may cause the acetylene to ignite spontaneously in contact with air, and both on combustion give rise to obnoxious products. When water acts upon carbide of calcium much heat is liberated; so that if little water were added to much carbide the mass might become red hot, and if this happened the acetylene formed would be ignited or decomposed. A suitable form of acetylene generator must therefore be employed. In most of the generators made at present, either water is allowed to drip slowly on the carbide, or the carbide is dropped into a large volume of water. In generators of the first type there must be elaborate cooling arrangements to keep down the heat evolved in the formation of the acetylene. The second method is the best, for no external cooling is necessary, and, moreover, the gas is purified by bubbling through the water. The generator, reservoir and service pipes must be constructed in such a way that the pressure in any part of the apparatus does not exceed a few inches of water. An Order of Council has declared acetylene to be an explosive within the meaning of the Act, when subjected to a greater pressure than 20 inches of water above that of the atmosphere (*i.e.*, about 1 1-20th atmosphere); hence the pressure in any part of the generating, storing or distributing apparatus must never exceed this limit at any time. Acetylene requires to be burned at a somewhat higher pressure than coal gas, and therefore particular attention must be paid to the gas fittings in order to prevent leakage and the consequent formation of the dangerously explosive mixture of acetylene and air. According to some authorities, no copper or brass should be used in the fittings, because, under certain conditions, acetylene is capable of forming a highly-explosive copper compound; but probably there is little chance of this happening if carbide of the best quality is used, so as to obtain the gas in a state of comparative purity. Liquefied acetylene should not be used under any circumstances, and the same may be said of the compressed gas, although it appears that mixtures of acetylene with proportionately large quantities of such gases as hydrogen, marsh gas or carbonic oxide may be compressed, and these used without danger of the explosion of the acetylene. Generally, it may be stated that if due attention is paid to the points mentioned, there should be little or no more risk in using acetylene than in using coal gas.

Everything published to date about this new illuminant tends to prove that when it comes into general use fatalities will follow. At all events, insurance men cannot do better than watch the introduction, and study the dangers of this new gas.

THE PIONEER POLICY HOLDER.

The Rev. T. De Witt Talmage preached a sermon once upon the crime of not insuring, in the course of which he observed that Joseph was president of the first life insurance company the world ever saw. "Life insurance," declared the simile loving divine, "is as old as the corn-cribs of Egypt."

Dr. Talmage was unfortunate in his selection of an insurance archetype. He declared in the sermon referred to that Joseph and Pharaoh organized the first life insurance company. They may have, but the organization under review was purely a scheme of land-grabbing without any flavour of life insurance in it at all. Joseph supplied the "scheme," and Pharaoh the capital. Undoubtedly between them they prevented a great deal of suffering in ancient Mizraim, but for that service what did they ask and obtain? All the money and all the cattle and every foot of arable land in Egypt, except what belonged to the priesthood, and could not be confiscated. Not only that, but they managed to purchase the people with the very grain they had grown by their own labour in their own fields, and they remained the peons of this "original life insurance company" until the dynasty of the Shepherd Kings was scattered abroad over the whole earth! Life insurance company indeed!

The late Sheppard Homans, one of the greatest actuaries the business of life insurance has yet produced, has told us that life insurance—the theory of probabilities, had its origin in a game of cards, while recently the Rev. Frank Albert Domer, of Youngstown, Ohio, preached an eloquent sermon to a local fraternal body in which he declared that God was at the head of the first life insurance association and Noah was the first policy-holder! "While the vast majority neglected to provide against approaching calamity, Noah made careful provision, and when other families were suffering, his household was safe. The benefits accrued only to the families of those who entered the ark."

Mr. Domer took for his text Hebrews 11. 7., and further declared that Noah made this provision for the safety of his family because he was "warned of God of things not seen as yet." "The flood," Mr. Domer assured his hearers, "was still a thing of the future. There was no sign or indication of any such occurrence. There was no cause for present alarm and yet by faith in God and moved by fear of the impending danger, of which he had been warned, Noah paid premiums for a hundred and twenty years that when death and destruction did come his household might be safe!"

Sermons such as these may do no great harm, accuracy not being a prime necessity in a theological discourse upon the origin of a great benefaction. But making all due allowance and margin, granting all poetic and other license to Mr. Domer, some of his figures of speech are far fetched. First: Noah was over five hundred years old before Shem, Ham and Japheth were born, and six hundred years old at the time of the flood, consequently he "paid premiums" less than a hundred years. Second: Noah was commanded to build the ark; he had no choice in the matter. Third: What would have been the use of the majority attempting to pay premiums? They were doomed. "All flesh wherein is the breath of life from under heaven and everything that is in the earth shall