

THE SHIPWRECKS OF A YEAR.

The year's shipwrecks make the subject of an interesting compilation in a recent issue of *Engineering*, of London. It appears from this that during the past year 984 vessels of 708,459 tons were wrecked, lost or burned, or passed the narrow border from usefulness to decay. This is about an average result, although in 1895 there were 1,237 vessels of 806,278 tons on the list; but then the average of several years was exceeded by 120,000 tons, so this year's statistics are only a return to their former state. This is fairly satisfactory, for the total volume of shipping continues to increase, and thus the death rate is not so high. The ratio is only 3½ per 100 tons owned. The last quarter of the year has been heaviest in its harvest of wrecks, the number being 327 and tonnage 202,676 tons, while the first quarter of the year naturally comes next with 282 vessels of 195,489 tons. The June quarter has only 164 vessels of 147,579 tons. The proportion of steamers to the total losses is rather larger than usual. As a rule, from 55 to 60 per cent. of the tonnage lost is of sailing ships; this year, however, less than one-half of the tonnage is of sailing ships—720 of 353,040 tons. Although the number of steamers lost is only 264, the tonnage is 355,419 tons, so that some large craft are included.

In view of the wide ramifications of the British fleet, which equals that of all other nations combined, it is gratifying to note that the percentage of loss is only 2.31 per 100 tons owned, while over the whole list the percentage is 3½. Some of the European nations, it is true, have a ratio of less than this, but it should be remembered that the total includes 65,000 tons of vessels that have been broken up, or more than one-half of the total broken up in the world. Indeed, this equals one-fourth of the total British losses, and no other country attains such a low percentage of actual loss by misadventure as in the case of the British fleet. Norway's loss is equal to 5.06 per 100 tons owned; that of Italy, 4.32; Sweden, 3.7; Austria-Hungary, 3.44; United States of America, 3.10; Spain, 2.63; Holland, 2.6; Russia, 2.14; Denmark, 2.13; France, 1.86, and Germany, 1.35 per 100 tons owned.

EXPORT TRADE IN AMERICAN BICYCLES.

During the nine months ended March 31st of the fiscal year 1896-97, the exports of American bicycles amounted in value to 4,165,680; and in view of the fact that in past years the shipments have been heaviest during the last quarter, it would be scarcely an exaggeration to place the probable exports for the whole twelvemonth at \$6,000,000.

During the fiscal year ended June 30th, 1896, the exports of bicycles from this country amounted in value to only \$1,898,000. Great Britain and her Colonies took the greater part of our exports in this line, as is the case with all exported products of the United States; and the phenomenal growth of American competition has caused no little anxiety in the British bicycle trade. The British exports of bicycles last year amounted in value to £1,860,972; and, says *The Saturday Review*, "in all probability America will beat us next year." A conference of British manufacturers has been called for a discussion of ways and means to cope with the situation; but instead of endeavoring to arouse a feeling in favor of protective duties, the members of the British bicycle trade will probably seek a remedy either in the reduction of prices, or in an improvement in the quality of their products. How un-American!

NEW RULES AT SEA.

On and after July 1st next the movement of ships on the high seas throughout the world will be governed by the rules of the road adopted by the International Maritime Conference at Washington in 1889. During the eight years which have intervened, the new rules have been subjected to much criticism from over-conservative shipmasters, and as a result a few modifications have been made in the code of sound signals evolved at the conference. It would have been easier to find fault with the new international rules of navigation on the score of their conservatism than on account of any radical departure from the old regulations; for instance, the former rule that in fog or heavy weather steam vessels should proceed at

moderate speed has been retained, without any definition of the permissible rate. Each captain will thus be left to determine what is "moderate speed," and there is nothing in the new regulations to prevent the captain of a 22-knot Atlantic liner from racing through a fog at a 15 or 20-knot gait. Notwithstanding some shortcomings, however, the new regulations contain substantial improvements upon the old, and if carefully observed they will tend to diminish to a measurable degree the risks of a voyage at sea. — *Philadelphia Record*.

FREAKS OF ENGINES.

(Locomotive Engineering.)

Defects often develop in steam engines and other machines that are very mysterious in their origin, and call for great ingenuity in detecting the cause. Unless a man in charge of an engine develops habits of close observation, he is likely to be easily beaten when anything unusual takes place.

We read lately of a tendency to run away of a Corliss engine, which was a great mystery for a time. The engine would speed up for a few moments without any apparent cause, and drop back to its normal speed without anything being done. The engine was taken apart and examined carefully, and particular attention was given to the governor, but nothing wrong could be found. One day, while the engineer was looking at the engine, it suddenly speeded up about fifty revolutions above the normal, and before the steam could be shut off it dropped back to the regular speed. The engine was stopped, the governor again taken apart, the valve mechanically examined and a minute inspection made over the whole machine, and nothing could be found the matter.

Some of the people about were beginning to think this erratic engine was acting outside of natural laws, and that a real mystery surrounded the tendency to run away. By accident the engineer grasped the governor belt, and was surprised to find that the pulley turned on the shaft. The pulley was of the common kind, made in two pieces and bolted together, being held to the shaft by the friction of the parts. The bolts had worked loose and permitted the pulley to turn on the shaft at short intervals.

