THE MODERN STEAMSHIP

ELECTRIC MARVELS ON BIG ATLANTIC LINERS.

The Latest Cunard Steamers Utilize Electricity for a multitude of Purposes.

Although much has, from time to time, been written about the two leviathan Cunard steamers, Lusitania and Mauretania, yet comparatively few can grasp the significant part which electricity plays throughout these ships. A few facts relating to the electrical equipment of the Mauretania may be of interest.

Apart from the 70,000 h. p. of the turbines which propel the ship through the water, the electrical power, which is supplied by four generators, represents an additional 2,144 h.p.

Electricity is used not only for illuminating the ship at night, but for a multitude of other purposes, such as operating the lifts, of which there are two for passengers' use, eight for baggage and mails, and two smaller ones in the pantries. Electrically-driven cranes and winches are also provided. It may be of interest to know that 6,300 electric lamps are installed throughout the ship, giving the enormous total of over 100,000 candle-power. For heating the first-class quarters sixty electric radiators have been fitted, to say nothing of some forty-three heaters in the bathrooms for use during the cold weather.

NUMEROUS ELECTRIC FANS

are used for ventilating the various rooms, and are so arranged that they can supply either warm or cool air according to the weather, while the air in the cabins can be totally changed six or eight times in an hour. Apart from the above venting-fans, sixteen larger ones, of 50 h.p. each, are fitted for supplying forced draught to the twenty-five boilers.

In the extensive kitchens of the Mauretania electricity is called upon to play an important role, and it may interest some housewives to learn that one range alone has a frontage of about 60 feet, and includes a roaster with four vertical spits rotated by an electric motor, these spits being capable of dealing with half a ton of meat at a time. This is in addition to a smaller roaster with three spits, driven in the same manner. In the bakery electricity is employed to operate a large dough-making machine capable of making bread for at least 2,000 persons.

Among the miscellaneous apparatus driven by this wonderful unseen power are three circular knives for slicing ham and bacon, four potato peelers, a whisking machine, several egg-boilers, numerous hot-plates for keeping the food warm, five plate-washing machines, and two twelve-quart freezers for making ice-cream for the passengers, to say nothing of

THE COLD-STORAGE PLANT

and the electrical printing press which enables the 'Cunard Daily Bulletin' to be published on board.

Some idea of the size of the vessel may be obtained when it is mentioned that over 200 miles of wires and cables are fitted throughout the ship.

The electric bell and telephone installation on the Mauretania surpasses anything hitherto attempted in connection with ship work. Bell-pushes are placed over every bed, and altogether 1,298 electric bell-pushes have been fitted in the various cabins, etc., whilst telephones, of which there are upwards of 100, are to be found in numerous parts of the ship and in all the best rooms.

Apart from the Marconi wireless telegraph outfit, which enables passengers to learn all that is going on in the world just as if they were in a first-class hotel in London instead of miles from land, means has been provided for coupling the ship up to the city telephone exchanges when lying alongside the landing stages at Liverpool or New York, thus enabling passengers to communicate with their friends or to transact business the moment the vessel touches the quay, or to say good-bye to friends in distant parts of the city up to the time

THE BOAT LEAVES LAND.

Electricity also plays an important part in the safety devices on board this wonderful ship, as, for instance, showing the officer in charge which water-tight doors are actually closed and what navigating lamps are lit. It is also employed to operate the fog-horn from the wheel-house, and for the system of fire alarms, in connection with which there are thirty-eight alarm-pushes in prominent parts of the vessel.

Four electric searchlights are carried on board, and, in addition to the usual complement of life-buoys which every ship carries, two special buoys have been provided for use at night. These, upon being released by pressing a button, automatically light a flare upon striking the water, thus indicating their position. Mention must be made of the system of electric clocks, which are placed in the various saloons and important situations throughout the ship.

The electric installation on this vessel represents about $325,000 value, or some fifteen times the cost of the electric equipment on an everage Atlantic liner.

STUBBORN INDIGESTION

One Who Had Suffered for Years Cured by Dr. Williams' Pink Pills.

The symptoms of stomach trouble vary. Some victims have a ravenous appetite, while others loathe the sight of food. Often there is a feeling as of weight on the chest, a full feeling in the throat. With others there is an intense pain and feeling of nausea after eating. Sometimes gas presses on the heart and leads the sufferer to think he has heart disease. Sick headache is another frequent and distressing symptom.

Mr. Alex. McKay, McLellan's Mountain, N. S., says:—"For years I was a great sufferer from indigestion, which was gradually growing worse and worse, and it would be impossible for me to tell how much suffering I endured. At different times I had treatment from three good doctors, but it did not help me in the least. Then I began trying all sorts of advertised medicines, and took ten packages of one medicine specially intended for dyspepsia, but with no better results. I had practically come to regard myself as incurable, and to feel that I would be a continuous sufferer, when one day I read in a newspaper of the cure of indigestion through the use of Dr. Williams' Pink Pills, and I made up my mind to give them a trial. I had used nearly five boxes before they began to help me, but I do not wonder at this as my case was so bad. I used in all a dozen boxes of the pills, and they cured me completely. I can now eat anything we raise on the farm for man to eat and have no longer the pains and discomfort I had endured for years. It is several years since I was cured, and I have never felt a symptom of indigestion since. I am well known in this locality and you are quite at liberty to use what I say in the hope that it will benefit some other sufferer."

