

**SAFETY AGAINST ELECTRIC FIRES.**

We admit that in England and Germany more precaution is taken; generally speaking, work is done well or not at all. Now, for the solution of the matter; the case is diagnosed, what is the cure? It is evident that the foundation corner-stone of absolute safety against electric fires must start in insulation of electrical conductors. After making an exhaustive analysis of every insulated wire made in the United States, in England, Germany and France, and a knowledge of the manner in which they are made and handled, from the drawing of the copper to the finish of each and the uses for which they are designed, I find that on this fundamental point there hangs a tale. Not 50 per cent. of the wire that goes on the market to-day is fit for use. Many of our electric light wires are carried into storehouses containing valuable merchandise by a tar or wax covered wire, with the poorest braiding that the unskilled hand can do, hidden from immediate view by the aid of wax used to give a finish under the polishing machine. Next we find the old underwriters' wire with its "white locks" crawling in because "it's cheap." One word for the underwriters' insulated wire for inside equipment. It has been, when properly made, the safest wire for inside work, but it has not the lasting qualities required for a number one wire.

We must have good insulation first; then the wiremen must handle the wires carefully, they must take time, do all their work honestly, all joints must be made and covered by a competent man, and, above all, a genuine electrician who knows how the work should be done should lay out the work and inspect it. As the wire enters the building it should go through a fire-proof tube. If wire is laid through concreted spaces the owner of the property had better pay a few dollars for lead pipe rather than suffer a loss.

I find that there is, with all the applications at hand, some cause for criticism yet with the management of the dynamo. Switches for electric light and power need as much attention as the switches of the railroads to prevent accident. Again, great reliance is placed on fuses, which in many instances are over-estimated as to their capacity and safety. It is the anxious hope of insurance companies that a genuine fire-proof insulation will be found, that when properly put up can be relied upon.

My opinion is that there is absolute safety from electric fires if the conductor is sufficiently large for any required current; that the conductor is carefully covered with a first-class seamless rubber insulation first, next to the wire, then a second covering over the rubber of a refractory element or compound, then carefully braided and handled in putting it in place, so that no abrasions are made, and all joints carefully insulated, that all entrances and exits are through porcelain tubes. The day is not far distant when all wires will be lead encased for concealed work in buildings.—C. T. Snedeker, in the *Electrical World*.

**THE NEW YORK LIFE.**

The trustees and officers of the New York Life Insurance Company celebrated the fiftieth anniversary of the company's organization, on April 10th, at the Lawyers' Club, New York. It is a coincidence that the company's annual election of trustees and board meeting fell on the same day and month, April 10th, that the company was incorporated, half a century before. About fifty guests were present, and very nearly half the number have been connected with the company over twenty-five years.

Speeches were made by president McCall, Mayor Strong, Major Livingston Mims, of Atlanta; Mr. William H. Appleton, trustee since 1852; Mr. Wm. A. Booth, trustee since 1863; Mr. William B. Hornblower, Mr. William L. Hill, of St. Louis; Mr. J. Sanchez and Mr. David Burke, of Montreal, Canadian trustee of the company.

Letters were read from Mr. Pierce, superintendent of insurance for the State of New York; Mr. Alexander G. Hawes, manager for the Pacific coast and connected with the company for twenty-five years; Mr. Spencer S. Benedict, of Sioux City, Iowa, the only surviving trustee of the board of 1845; Mr. James B. Wallace, of Brooklyn, who holds the only policy in force issued in the year of organization; Col. W. B. Hamilton, of San Antonio, Texas, an active agent for thirty years, and Mr.

William E. Ingersoll, of Paris, foreign director general, attached to the company since 1874.

The following is quoted from the address to Mr. John A. McCall, president of the company:—

**RESUME JANUARY 1, 1895 — RECEIPTS AND EXPENDITURES FROM ORGANIZATION.**

Received from policy-holders.	\$359,451,763	12
Received from all other sources	88,281,236	62
<b>Total</b> .....	<b>\$447,732,999</b>	<b>74</b>
Paid policy-holders	\$190,993,559	43
All other payments	94,727,669	38
<b>Total</b> .....	<b>\$285,721,228</b>	<b>81</b>
Balance—Assets on hand December 31, 1894.....	162,011,770	93
<b>Total</b> .....	<b>\$447,732,999</b>	<b>74</b>

**BULLION HOLDINGS IN EUROPE.**

The following indicates the amount of bullion in the principal European banks last week and at the corresponding date in 1894. The figures are received weekly by cable by the *Commercial and Financial Chronicle*:

<b>BANK OF ENGLAND.</b>			
	Gold.		Silver.
April 11, 1895.....	£36,653,356		.....
" 12, 1894.....	31,218,075		.....
<b>BANK OF FRANCE.</b>			
April 11, 1895.....	83,006,377	£49,388,173	
" 12, 1894.....	68,842,924	50,789,229	
<b>BANK OF GERMANY.</b>			
April 11, 1895.....	36,737,388	15,005,412	
" 12, 1894.....	31,919,250	10,639,750	
<b>AUSTRIA-HUNGARY.</b>			
April 11, 1895.....	17,794,000	13,681,000	
" 12, 1894.....	10,345,000	16,317,000	
<b>NETHERLANDS.</b>			
April 11, 1895.....	4,276,000	7,030,000	
" 12, 1894.....	4,335,000	7,078,000	
<b>BELGIUM.</b>			
April 11, 1895.....	3,420,667	1,710,333	
" 12, 1894.....	3,128,667	1,564,333	
<b>SPAIN.</b>			
April 11, 1895.....	8,004,000	12,370,000	
" 12, 1894.....	7,918,000	8,162,000	
Total last week..	£189,891,788	£99,184,918	
Corresponding week 1894.....	156,407,202	96,417,873	
Week ending April 4, 1895.....	191,538,887	99,392,826	
Corresponding week 1894 ..	155,828,754	96,396,443	

