## LIFE INSURANCE.

A correspondent desires our opinion as to whether the Independent Order of Foresters, of London, will "continue to exist for any considerable time as an insurance society," as he is desirous of having good security for as little money as possible.

Our answer must be that if one want good security one must connect himself with a society or company that gives it, and not one concerning which there is doubt. Doubt is not security. The fact that J. B. has to ask such a question indicates doubt, and if it were answered affirmatively, there would still be doubt as to what was meant by the expression "any considerable time." If the question were, "would the order exist for a few years." we could answer yes, and this for the reason that it has accumulated a small reserve fund, of about \$10 per member, with which to make up, for a while, any deficiency in its income, which income, however, must before long become inadequate to meet the increasing death calls. We say, it must become inadequate, because it is derived, not from a varying assessment to meet the actual death claims. but from fixed monthly payments; and these are of such +mall amounts as to do very little toward meeting the heavy losses which must come when consumption, and cancer, heart disease and old age begin to operate freely as causes of death. These do not trouble any life insurance company much during the time when its members are nearly all fresh from the medical examiners' hands, but they "get dar all de same," in the case of every company living to a respectable age.

The yearly collection of the I. O. F. on a person 35 years of age, is only about one-third of the rates collected by regular companies; and the inadequacy of the regular rate, after the above causes begin to affect the mortality, may be seen from the following statements which appeared in these columns on the 25th June last. The first table gives the gross premiums received, and the losses paid in Canada, during the past five years, by the companies named.

Past tive years, by t	пе сошращев	пашои.
Name of Co.	Premiums.	Losses.
Briton Medical		<b>\$</b> 207,727
Edinburgh Life	. 83,491	73,275
Life Ass'n of Scotland	. 388,558	380,588
Mutual, of Hamilton.	180,615	98,037
North British	. 120,489	115,549
Queen, of Liverpool.	. 49,754	52,346
Reliance Mutual		60,963
Scottish Amicable .		136,444
Scottish Provident .		13,239
Scottish Provincial.		187,964

Totals ......\$1,241,954 \$1,328,136

THE SAME TEN	COMPAN	ies.—Eleven	YEARS.
			er \$1,000 of
Insu	ance	$\mathbf{Death}$	the ins.
Year. in fo		Losses.	carried.
1875\$12,35	1,727	<b>\$</b> 179,380	<b>\$14.52</b>
1876 11,76	0,378	209,910	17.85
1877 11,48	0,890	186,379	16.23
1878 11,45	7,903	208,301	18.18
1879 10,66	5,451	181,437	17.01
1880 10,12	4,900	149,761	14.79
1881 9.69	7,272	230,586	23.77
1882 9.56	7.143	372,206	31.59
1883 9,05	7.349	196,183	21.66
	1.045	236'102	28.75
	2,780	296,531	41.69

The amount of premium collected upon each \$1000 of insurance by the I, O. F.. as shown by its actual receipts, is \$13.85 per annum, so that it could not have met the smallest year's average death loss of the

ten companies, as above shown, from its current income. And its rates do not iucrease with age, after entry, as in the Homan's plan. Therefore, when it has to meet a loss equal to \$17.85 per \$1,000 on \$11,760,878, i s deficiency for that year will be \$4.00 per \$1,000, or \$47,040, And when its losses are \$41.69, such as the ten companies averaged in 1885, the deficiency for each year will be \$194,880. It would take an immense reserve fund to stand this sort of thing for a few years runeing. As such a time comes to every life society, if it do not collapse at an earlier date, and as this one has made no suitable preparation, we cannot advise our correspondent to put his trust in it. It may exist a few years but must go under when hundreds of its now healthy members have become uninsurable. And then there will be bitter regret that members did not look ahead and see that no society could possibly pay the last claimant in full on such a basis as that on which the I. O. F. stands to-day.

## THE MIDDLINGS PURIFIER CASE.

During nearly all last week this case was being litigated at Osgoode Hall. Witner from all over the United States, principally large millers, were either giving or waiting to give their evidence as to the validity of a patent, the nature of which we describe later on. Messrs. O. Howland and F. Arnoldi appeared for the plaintiff and Messrs. B. B. Osler and H. Gamble for the defence. The Court Room was piled up with various models of invention in milling machinery, and the corridors of the hall were like a furniture store or a curiosity shop. The action was brought by the George T. Smith Middlings Purifier Company of Canada, limited, against the Messrs Greey, and the facts, in addition to what has already appeared in our columns, will be of interest to our readers. From what we can learn of the history of this patent in Canada, it would seem that although it has been an unusually prosperous one it is far from proving that the inventor, even when successful, has in Canada a very golden prospect.

