miums. Occasionally an individual is found foolishly trying self-insurance, oblivious of the average principle, which would enable a company to pay for his property if burned up, whereas carrying singly his own risk, a fire inevitably must mean loss to him without remedy. An excellent editorial appeared recently in the *Insurance Observer*, our London contemporary, on "His Own Insurer," which well punctures this self-insurance fallacy, and from which we quote a portion. After illustrating the principle of combined experience with a large number of persons as against individual experience in life insurance, the *Observer* goes on to say :—

What is true of life assurance is equally true with regard to insurance against fire. One risk cannot be advantageously insured by itself; and the same rule applies proportionately to any small number of risks. Let us suppose, by way of illustration, that a merchant insures himself for £1,500 on the contents of his dwelling house, £5,000 on the contents of his warehouse, and £1,500 on the building of three houses, all distinct risks; and that the rates of premium which he sets aside to cover the risks are 2s, 5s. and 1s. 6d. per cent. respectively. He will thus have in readiness for an emergency a sum of £15 2s. 6d. in the first year, which will multiply according to the number of years for which the experiment continues. It is a contingency to be reckoned with that a fire in his dwelling may destroy goods to the value of £100; and it will take more than six and a half years' premiums to pay for it. It is equally possible that one of his three separate houses may be damaged to the extent of £200, absorbing 13 years' premiums. And it is still more probable that he may lose to the extent of £1,000 by a fire in his warehouse, by which nearly 70 years premiums would at once be engulfed. Now, supposing this merchant could pretend to an absolute certainty of immunity from losses to the extent assumed for 140 years, he would then, and not till then, be prepared to meet them out of his insurance fund. And it is to be borne in mind that, in this illustration, we have assumed only partial loss. It is thus evident that, in order to bring an insurance scheme within measurable distance of profitable working, it must embrace a large average of independent risks.

THE MUTUAL LIFE OF NEW YORK.

The annual report of the Mutual Life for 1892 shows that the company still leads all other life insurance institutions in the world as regards volume of assets. Its fifty years of life have been years of steady accumulation, and though during that time it has paid to policyholders or their beneficiaries nearly $170,000,000 for death claims and endowments, and about as much more in dividends, surrender values and annuities, it begins the record of 1893 with $175,084,157 of solid assets, a gain of $15,577,018 in a single year. After paying to policyholders over $19,000,000; for expenses of all kinds $7,419,611 ; and providing for an increase in the reserve of $12,212,745, bringing that item up to $159,181,067, the company holds a surplus over all liabilities of $15,168,234. This is an increase in surplus during 1892 of $3,137,267, or more than the entire income of many good companies. The total income of the Mutual Life was $40,238,865, and the total disbursements $26,806,143, while the net increase of insurance in force was $50,295,925, swelling the total in force to $745,780,083. All the transactions of the company run to big figures, the full significance of which is not easily realized by a casual reading. The following comparative record for a few years will show more clearly the rate of progress which has been made by this great institution :—

YEAR.	Insurance in force.	Total Income.	Total Assets.	Total Surplus.
1885.....	$368,981,441	$20,214,954	$108,908,967	$5,012,634
1886.....	393,809,203	21,137,177	114,181,963	5,643,568
1887.....	427,628,933	23,119,922	118,806,852	6,294,442
1888.....	482,125,184	26,215,932	126,082,154	7,940,063
1889.....	565,599,934	31,119,020	136,401,328	9,657,248
1890.....	638,226,865	34,978,779	147,152,961	9,981,233
1891.....	695,753,461	37,634,735	159,507,139	*12,030,967
1892.....	745,780,083	40,238,865	175,084,157	*15,168,234

* American experience, 4 per ce

These figures tell their own story in outline only; for their full meaning, read in the light of daily events, account must be taken of the constant watchful activity of half a score of able and trained minds planning the methods and skilfully directing the forces by which such results are made possible. Superior ability at the home office, of which President McCurdy is the worthy exponent, naturally points to the employment of the most capable lieutenants, and such the managing agents in the various fields are known to be. Canada is no exception to the rule, as the very large and constantly increasing business of the company here shows. Among its best representatives may be mentioned Mr. Fayette Brown of Montreal, whose ability as a manager and whose worth as a citizen is widely known and generally recognized.

FIRES CAUSED BY STEAM PIPES.

We find in the *Spectator* an important communication on the above subject from Mr. C. T. Aubin, a civil engineer of Philadelphia, who states clearly, as an expert observer, just what fire underwriters have contended for, viz., that a good many fires originate from steam pipes coming in contact with wood. Property owners of course stand by the declaration of their engineers, who for their own sakes are interested in shielding themselves from blame for low water in the boiler and the resulting overheating of pipes. As Mr. Aubin points out, the engineer in charge is ready to demonstrate with tables in hand that 100 pounds pressure generates only 300 degrees of heat, and he is ready to declare that the pressure indicated by his gauge is nowhere equal to produce a dangerous degree of heat. We subjoin a portion of Mr. Aubin's testimony on the subject, which is well worthy of attention :—

Several theories have been advanced as to the probable cause of steam pipes igniting wood. One, that the constant heating has carbonized it, and as carbon has an affinity for oxygen, corrosion takes place and ignition ensues. Another theory, published some time ago in *Power*, attributes the result to the same cause, but by the corrosion of the steam pipes. None of these theories are corroborated by the authority of men who have spent a lifetime experimenting on this subject. In 1886 the subject came up for discussion in a civil engineers' club. The president requested its members to make a thorough investigation of the matter, and to present papers upon the subject at subsequent meetings. The writer conducted a series of experiments, and read a paper upon the result of his investigation to the club, which was accepted and ordered printed in their monthly issue. The writer, in