

which drops from locomotive wheels, or grease in quantity from any other source, combustion might well take place spontaneously. There are instances, however, of combustion originating on the heating of wooden materials.

Respecting the fire hazard of steam heating, an insurance writer says:—"It is a well-known fact, that the use of steam pipes for heating purposes entails an extra fire risk, especially in factories where inflammable materials are liable to be brought into contact with them, while the general subject of reducing this risk to a minimum point, and at the same time of providing properly for the extra hazard assumed by the companies, has been discussed. Various methods of securing safety have been devised, some of which are of unquestioned merit—such for instance as the plan of leaving spaces around the pipes where they pass through wood, also that of using cast-iron supports, etc." A Boston paper—the *Commercial Bulletin*, in discussing the subject, says: "Two widely different schemes have been proposed. One plan, which has received the most favor from underwriters, is to raise the heating pipes to the top of the rooms, or at least six or eight feet from the floors, thus removing them from the alleys, which are sometimes quite narrow, and gaining room thereby, which will allow the boxes for waste, bobbins, etc., as well as the overseers' benches and the wardrobes, to be pushed back solid against the walls; and, in cases where the alleys are very narrow and the operatives have occasionally burned themselves against the pipes, this evil will be removed. In England, steam-pipes are almost universally hung from the ceiling. A well-known Manchester spinner, who looked into the matter at the request of Mr. Atkinson, writes to that gentleman strongly endorsing the custom on other grounds expressly than those of fire protection. He maintains that, in a large room, the heat can be more generally diffused by hanging the pipes from the ceiling than by placing them against the walls."

The Chicago *Tribune* describes how a propeller the "Colorado," left that port some days ago for a voyage to Buffalo:—"She drew fourteen and a half feet of water forward, and no one knows how much aft, as the sternpost was submerged to the fantail. The wale-stroke amidships dragged in the water, and that, too, in view of the severe norther which passed over the lakes immediately after, and the suddenness with which it sprung up." If this be not dangerous overloading, we do not know what is. And if the insurance companies choose to underwrite vessels so laden, (at the beggarly rate of 15c. per \$, less ten per cent., as the *Tribune* puts it) those who have authority should not permit human life to be so recklessly endangered.

Comparative losses by fire in the United States during five past half-years are thus given by the *Chronicle*.

1876 first six months.....	\$36,721,100
1877 do do	59,548,600
1878 do do	34,793,900
1879 do do	50,873,300
1880 do do	40,626,800

In the matter of the spontaneous combustion of silk. The N. Y. *Monitor* is promised an article from the pen of an eminent chemist of Philadelphia, upon the manufacture and adulteration of silk, wherein it will probably be shown that with one third of pure silk there are two thirds of foreign substances, the chemical qualities of which will doubtless account for the mysterious fires which take place in this staple article, and the consequent unprofitableness of insuring it. It is not improbable that a great many losses have been paid for the "proper vice" of silk which underwriters supposed originated from some outside or accidental cause.

The English law is not a respecter of persons.

After a lengthy trial, the general manager, auditor and four of the directors of the Northern Counties of England insurance company were convicted at Manchester on July 12th last, of fraud and conspiracy in falsifying the accounts of the company. The general manager was sentenced to eighteen months imprisonment at hard labor, the auditor to twelve, and four directors to six months each.

There has been a dissolution of the firm of Messrs. Stephens & Foster, Montreal, agents for the London Assurance Corporation. Mr. Romeo H. Stephens retires, and Mr. C. C. Foster now occupies the position of sole agent for the Company in Canada.

LIFE INSURANCE ITEMS.

The effect of bad drinking-water upon the health of a community is shown by a recent investigation at North Adams, Mass. Engineer Locke made a map of the town, indicating by red dots every house in the town and on the roads out of it, where there was a case of sickness, and by small circles every house that had escaped. Afterwards he drew the line of the water-pipe on his map, and everywhere the red dots stop with the pipe and follow its course. He cites numerous instances to prove that the water was the sole cause of the trouble, and shows that nearly everybody who was pointed out as not using the town water, although sick, had been in the district and drank the water. He locates the impurity in the old mill-dam through which the water passes, and says he found it full of decaying vegetable matter which gave forth an offensive odor perceived at some distance from the pond. That, he thinks, was sufficient to cause an outbreak, in connection with peculiar weather.