**BANK STATEMENT.**

The weekly statement of the New York City Associated Banks, issued on Saturday, April 13th, showed an increase in reserve of \$992,850. The banks now hold \$14,922,775 more than the legal requirements. The changes in the averages show an increase in loans of \$584,800, an increase in specie of \$915,800, an increase in legal tenders of \$829,100, an increase in deposits of \$3,008,300, and an increase in circulation of \$57,300.

The following is a comparison of the averages of the New York banks for the last year:

	April 13, '95.	April 14, '94.
Loans.....	\$481,023,100	\$456,939,400
Specie.....	65,387,000	100,099,600
Legal tenders ..	75,493,400	121,608,000
Deposits.....	503,830,500	563,506,400
Circulation.....	13,141,300	11,042,300

The following shows the relation between the reserves and the liabilities:

	April 13, '95.	April 14, '94.
Specie.....	\$65,387,000	\$100,099,600
Legal tenders.....	75,493,400	121,608,000
<b>Total reserve</b> ....	<b>\$140,880,400</b>	<b>\$221,707,600</b>
Reserve required ag't deposits.....	125,957,625	140,876,600

Excess reserve above legal requirements.. \$14,922,775 \$ 80,831,000

The following table gives the surplus reserve at this date for a series of years:

1895.....	\$14,922,775	1890.....	\$ 452,000
1894.....	80,831,000	1889.....	6,065,550
1893.....	11,072,550	1888.....	10,870,425
1892.....	15,788,500	1887.....	4,488,650
1891.....	5,612,960	1886.....	14,722,650

**THE CANADA COMPANY.**

The annual general court of the proprietors of the Canada Company was held on March 27th, at 1 East India avenue, London. Sir Robert Gillespie presided, and, in moving the adoption of the report, said he thought that, in face of the prolonged adverse condition of trade and the scarcity of money in the Dominion of Canada, the transactions of the past year could not be considered as unsatisfactory. They had disposed of 13,274 acres during 1894, giving as a general result an advance of 11 per cent. on the valuation of 1886. Taking the average of the eight years since 1886, during which time they had sold 76,000 acres, he found they had realized 75s. an acre, as against an average annual valuation in 1886 of 61s. 4d. an acre. They had also been able to lease, with and without the option of purchase, a considerable extent of the company's inferior lands in Eastern Ontario, as well as reclaim lands by the drainage of Lake Burwell.

He reminded the proprietors that the whole of their capital had been returned, with the exception of £1 per share, which was provided for by an investment in Metropolitan stock, and that they had a surplus property which, according to different valuations, was worth between £573,340 and £850,456. The year 1894 showed a further reduction in the expenses of £900, the total decrease since 1890 being £3,296. He then moved the adoption of the report and accounts, which showed that in 1894 two dividends, amounting together to £1 6s. per share, were paid, and that on December 28 last a further dividend of 10s. per share was declared. Mr. G. P. Currie (deputy chairman) seconded the motion, which was adopted.

**THE STEAM ENGINE AND FUEL.**

In calm and drought the windmill and the water wheel must come to rest, but the throb of the steam engine's mighty pulse remains undiminished. If its fuel does require to be brought to it, we have it within our power to make the supply regular, rendering the continuity of its action thoroughly reliable. Unlike these simpler motors, moreover, it is not chained to the source whence it derives its power, but may be stationed wherever required; or, taking its supply upon its back, it can make off with the speed of the wind, carrying man and his commerce over land and sea.

The widespread distribution of fuel and water also renders the steam engine ubiquitous. It has opened for itself a door of welcome in every land and climate where fuel of any kind is found, or to which it can be conveyed, and it is equally efficient on the surface of the earth or in the depths of the mine.

In view of the labor involved in procuring fuel, economy in its use is important. About a century ago, when the improvements in the steam engine had so far advanced as to render its employment profitable, it was found even then, in its most perfect form at that time, to require twelve pounds of coal per hour for the development of each horse power, and in the inferior engines of that period it might have taken double this quantity. Since then the steam engine has been undergoing a steady process of evolution, and in the present day an engine which requires over one pound and a half of coal for the development of the same power is considered wasteful.—*Chambers's Journal*.

—The Chaudiere mills, says the *Ottawa Journal*, will open as soon as the ice clears from the river. Gangs of men are at work in all the mills getting the machinery in shape to begin operations about the middle of this month. There is a good stock of logs on hand at all the mills, so there will be no delay this spring on account of shortage of logs.

—A singular accident occurred on April 10th at the Manchester Ship Canal. The steamship "Harold" entered the Latchford lock of the canal at full speed. She smashed the gates, passed through and dropped sixteen feet into the water below. The gates weigh 300 tons. One sank and the other hangs across the lock. The attendants closed and bound with hawsers the upper gates, thus preventing the disaster which otherwise would have resulted from the 16-foot difference of the water levels. The "Harold" was much damaged by her collision and her plunge.