-eighths the thickness of the plates they cover, and all the seams being at least doublerivetted and having at least seventy per cent, of the strength of the solid plate, and all the flat surfaces stayed in the best manner and all the seams doublerivetted,—and they shall rate the working pressure of all steel boilers so made, whether of greater or less diameter, according to this standard; and in all such cases the test applied shall exceed the working pressure allowed for such boilers in the ratio of one hundred and ninety pounds to one hundred and twenty-five pounds, using the water in such tests at a temperature not exceeding sixty degrees Fahrenheit;

Ratio of test to working pressure.

5. But if the Inspector is of opinion that any boiler, whether made of iron or steel plates, by reason of its con struction or material, will not safely allow so high a working pressure as that hereinbefore specified for each such description of boiler respectively, he may, for reasons to be stated

Working pressure allowed may be reduced.