All medicine dealers sell Dr. Williams' Pink Pills or you can get them by mail at 50 cents a box or six boxes for $2.50 from The Dr. Williams' Medicine Co., Brockville, Ont.

KEEN BARGAIN HUNTERS

BIG POWERS KNOW HOW TO GET VALUE FOR MONEY.

Yankees Have Bought More Land for Cash Than Any Other Nation.

The maligned ladies who are made fun of in the comic papers, because of their fondness for frequenting sales where everything is to be disposed of at an immense sacrifice, are in very good company. Some of the biggest Powers of the world have been keen bargain-hunters, says Pearson's Weekly.

The United States, for instance, easily takes first place where big transactions in real estate are concerned. Our Yankee cousins have bought more land for hard cash than any other nation. Private speculations have been quite outdone. America's first bargain in this direction consisted of the purchase of a whole state, out and out.

Some people suppose that England was the only country which had any settlement in North America when the war of Independence broke out. This was not so, however. England held only thirteen of the States which at present form the Union. Spain possessed Louisiana and Florida. The Redskins had the rest.

Napoleon forced Spain to cede Louisiana to him. But he could not send either warships or soldiers to protect it, and he saw that it was practically certain to fall into the hands of England unless he did something. So, in 1803, he offered to sell it to the Yankees. They promptly accepted it, and paid him $10,750,000 "cash down" for it. They made a splendid bargain, for Louisiana could not be purchased now for fifty times the sum given.

$15 A SQUARE MILE.

Besides, if the State still belonged to France, the United States would be in exactly the same position as we are in India—as we have to keep up a great army to defend the Indian frontier, so the Americans would be compelled to spend millions of dollars yearly on an army capable of defending her frontier against possible trouble with her French neighbors.

Uncle Sam's next bargain was the biggest on record. Alaska is a vast tract of country, 580,107 square miles in extent—more than four times as large as Great Britain and Ireland. For a long time it belonged to Russia; but it was never much good to the Muscovites, and in 1867 the Czar let it be known that it was in the market. Great Britain could have had it, but refused to bid. The United States snapped it up for $7,250,000. They got it cheap, paying less than $15 a square mile.

Up to now, it must be admitted, Alaska has not paid, for it is mostly a desert of ice and snow. But it is full of possibilities. It contains the Yukon region next door to our Klondike, so that there is a possibility of millions of gold coming out of it yet. Also the country is fairly rich in seals.

Although there is no record of Britain buying big tracts of territory for cash, she has done a little bargaining. In 1878 the Sultan of Turkey was in deadly fear of being attacked by Russia. Great Britain agreed, if certain circumstances arose, to fight for him. In return he handed over the island of Cyprus. Nominally, the island was to form a base for British troops, so that they could be more readily sent to the Sultan's assistance, if needed, but its transference practically amounted to payment in advance for the promised help.

BRITAIN'S BEST BARGAIN.

The "certain circumstances" have not yet arisen, and we have not fought Russia or any other country on Turkey's behalf. So Cyprus is not yet paid for.

The British Government holds the record of having paid the highest price ever given by a nation for a picture. This was $350,000 given to the late Duke of Marlborough, in 1885, for the "Ansidei Madonna," by Raphael. When his Grace offered the picture for sale every art gallery in the world was anxious to buy, but Britain outbid them all.

Another good bargain was made by Great Britain in 1875. The Suez Canal, which, as everybody knows, is the short cut to India, was constructed by a French company founded by De Lesseps, the shares of which were held by pretty well all the Powers. Britain, though the nation most interested in the conduct of the canal, had at first no real control over its management. In time of war it might even have been closed to her warships and opened to an enemy.

But the largest shareholder was Ismail, the Khedive of Egypt. In 1875 he was on the brink of bankruptcy, and offered his shares, numbering 176,602, for sale. Germany and France would gladly have bought them, but they were forestalled by Lord Beaconsfield, who snapped them up at a total cost of $20,383,110.

This made Great Britain the chief shareholder, and gave her a controlling voice in the great waterway.

The family fortunes of Lord Dudley, the Governor-General of the Australian Commonwealth, had their foundation in a chance customer at the shop of an ancestor in Lombard Street. So, at any rate, says tradition. The story goes that in the reign of the first Charles one William Ward opened a goldsmith's shop in Lombard Street, and soon afterwards was enabled to purchase at a great bargain a quantity of the finest diamonds, which had been offered for sale by a sailor who had just come ashore. Ward's stock of diamonds soon attracted the attention of the Court, and he obtained the custom of Queen Henrietta Maria, who appointed him her jeweller. The rest of the story can be told in a few words. A Lord Dudley of that day being in want of £10,000 came to Ward and asked for a loan. Fortunately or unfortunately, he was able to offer but little in the way of security, and here Ward saw his chance. He had a son, and Lord Dudley had a granddaughter, and, if Lord Dudley would consent to the match, the money should be handed over. This was accordingly agreed upon, and the fortunes of the family may be said to have gone on increasing ever since that date.

