GREAT PROGRESS IN DEVELOPMENT HAS BEEN MADE

No Science Has Advanced More Rapidly Than Use of Electricity.

EXHIBITS IN MANY CITIES ARE HELD

Show the Wonderful Strides Made in Electrical Appliances in Recent Years —Foreign Visitors at the Boston Commercial Congress Praise Great Exhibit—Important Part Is Taken by the Government.

By Frederic J. Haskin.

No modern science has been so rapidly developed in so many channels of practical usefulness as electricity. This is demonstrated in the numerous electric exhibitions and displays which hae been among the important events of this fall in a number of the larger cities. Some of these exhibitions represent millions of dollars of value and have presented hundreds of thousands of working models adapted to a seemingly endless variety of industries and objects.

One of the most noteworthy of these exhibitions took place in Boston and was a fitting adjunct to the International Commercial congress, which called visitors from every civilized country to the New England metropolis. Preparations for the electric exhibition had been in progress for two years and the result was the highest culmination of electrical skill the New England states could mass. Both the interior and the exterior arrangements won hearty applause from the foreign visitors who were not accustomed to such lavishness in their own countries. The entire building was outlined on the exterior with cables of electric light, while special designs in colors were liberally displayed. In addition, special street lights were provided for several squares to add to the brilliancy of the scene. Inside, over five miles of electric cable lights were used as a foundation for the illumination, not to mention the innumerable decorative designs, many of them being specially arranged for the displays in the different booths.

New York Electrical Exposition.

The New York Electrical exposition, which has just concluded, differed from most of the others held in the country in that it was designed especially to demonstrate the historical side of the electrical industry. This was partly in honor of the completion of the 30 years' central station existence which is being celebrated by one company. One of the opening features of this exposition was the luncheon given in honor of Thomas A. Edison, the father of electric power, who with pardonable pride reviewed the electrical advance of the last three decades. As a part of the exhibit, many of the oldest machines and electrical engines in existence were shown, including the one surviving old and original "Jumbo" which had been brought out of its time honored retirement for the occasion. A model of the old Pearl street electrical station erected in 1882 also was shown.

Important features of this show were the exhibits arranged by the government, which were presented by special arrangement. The bureau of navigation and the electrical school connected with the Brooklyn navy yard took active part. The navy men set up the very newest type of wireless telegraph apparatus with which the first wireless message will be sent to the Panama canal. The canal itself was represented by a large operative model of the Gatun dams, locks and spillways, showing the operation of the gates by electric power. Similar to this, upon a smaller scale, was the model of the electrical machinery operating the Mohawk River dam, which was supplied by the state of New York.

The use of electricity in expert accounting is one that has not suggested itself to many people and yet there were any number of adding machines operated by electricity shown in the electrical exhibitions of the present season. A feature of the government exhibit at New York included that by the bureau of census in which census cards were sorted and tabulated by a wonderful complex machine driven by electric motor. The army signal corps, the bureau of mines, the department of agriculture, through several of its branches, and the coast defense division of the United States army and the National Museum are all employing electrical power in the operation of their various activities.

For Agricultural Purposes.

One of the newest developments in the use of electricity is for agricultural purposes. A New England firm recently equipped a Missionary Farm to demonstrate the many uses to which electric power could be put in connection with the daily work of the farm. On old "Fairfields" near Boston, a complete set of electrical agricultural implements was set up several months ago and the machines have been in actual demonstration since, showing the actual work of the farm. The outfit included 40 large pieces of machinery and innumerable small tools. Among them were an electric truck for hauling farm produce to market, a cider mill, reaper, threshing machine, horse clipper, grain driller, milk tester, bottle washing machine, hay unloader and packer, wood splitter, oat crusher, grindstone, corn sheller and clover cutter. Perhaps the most interesting of all, however, was the electric milking machine, which is a device to be attached to the udders of the fine blooded cows belonging to the farm. This milking machine has now passed the experimental stage and is receiving the hearty endorsement of many of the leading farm experts from different parts of the country. It will be demonstrated at many agricultural fairs during the next month, where it will no doubt so thoroughly show the practicability of substituting electricity for human power that it will become a valuable adjunct to the dairy farm and show many a farmer's wife how to overcome what most persons consider one of the most disagreeable parts of the farm work.

