

tal, amounted to \$2,178,838, it will be seen that the surplus to policyholders amounts to \$294,676. The net surplus over all liabilities, including capital, is \$232,176, and presents a handsome gain for the year of \$75,641. As an additional guaranty to policyholders, the company has subscribed capital subject to call amounting to \$437,500. A clear view of the progress made by the Sun Life will be gained by a glance at the following record for the years named :

Year.	Income.	Assets.	Life Assurance in force.
1876	\$102,822.14	\$265,944.64	\$2,214,093.00
1880	141,402.81	473,632.93	3,881,479.14
1884	278,379.65	837,397.24	6,844,404.04
1888	525,273.58	1,436,816.21	11,931,316.21
1889	563,140.53	1,795,822.72	13,337,983.08
1890	889,078.87	2,473,514.19	16,759,355.92

It is readily seen from the above that the income in 1890 exceeded the total assets of six years ago ; or, deducting from 1890 the \$187,906 received from the Citizens', there remains \$701,173, as the income on the company's ordinary business, and amounting to more than a quarter of a million dollars in excess of the total assets in 1880, ten years ago. The policyholders of the Sun are to be congratulated on the excellent condition of their company, whether considered with respect to its healthy and vigorous growth, the solid character of its assets, or the amount of its surplus, as well as for the liberal character of its policy contracts and the safety of its varied plans. The company's directors are soon to find themselves "at home" in the artistically planned and carefully constructed new office building in this city approaching completion—a home worthy of the company and demanded by its fast growing needs, and pronounced generally as a judicious investment. Under the management of the president, Mr. Robertson Macaulay, aided by the accomplished secretary and actuary, Mr. T. B. Macaulay, and a prudent board of directors, increasing success may be looked for in the future, for which success the record of the past furnishes a substantial and reasonably sure guarantee.

THE LENGTH OF LIFE.

The following extracts are from an interesting paper on "Longevity," read before the Englewood (N. J.) Literary Society, by Mr. Sheppard Homans of New York :—

We read in the 5th chapter of Genesis: "And all the days that Adam lived were 930 years; and he died." Also: "All the days of Seth were 912 years; and he died." The ages of five other descendants of Adam are then given, each of whom lived more than 900 years, and then we come to Methuselah, the oldest age on record. "And all the days of Methuselah were 969 years; and he died."

After the flood the ages recorded of the patriarchs were much less. Abraham died at the age of 175, Isaac at 180, and Jacob at 147; and Sarah, whose age is the greatest recorded in the Bible of a female, died at 127.

In modern times we have the records, more or less authentic, of many persons who have attained extreme old age. Mr. James Easton, of Salisbury, England, published in 1799 a list containing the names of 1,712 persons who had reached the age of 100 years and upwards. In 1826, Mr. Charles Babbage collected 1,750 similar cases. Haller cites two cases of extreme

age which came under his own observation, one of 152 years and the other of 169 years.

I select the following from a list prepared by the late Cornelius Walford, containing the names of 208 persons who died at or above the age of 120 years. Thomas Carn, Shoreditch, England, at the age of 207 years, in 1588. This case is said to be confirmed by the parish registers. If this be true, it is the most remarkable instance of longevity recorded since the flood. 175 years, Louisa Truxo, a negress, Brazil, in 1780; 152 years, Thomas Parr, Shropshire, England in 1635. In the Petersburg *Gazette*, a Russian paper published in 1812, the case is recorded of a man who died in the diocese of Ekateriois, who attained an age between 200 and 205 years at death.

The age of Dr. Parr, as he was called, appears to be well authenticated. It has the testimony of Harvey, who dissected his body, and found all the organs in a sound and healthful condition. Charles the First sent for Dr. Parr, who had become famous by reason of his extreme age. Dr. Parr went to court where he was feasted, and, eating too much, died from a fit of indigestion. He might have lived many years longer—in fact, he may be said to have died from an accident.

There would then seem to be abundant evidence that, not only among the patriarchs who lived after the flood, but among those who lived in modern times also, instances are not wanting of deaths approaching the age of 200 years, which would seem to be about the extreme limit possible for man to attain.

Scientific research has demonstrated some remarkable physiological facts which bear upon the duration of human life. It is demonstrated that *species* never change. Their physiological characteristics are fixed and unalterable. Man at the present day has precisely the same formation, the same organs, the same type, in fact, as may be found in mummies embalmed centuries before the Christian era. The fossil horse is the same as the living animal. Siberia was once peopled by elephants. These elephants have disappeared, but their fossil remains present precisely the same physiological characteristics as those of the living elephants. America was once peopled by mastodons. They have disappeared, but they have not left in their places other or different mastodons. The type of man, of the horse, of the elephant, and of every other animal, living or extinct, has remained unaltered by the revolutions and mutations of the globe.

Buffon, the celebrated naturalist, first enunciated the theory that the natural life of all animals bears a certain relation to the periods of their growth. This period is defined by the union of the bones with their epiphyses. When this union takes place, the bones, and consequently the animals, cease to grow. M. Flourens, accepting this ingenious theory of Buffon, and having the advantage of later and more correct physiological knowledge, made a series of very interesting experiments by which to determine the length of time after birth when this union of the bones with the epiphyses takes place in different animals. He then found that the natural limit of life in all animals is about five times the period of growth.

Thus the union of bones and epiphyses and the consequent natural life of different animals is as follows :—

Man grows 20 years.	Natural life, 100 years.
Camel " 5 "	" " 40 "
Horse " 5 "	" " 25 "
Ox " 4 "	" " 20 "
Lion " 4 "	" " 20 "
Dog " 2 "	" " 10 "
Cat " 12 "	" " 7½ "
Hare " 1 "	" " 5 "

Buffon states: "The man who does not die of accident or disease lives everywhere to 90 or 100 years of age." Hufeland says: "Nearly all those deaths