

ties recorded, is because in cases of collision two or more ships are involved in one casualty.

Loss of human beings by these casualties, in 1865—

	698
Ships in which lives were lost.....	164
Number of laden ships to which casualties suffered	124
" in ballast.....	33
" of ships entirely lost.....	131
" partially damaged	33
Lives lost in foundered ships	275
" by collisions	53
Washed overboard	35
In ships stranded, or cast ashore	335
Vessels over 100 years old wrecked...	1
" between 90 & 100	1
" " 80 90 " " 	5
" " 70 80 " " 	9
" " 60 70 " " 	20
" " 50 60 " " 	51
" " 40 50 " " 	84
" " 30 40 " " 	145

The conclusions thus arrived at are that the largest proportion of the wrecks and consequent loss of life are owing to the rottenness of the vessels through age.

During the year there were rescued from watery graves by life-boats, rocket apparatus, &c., 4,162 persons. The number of life-boats in the United Kingdom now amounts to 192.

Miscellaneous.

Vivisection in France.

The following account from the London *Veterinarian* is almost too horrible to be believed, did we not get the facts from so reliable a source:—

"In a building or shed open to the air on one side lay six or seven living horses, fixed by every possible mechanical contrivance by the head and feet to pillars, to prevent their struggling, and upon each horse were six or seven pupils employed in performing different surgical operations. The sight was truly horrible. The operations had begun early in the forenoon, it was nearly three o'clock when we entered the place, so that the poor wretches, as may be supposed, had ceased being able to make any violent struggles. But the deep heaving of the still panting chest, and the horrible look of the eyes, when such were remaining in the head, whilst the head was lashed to a pillar, were harrowing beyond endurance. The students had begun their day's work in the least vital parts of the animal; the trunks were there, but they had lost their tails, ears, and hoofs, and the operators were now engaged in performing the more important operations as tying up arteries, trepanning the cranium, cutting down the more sensitive parts, on purpose, we are told, that they might see the retraction of certain muscles by pinching and irritating the various nerves. One animal had one side of his head completely dissected, and the students were engaged in laying open and cauterizing the hock of the same side when we entered."

Non-inflammable Clothes.

"Former attempts in this direction were made with different mineral salts, such as sulphate, phosphate, and muriate of ammonia, liquid quartz, or waterglass, all of which accomplish the object in view, as long as they really permeate the fibre of cloth. But being of a crystalline nature they soon become brittle, and the ordinary wear of clothes, ironing, etc., breaks the miniature crystals in the fibres to dust, which leaves the fabric in its original inflammable condition as soon as it is lost.

A substance not possessing these disadvantages is the tungstate of the alkalis—soda, potash, and ammonia—especially of the former, which has been used for a number of years past at the laundry of the court of Great Britain. This salt is of a smooth, fatty, tallowy appearance, does not break off in the process of ironing or in ordinary use, and envelops the fibre completely, to exclude the air necessary for combustion.

The proper strength of a solution of this salt for the purpose in question is one containing 20 per cent. of the salt. This solution has to be prepared fresh for each application, as otherwise bi-tungstate is formed, which is not very soluble but crystallizes out of the solution, leaving the latter too diluted for application. But this evil may be remedied by the simple addition of a small quantity of phosphoric acid or phosphate of soda. This salt need not be added in greater quantities than 3 per cent. of the amount of the tungstate solution.

As the old country abounds in tungsten ores, especially wolfram, which is a tungstate of iron and manganese, and which is largely imported to this country, the tungstate of soda may be prepared here easily and cheaply."—*Joseph Hirsh.*

Mistaken Pride.

The following very sensible article is from the *New York Sun*. It will not be difficult to judge how far it is applicable to Canada, not only as to the false pride indulged in, but to the very serious defect in our public school systems, in not furnishing any department of education having a special view to preparing boys for following any of the mechanical or other industrial pursuits:—

"MR. WEBB, the eminent ship-builder, gives it as his opinion that one of the reasons for the decline in American ship-building is the difficulty of inducing boys to apprentice themselves to the business and learn it thoroughly. There is a want of skilled and educated laborers in this department of industry, simply because boys prefer to spend their time in some occupation they deem more respectable than manual labor. This is an error that does not apply to ship-building alone. In almost every branch of industry there is a distaste in the mind of the American boy for anything like manual work. There is an ambition, altogether false and very prejudicial to the boy's future success, to escape all rudimentary work and occupy at once a position where a living can be made in the easiest and most respectable manner. This is contrary to all democratic teaching as to the dignity of labor, but it is, unfortunately, true. Young men in this country are ashamed of toil. They are even ashamed of the toil of their fathers before them. They forget how large a proportion of men in all countries have attained wealth and eminence