Mr. George T. Smith, the inventor of the patent in question, first brought to perfection, a complete middlings purifier, of the class he has patented, at the Washburn Mill, in Minneapolis, of the year 1871. One discovery rapidly led to another, so that within less than three months from the time a middlings purifier had been made to do its work successfully by means of Mr. Smith's combination of brush with the other necessary parts, some of the mills in Minneapolis had begun, under Mr. Smith's direction, to manufacture what has since become famous as the patent process flour. One of the witnesses in this suit, Mr. Pillsbury of Minneapolis, the proprietor of probably the largest flour mill in the world, testified that the development of the milling industry in the North-western States was largely due to this one simple discovery. The "hard" wheat which the Minnesota and Dakota grain fields produce, was in the old process of milling at a great disadvantage as compared with the softer wheats of the East; and as Mr. Pillsbury said, would at the present prices be practically unmerchantable if it had to be milled by the old process. The advantage which has thus been conferred on the North-western United States, applies, in perhaps even a greater degree, to our own North-western pro-

founded a great prosperous company for the working of his patents and is the acknowledged master of the field. In Canada a company of large proportions has been working at Stratford for some three years past and is the plaintiff in this litigation.

So far as the patent right is concerned, however, neither Mr. Smith nor his company can be said to have derived much pecuniary advantage from it in Canada. This is owing to the extraordinary number of invitations to litigation which the Canadian patent law holds out against a patentee. Mr. Smith's patent was attacked first in 1876 by a rival manufacturer under the 28th section of the Patent Act. Under this section a patent is liable to be declared void by the commissioner of patents at any time after two years, upon proof to the satisfaction of the commissioner (without appeal) that the patentee has either imported the pattented article, after the first year from the date of his patent, or that after the second year he has failed to "manufacture" in Canada within the meaning of the section. After a necessarily expensive contest at Ottawa on this subject, the patent was upheld by the Deputy Commissioner (Dr. Tache) in a judgment which has since been commented on with approval by judges of the Court of Appeal for Ontario, the Supreme Court of Canada and the Judicial Committee of Her Majesty's Privy Council. The next difficulty in the inventor's way arose from the practice under our patent law which permits a subsequent applicant to obtain a similar patent without investigation. A rival inventor or person claiming himself to be such, had obtained a patent in 1873, several months after Mr. Smith's patents issued, containing claims almost identical in their working. Naturally suits arose, one by Mr.Smith against his rival licensees; the other by the rival patentees against Mr. Smith's licensees. This second dispute was set at rest in the year 1878 by decision of V. C. Blake, declaring the rival patent invalid. That decision was based on grounds collateral to the main question, leaving the issue of first invention still open for further litigation. Next came the well-known case of Smith against Messrs. Goldie & Mc-Culloch, a suit which was brought in the year 1879, and was heard before the late Chancellor Spragge in June 1880, resulting in a decision finding the patent void on the same ground on which the application had been made and disposed of to the contrary by the Commissioner of Patents. The case was then heard on appeal by the Court of Appeal for Ontario, which dissented from the Chancellor's view, but on the other hand found the patent void on a technical point—that of want of patentable novelty. Judgment was at last given by the Supreme Court of Canada, June, 1883, reversing all the previous judgments against the patentee and declaring the patent valid in all points. Even then the unfortunate patentee was not allowed to rest until Her Majesty's Privy Council, upon an application of the defendants, had declined to review the judgment of the Supreme Court; this decision was pronounced in March 1884.

which the Minnesota and Dakota grain fields produce, was in the old process of milling at a great disadvantage as compared with the softer wheats of the East; and as Mr. Pillsbury said, would at the present prices be practically unmerchantable if it had to be milled by the old process. The advantage which has thus been conferred on the North-western United States, applies, in perhaps even a greater degree, to our own North-western provinces. In the United States Mr. Smith has