The installation of electricity in the modern home has led to many labor saving devices which the accommodating architect puts in the first plans for a house. One of those most recently adopted is the electric washing machine which may be set up in the home laundry for about $50 and is being installed in the better grade of houses erected by a number of progressive real estate dealers.

Appliances in the Home.

The popularity of electric appliances in the home is so generally acknowledged that a prominent home magazine gives a page of its current issue to the illustration of various electrical devices to be used in the home and suggests their desirability as Christmas presents. Among these are included an electric toaster which may be utilized for several other purposes than toasting bread, an electric motor to be attached to the sewing machine, an electric hot pad to take the place of the hot water bag in soothing an aching tooth or other ailment, a radiator for heating a room, a curling iron heater and an electric iron. The electric iron, by the way, may serve for several purposes. Its top comes off as a lid and in that case it may be made to serve as a stew pan. The possibilities of use for the electric toaster includes popping corn, as well as the toasting of marshmallows. An electric waffle iron is shown in practical demonstration, while an electric metal polisher suggests great possibilities in the way of relief from disagreeable labor.

Perhaps there is no electric convenience being more generally and increasingly used than the electric vehicle, and every week sees new improvements and additions to the numbers of these. In the large cities the horse has been almost entirely superceded by the motor and in many instances the motor power which a year or two ago was supplied by gasoline or steam, is now being furnished by electricity. The difficulties of short charges, sudden exhaustion and kindred troubles are receiving the consideration of experts and are being overcome to a surprising degree. A recently published test of the comparative costs of a delivery operation show the diminished cost of operation to be secured by electric over that of horse power. According to the test of a 1500-pound load the cost per ton-mile was .466 cents for horse power and .276 cents for electric power. In tests of two-ton and five-ton loads the difference was much greater, the cost of electric power being little more than half that of horse power. The speed is greater and the cost of stabling less.

One of the matters to which electrical workers have been giving much attention during the past few years has been the provision of greater precautions for the safety of the men working with electrical apparatus. Special shields are now supplied which protect the linemen from shock in any accidental contact with live wires. From a financial, as well as a humanitarian point of view, their use is becoming generally accepted.

The utilization of electric power for manufacturing purposes is increasing daily. There are now electrical bakeries, electrical irrigating plants and factories of every description which are operated entirely by electric power. The utilization of a single electrical plant for the three purposes of power, heat and light represents an economy which is each day becoming better understood. One of the features of the electrical shows of the season is the reproduction of a sewing machine factory showing the different processes in the manufacture of a well-known sewing machine and all done by electric power.

Another use of electricity which may properly come under the head of illumination is the electric sign which has made such enormous strides in popularity as a means of advertising. In every city there are electric signs to be seen for miles, which not only add materially to the illumination of the streets, but are a decided attraction to the streets in the eyes of the public. Some of these signs are changeable and give a variety of effects. A cat wrestling with bright red silk threads which she cannot break is a model of a type of changeable and apparently "living" electric pictures of which not only every large city, but every small city now boasts some variation. In very truth, this is the electric age.

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Tomorrow—The Smoke Nuisance.
I.—The Crusade for Its Abatement.

Mrs. W. G. M. Allen and son, Mr. Arthur Allen, left yesterday for San Diego, Cal., to spend the winter.

Cottolene

is ⅓ richer than butter

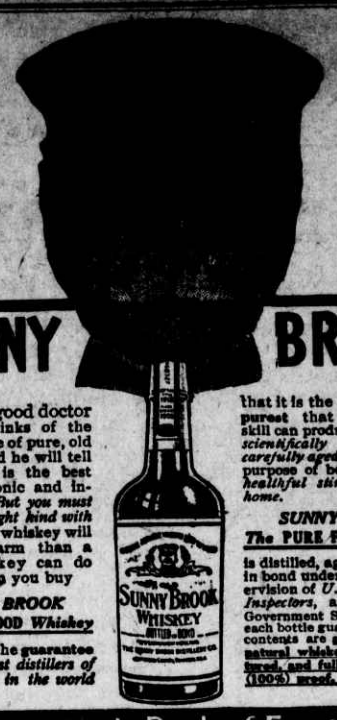
Cottolene is not for table use, but it is the best cooking fat for all shortening and frying. If you are using butter in your kitchen you are paying at least twice as much as necessary to secure the same results with **Cottolene.**

Another point of economy about **Cottolene** — use one-third less than you would of butter or lard.