Longevity, and specific mortality amongst males of certain ages, is thus dealt with by Mr. T. A. Welton, in a paper read before the Statistical Society of London. "1. I find that while both sexes, especially females, have experienced a diminished mortality during many years past at ages under 25, there has been an increased death-rate amongst males at the ages from 35 upwards, if not commencing earlier, which has raised male mortality of those ages, not only far above the standard of 1856-60, but even higher than the unfavorable rates which prevailed in 1846-50. A similar tendency to increase is observable in female death-rates at 45 and upwards, but it is much less powerful than that affecting male rates. 2. It appears that in consequences of these changes the probability of attaining a high age has diminished in the case of males, but has increased in the case of females, so that a tendency towards an excess of female population arising is stronger than formerly. A national life table based on recent data would, consequently, deviate considerably from Dr. Farr's life table No. 3. 3. The changes in question seem to have progressed step by step without much interruption, at all events since 1856-60. "The particular diseases to which the increased numbers of male deaths at ages 35 to 65 were attributed in the Registrar General's tables, appear to have been mainly lung disease (bronchitis, etc.) heart disease, dropsy, brain disease, disease of kidneys, and cancer. The ordinary fatality resulting from these diseases in medium or favorable years is there shown to have risen considerably."

Whatever criticisms may be justly levelled against the old time methods of life insurance management, there is small reason for complaint on the part of a good many thousand families to whose needs the system has ministered during all these years. When we come to consider that, of all the premiums paid to the companies, not much less than 70 per cent has been returned to policy holders, on the average,

in one form or another, without in the least prejudicing the solvency of the companies as to future claims on unmatured contracts—it seems reasonably clear that the life insurance system possesses the essentials of usefulness and permanence.

Mr. William H. Bulkeley, late vice-president of the Ætna Life Insurance Co. of Hartford, and brother of the president, Morgan G. Bulkeley, was nominated for lieutenant-governor of Connecticut by the republican convention in that State. Mr. M. G. Bulkeley was, a few months ago elected Mayor of Hartford, as well as re-elected President of the Ætna Life.

INSURING CHILDREN.—I had occasion to go through a large tenement of the worst class, swarmed with children and reeking with horrible odors. On one of the landings I met a young man who was writing something in a memorandum book. Half a dozen women were talking to him at once, and several children seemed interested in what he was doing. Being a little curious to know his business in the place, I waited at the door till he came down, and asked him. He answered promptly that his business was to insure the children. He represented a company (naming it) he said, which made a specialty of insuring the lives of children in tenement houses. The company did quite a large business, too. The risks taken were generally small—from ten to twelve dollars on each child insured. The premium was payable weekly, and ran from five cents to twenty cents a week. The company had several canvassers employed going from house to house in the tenement quarters. When a child died the insurance money was promptly paid. It was not much, but at such events it helped the parents to bury their child. If the parents failed to keep up the weekly payments of premiums, of course the policy lapsed. As the mortality among children, especially in tenements, is very great, I thought the business of insuring their lives could not be profitable, but the young man said the company was doing very well, and had already made a good deal of money.—*New York Letter*.

FLUCTUATION OF PRICES.

The London *Economist* of a late date contains a table of prices of leading commodities, which shows that the English market has been subject to about as violent fluctuations as the American during the last twelve months. The widest fluctuations in that market were on Iron, Wheat, Tea, Beef, Sugar and Copper, while the narrowest were on Wheat, Coffee, Silk and Saltpetre. The decline, since the highest prices on the former were reached, is from 28 to 45 per cent., on the latter 15 to 22 per cent., with an average decline of 27 per cent., from the highest prices. Comparing values a year ago with those of the present time, the London paper gives the following statement of the lowest prices of the same articles during the last half of 1879 and their prices on the 26th of last month, with the percentage of advance or decline:—

Articles.	Lowest	June 26, '80.	Change.
	2d	2d	d.
Scotch Pig Iron.....	40	48	9.00 adv. 22.5
Coals.....	15	14	6.00 adv. 4.0
Copper Chili.....	53	60	10.00 adv. 13.2
Wheat.....	42	44	8.00 adv. 19.0
Beef, inferior.....	2	3	0.00 adv. 50.0
Beef, prime.....	4	5	0.00 adv. 25.0
Cotton mid.....	6	0	11.00 adv. 183.3
40 mule twist.....	0	9	0.00 adv. 0.0
Wool, S. down.....	10	15	0.00 adv. 50.0
Sugar, W. Ind.....	16	0	21.00 adv. 131.2
Coffee.....	63	0	2.00 adv. 3.2
Tea, common.....	0	7	41.00 adv. 102.4
Tallow.....	35	0	27.00 adv. 77.1
Saltpetre.....	24	0	21.00 adv. 87.5
Hemp, Manila.....	26	0	15.00 adv. 57.7
Silk, cossim.....	15	0	18.00 adv. 20.0
Jute.....	15	0	18.00 adv. 20.0