Singer Talks

6. The Many Uses of a Good Sewing Machine

¶ There is practically no limit to the variety of work that can be done with a Singer Sewing Machine. Whether for the finest embroidery, the plainest home sewing or the most elaborate tailoring, the Singer is equally efficient.

¶ Every woman takes pride in having these things, but if they be her own handwork, the satisfaction is complete, because her own personality is reflected in every seam.

¶ The woman who uses a Singer may have everything in needlework she can desire—she is better dressed at much less cost; her children are clothed according to her own taste and ideas; she has attractive table linen, and an unending supply of dainty underwear.

¶ Moreover, she is free from the worry and delay which always comes with the use of a "cheap" machine.

Sold only by

Singer Sewing Machine Company

TORONTO 312 Manning Chambers
MONTREAL 533 Board of Trade Bldg
WINNIPEG 364 Main Street

WONDERS OF THE FUTURE

MARCONI PREDICTS STRANGE THINGS NOT FAR AWAY.

Says We Shall Catch the Energy of the Sun and Store it for Our Own Use.

That steamships will run by sunshine is the opinion of Guglielmo Marconi. The inventor of wireless telegraphy has come to America to increase his trans-Atlantic service from a capacity of 5,000 words a day to 20,000. After predicting a great future for wireless telegraphy he said:

"There seems to be a happy fate in the coincidence of scientific discoveries, which on first thought are quite unrelated to each other. The development of the airship, as shown in the astounding performance of Orville Wright's machine in Washington, would seem to have nothing in common with the perfection of wireless communication, and yet, if one looks into the future, the great airships which are to come, sailing at incredible speed and at unforeseen and varying altitudes, could never without the wireless 'speak' each other as ships do at sea and so remain in touch with those safely at home.

LIFE AN EASIER PROBLEM.

"And the airship is certain to come into general use, and that within the lifetime of our generation, not for freight, perhaps, but for people surely. In fact, as I look into the years to come, I am convinced that life will be an easier problem, a more genial function in the scheme of things, than it is to-day.

"Aside from the economy of labor which follows the conquest of Nature's forces, there will be fewer people among whom to divide the benefits. The birthrate will continue to decrease, as I believe it should, at least for the present. With the growth of intelligence among the mass of people there will come a realization of the folly of rearing more children than can be properly fitted to be efficient members of society. Quality, not numbers, will come to be the standard racial excellence, and the present anomalous condition wherein the number of children in a family is inverse ration to the earning capacity of the parents will have disappeared.

"The condition to-day is not one of race suicide, but of social common sense. And if the present enlightenment of the average men and women continues to its righteous turning point there will come an end of congested cities, with their wretched and starving children of the tenements, their crimes, their killing competition and their discouragement of the gentler

ASPIRATIONS OF MEN.

"In all ways, science is more and more studying to perfect the practical comfort and well-being of the world. Of course, there will always be ships upon the seas. The mysterious primeval voice of the ocean will continue its spell over the human imagination. But there will not always be steamships. They will pass the way of their predecessors, and ere long we shall cross the ocean in ships run by electric power. There will be no grime of coal smoke, no sickish odor of stale steam, no blazing caverns in the hold, where human beings with staring eyes and blackened faces sweat their lives away that the pulse of the engines may not stop. The storage battery will take the place of coal and fire and water. Instead of coaling, the great ship will quietly and cleanly renew her batteries at her journey's end, and if coal is used, it will be far from the lines and the noses of men.

"Furthermore, I look for the time when coal will cease to be our only source of energy. In every land men of science are patiently studying the problem of utilizing the energy of the sun—storing it, in fact—so that the generation of electric force may be cheapened by its use to a point where the storage battery on a large scale will be an economic as well as an

ACADEMIC POSSIBILITY.

The wasted energy in coal as now used may in the interval be brought to do its work and so bring about the monster storage battery sooner than we now expect. But, sooner or later, we shall enslave the sun's rays to our uses as we have the other products of his being.

"Ah, yes, life is going to be a better experience for our children than it is for most of us now. In many little ways it will be so. Do you know that in many laboratories they are coming close to letting us see the person who is talking to us at the other end of the telephone connection? And if they can do this, if they can transmit the light waves of images at a distance—and it looks as if science is bound to accomplish it—I am voicing no extravagance in saying that we may yet sit in our homes on a cold winter's night, turn a switch, and not only hear, but see the opera in progress in a faroff building.

"And, going back to my own hobby of wireless communication, I want to say that we shall not have to wait long for the wireless telephone. De Forest and his colleagues are doing great things in that direction."

A man is always willing to confess faults that he thinks he hasn't.

A man would rather give himself away than be sold by a woman.

The more a man talks the less he can be depended on to deliver the goods.

Some women are self-made and some are remodeled by a dressmaker.

Only the choicest selected hill-grown tea leaves are used in "Salada" Tea, giving it a delicious fragrance and delicious flavor.