Cottolene is a clean, pure product, and makes wholesome, healthful, digestible food, because it is a vegetable and not an animal fat.

Cottolene is never sold in bulk — always in air-tight tin pails, which protect it from dirt, dust and odors. It is always uniform and dependable.

THE N. K. FAIRBANK COMPANY



SUNNY BROOK

Ask any good doctor what he thinks of the judicious use of pure, old whiskey, and he will tell you that it is the best sort of a tonic and invigorator. *But you must choose the right kind with care*—a poor whiskey will do more harm than a good whiskey can do good. When you buy

SUNNY BROOK
The PURE FOOD Whiskey

—you have the guarantee of the *largest distillers of fine whiskey in the world* that it is the very best and purest that money and skill can produce—a whiskey *scientifically distilled* and *carefully aged* for the express purpose of being used as a *healthful stimulant in the home.*

SUNNY BROOK
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is distilled, aged and bottled in bond under the direct supervision of *U. S. Government Inspectors*, and the Green Government Stamp that seals each bottle guarantees that the contents are genuine, straight, natural whiskey, properly matured, and full U. S. Standard (100%) proof.

"The Inspector Is Back of Every Bottle"

Northwestern Liquor Association
(Successors to LEO P. GRUNBAUM)
General Distributors Boise City, Idaho

TONIGHT! TAKE A "CASCARET" SURE

No Headache, Bilious Stomach or Constipated Bowels by Morning.

Turn the rascals out—the headache, the biliousness, the indigestion, the sick, sour stomach and foul gases—turn them out tonight and keep them out with Cascarets.

Millions of men and women take a Cascaret now and then and never know the misery caused by a lazy liver, clogged bowels or an upset stomach.

Don't put in another day of distress. Let Cascarets cleanse and regulate your stomach; remove the sour, undigested and fermenting food and that misery-making gas; take the excess bile from your liver and carry out of the system all the constipated waste matter and poison in the intestines and bowels. Then you will feel great.

A Cascaret tonight will surely straighten you out by morning. They work while you sleep. A 10-cent box from any drug store means a clear head, sweet stomach and clean, healthy liver and bowel action for months. Children love to take Cascarets because they taste good—never gripe or sicken.—Adv.

VINCENT ASTOR GAINS CONTROL OF VAST ESTATE

Reaches His Majority and Takes Over the Astor Fortune of $65,000,000 Left by Titanic Victim.

New York, Nov. 15.—William Vincent Astor, head of the American branch of the Astor family since the death of his father, John Jacob Astor, who went to his death on the steamer Titanic on the morning of April 15, 1912, reached his majority today and by virtue of this fact came into full control of the Astor fortune which is conservatively estimated at $65,000,000. When the estate was appraised by experts shortly after the death of Colonel John Jacob Astor, to determine the amount of inheritance tax to be paid, the aggregate value of the estate was placed at between $75,000,000 and $80,000,000. As these figures are official and probably as nearly correct as possible under the circumstances, the amount of the fortune into the possession of which young William Vincent Astor came today, may easily be estimated.

Under the terms of Colonel Astor's will, William Vincent Astor was made residuary legatee. The shares of all other heirs were fixed in plain terms by the will itself. Mrs. Madelaine Talmage Force Astor, the widow, received for life, or until remarriage the income from $5,000,000 and the use of the Fifth Avenue home of her late husband, as well as $150,000 outright. Muriel Astor, a daughter, by Colonel Astor's first marriage, received a trust fund of $5,000,000. A similar trust fund of $3,000,000 was provided for John Jacob Astor III., the posthumous child of Colonel Astor. Other bequests aggregated nearly $500,000. Deducting these trusts and bequests from the estimated total value of the estate would place William Vincent Astor's share at about $65,000,000.