When hearing about this mystery the surprise we experienced was that the engineer did not thoroughly examine the pulley after he had looked at the governor.

OTTAWA DEBENTURES SOLD.

Another good sale of civic debentures has been made. Tenders for debentures totalling \$297,776 were opened by the finance committee last evening. These include \$131,000 for local improvements, \$75,000 for waterworks extension, \$55,000 for new fire appliances and fire stations, and \$36,000 for public school purposes.

Mr. A. Jarvis, of Toronto, was the highest of the six tenderers. He offered \$312,826, which is equal to a five per cent. premium. The tender for forty-year debentures is equal to a premium of 6-8-10 per cent. Other tenderers were Mr. Wm. Mackey, Hanson Bros., Cassels, Son & Co., James A. Meldrum, and the Molsons Bank. This is the best sale of debentures the city has ever made. — *Ottawa Journal*.

—The comparative statement of pauperism shows that in March, 1897, in respect of England and Wales, the number of paupers in receipt of relief was smaller than in the two preceding years, but that it was larger in each week than the number relieved in ten out of the twenty-one preceding years. It was, however, notwithstanding the increase in population, smaller in each week than the number relieved in the corresponding month in any year from 1857 to 1875.

—Lord Esher, Master of the English Rolls, still active at 82 years of age, has been giving some unconventional dicta from the bench of late. In an action for libel involving the professional sensibilities of two musicians, one of whom was Tito Mattel, the composer, the judge stopped a lawyer who wished to quote authorities as to what may be libel, saying: "If you do, it will be a serious libel on us. We ought to know enough law to decide a wretched case of this size, where the damages were only £20, without counsel having to help us by referring to authorities. Do shut up your book."

ORE SHIPMENTS FOR THE WEEK.

During the week ending June 12th, the Trail Creek smelter sent forward nearly \$100,000 worth of matte, its shipments comprising the bulk of the mineral exports of the port of Nelson for the past week. The entries for the week were:

	BULLION AND MATTE.	
	Pounds.	Value.
Trail smelter	283,185	
ORE.		
	Tons.	Approximate Value.
Le Roi mine, Rossland ...	370	
Kootenay Ore Co'y, Kaslo ...	223	
Slocan Star, Sandon	75	
Washington	64	
Payne mine, Slocan	50	
No. 1 mine, Ainsworth ...	19	
Total for week	943	\$131,508
Total so far for June	1,220	152,277
Total for May	2,995	397,797
Total for April	3,764	433,234
Total for March	5,822	677,681
Total for February	5,201	562,853
Total for January	4,543	675,506
Total via Revelstoke to May 12th	2,296	223,382
Total so far for 1897	25,841	3,222,730

—"I discovered a gold mine," said the forty-niner. "I invented a torpedo boat," replied the genius. Then they shook hands like brothers and pooled their capital to buy a cheap dinner. — *Detroit Free Press*.

Commercial.

TORONTO MARKETS.

TORONTO, 1st July, 1897.

DAIRY PRODUCTS.—There has been some improvement in the dairy butter trade. The quality of offerings is good. For pails and tubs merchants are quoting 11 to 12c., while pound prints are worth 12 to 13c. per lb. The local cheese trade is quiet and steady, jobbers quoting 8½ to 9c. per lb. There has been less demand for eggs this week, doubtless as a result of an increasing abundance of food substitutes in the shape of green fruits. Deliveries are about equal to the demand, with sales at 9½ to 9¾c. per doz.

DRUGS.—Business in general drug supplies has been good the past several weeks. Merchants' supplies of hellebore are not abundant; the consumptive demand is good, with quotations 13 to 15c. For Paris green there is active enquiry; the market remains firm at 13½ to 15c. Tartaric acid and citric acid are reported firm; the duty of 20 per cent. recently placed by the Government, together with firm values in primary markets, has resulted in an appreciation of prices. Collections are very satisfactory. A New York advice, June 26th, says: "Opium was rather more firmly held at \$2 25 in case lots, and \$2.30 in smaller packages. Neither manufacturers nor jobbers were anywise free buyers, and the better tone to the market seemed due chiefly to more temperate competition between prominent local and out-of-town holders. Quinine was without change in any respect. Manufacturers' agents quote former list prices, but take very few orders, although delivering to a fairly liberal extent on old contracts. Norway cod liver oil was rather more active and the market shows firmer tone, with prices rather higher."

GRAIN.—During the week the wheat markets have been unsettled. Activity at the beginning of the week has resulted in depression at its close. In the local market wheat is dull and depressed, values, however, remaining as quoted last week. Some transactions in red winter at 69c., and white at 70c. Middle freights are reported for export shipment. This enquiry has now fallen off. The most interesting news from Europe is to the effect that rainy weather continues in Hungary, and gives serious apprehensions for this year's harvest; some districts in central Hungary are partly submerged. Hungary is likely to yield 4,000,000 double cwt. less than 1896; other crops as bad. Advices from different parts of Canada indicate continued weather conditions favorable to the growing crops. Peas are firm and in good demand for export, with quota-