No Astor has ever come into the family fortune at so young an age as William Vincent Astor. His father was 28 before he succeeded, and his grandfather was 60. His great-grandfather, John Jacob III., was 53, and his father, William Backhouse I., was 56.

Was a Frail Baby.

William Vincent Astor was born in the old Astor homestead on Fifth avenue and Thirty-fourth street on Nov. 15, 1891, five months before his grandfather died and his father became head of the house. He was so frail a baby that only unremitting care kept him alive. He lived the loneliest childhood because of this and, when other children romped in the open air, he sat over a toy piano in a nursery to which no playmates ever came. Servants saved him every exertion, nurses were always with him; physicians awaited calls to him that had precedence over all others.

Six years of this unceasing attention brought Vincent Astor to a degree of health it had been thought he never could attain. Newport was astonished to see him come there five years ago and take an active part in the sports of the summer colony. It was still more astonished at his great interest in automobiling. He drove his own car with daring skill, although he was then only 19 years of age. His father, wishing to strengthen the boy's health by keeping him out of doors as much as possible, encouraged his fondness for automobiling and yachting, but although Vincent Astor continued to retain a certain amount of interest in the sailing sport, he devoted the greater share of his interest to automobiling.

Submitted to Operations.

As a boy of 12 or 13 William Vincent Astor passed through severe sicknesses and had to undergo several surgical operations. Every year he was taken to St. Moritz or the Riviera on account of bronchial trouble. The constant care required by his delicate health retarded his education to some extent. He was sent to Eton, but soon returned because the English boys at that famous school made life a burden to the rich young American. He went through a course at St. George's, at Newport and then entered Harvard university for a three years' course. He intended to take his bachelor's degree and then study law, but all these plans were changed through the death of his father and the change in conditions caused thereby.

During his college days William Vincent Astor made an attempt to go in for athletics and was assigned a place in the freshmen crew, but soon withdrew and confined himself to a life of luxury and daring automobiling. He became noted for his speeding and repeatedly came in conflict with the speed laws.

It is not surprising that William Vincent Astor is considered the greatest catch by the mothers of marriageable daughters. There have been a number of rumors of engagements of the young man to various society girls and others, but so far there seems to be no evidence that the young man has formed any attachment likely to lead to his marriage in the near future.

Dentist, Dr. Carpenter, Idaho Bldg.

Con W. Hesse, Watch Inspector of O. S. L. for 16 years. There's a reason. Adv.

We have repaired over 25,000 watches. Why?
CON W. HESSE, Jeweler. Adv.

The Lion Tamer's Revenge
Special Two-reel Feature.
AT THE ISIS THEATER.
A Thrilling Story of Love, Jealousy and Fiendish Revenge.

COST OF ELECTIONS IN IDAHO THIS YEAR

While there is no official data, it is probable that the primary and general elections of this year will cost the 27 counties in the state close to $180,000.

The figures are based on those of Ada county just totaled by the county commissioners and show a total expense for the election last Tuesday of $7528.61. This includes the pay for the election judges and clerks, the books and records, the ballots and all other election supplies.

The records of the commissioners show that a force equal to a squadron of cavalry was employed for the day, a total of 376 persons at work in the various election offices.

Highland precinct holds the record for expense as it was figured that each vote in that district cost the county $3.70. Thirty-two of the 36 precincts had a dozen persons on duty either as counting judges or as election judges and, in addition, each polling place was given one constable in order to maintain peace and to see that no work was done within the prohibited district.

If the other counties of the state have one-half of the expense that has been charged against Ada for primary and general elections during the last year, the total will run close to $180,000. The number of employes apparently necessary at a poll in order to get in the returns and the general expenses of holding an election for any purpose run the amount high over the $100,000 mark.

All our watch work absolutely guaranteed.
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His Rise to Power

BY HENRY RUSSELL MILLER

Read of This Stirring Battle Against Civic Evils That Are, and For the Honor and Justice That Should Everywhere Prevail

This Great Novel by the Author of "The Man Higher Up" Has Been Secured for Use in This Paper.

The First Chapters Will Appear Next Sunday Morning