approached, while it is greatest when the chances are even.

For example, the "probability" of drawing one particular card from a pack is only one in fifty-two. The "uncertainty" about its being drawn or otherwise is very small; the assumption that it will not be drawn will be correct in fifty-one out of fifty-two cases. On the other hand, the "probability" of drawing a red card is an even chance, while the presumption that it will be drawn or otherwise will only be correct half the time; thus

"uncertainty" is at its maximum.

To come to fire insurance. Let it be supposed that a hundred factories show approximately one loss by fire in a year. If frequent repetitions of the same experience show a like result, there is little doubt that any similar number of factories can be safely insured on that assumption. On the contrary, if they were dwellings, and it was found that the fires in one group varied widely from those in another, no reliable basis could be fixed for fire insurance unless the group was so large as with reasonable certainty to include all the probable variations. In other words, as The Monitor points out, the actual cost of insurance will depend on the likelihood of fluctuations in the experiences of any group of risks secured. This is the reason that with highly specialized risks, where the fluctuations are small, companies can afford to write them at a premium nearly corresponding to the actual value of the risk, while in case of dwellings where the fluctuations are wide a heavier premium in proportion to the risk is demanded.

The point is made that the same principle applies to life insurance. Few companies care to accept risks beyond a certain age. The "uncertainty" is too great. The limited experience available of lives beyond seventy shows no such uniformity as in the case of younger years. So, too, with the insurance of lives in the tropics and with underaverage lives: "The observations of one company or territory or class vary widely from those of others. No assurance can be obtained that a fairly representative body of risks have been secured. Premiums must be correspondingly high. The 'uncertainty' is large and the company must

protect itself by special precautions."

EXTERNAL EXAMINATION OF BANKS.

Just as we go to press we receive a communication from Mr. H. C. McLeod, replying to our editorial of last week. We shall be glad to insert it with our comments in next week's issue of THE CHRONICLE.

THE NOVA SCOTIA LIFE UNDERWRITERS' ASSOCIATION held its regular meeting in Halifax on December 6th, President Wilson in the chair. A resolution was unanimously adopted taking issue with a Toronto insurance journal's stand on the question of rebating, and upholding the principle of a prohibitory by-law against rebating and twisting.

THE GOVERNMENT ANNUITIES BRANCH, up to December 14, issued 467 annuities, the amount applied for being \$106,670, while the purchase money was \$354,325.

SELECT AND ULTIMATE VALUATION.

Mr. Walter C. Wright, Consulting Actuary, Characterizes Plan as Futile, Deceptive and Vicious in the Following Article Contributed THE CHRONICLE.

Of all the schemes of valuation, so-called, which have been invented or devised to provide for or conceal reckless and extravagant expense in seeking applications for life insurance, the Select and Ultimate plan of valuation is perhaps the most open to objection on scientific grounds, and the worst.

There is no more unquestionable principle of valuation than that a policy should be valued according to its expressed terms, and most other preliminary term plans of valuation do not violate this principle, however much latitude they may give for extravagant expense, owing to the unreasonable loading of first premiums for expense, considering the expressed terms of the policy, as governing the first, or first few years of its duration; but the Select and Ultimate plan, by the assumption of elements for the computation of reserve which are incongruous, thus results in producing reserve for the first few years, less than a valuation according to the expressed terms of the policy on consistent assumptions would produce. The excuse made for this device is that the reserve can ultimately be repaired, because surplus, especially in the form of vitality gain, of decreasing yearly amount, may be expected to accrue, under the ordinary circumstances of life insurance administration and experience.

But this assumption cannot add one dime to the actual earnings or assets of a company, at the

outset or afterward.

The ordinary method of valuation does not preclude any life insurance company from securing the full benefit of all surplus which may actually be realized by the company, and no mere plan of valuation can do more.

It consequently follows that any relief from liability of the capital of a company, through valuing policies in disregard of their expressed and essential terms, by the Select and Ultimate, or any other artificial plan of valuation of similar character, can give only apparent and not real relief from impairment to the paid-up capital of the company, because the impairment of reserve in such a case will be exactly equal to the relief from apparent impairment of the capital, while the company will have need of exactly as much future realization of surplus, in one case as in the other, to duly meet all actual liabilities and show an unimpaired capital.

If applicants for policies of certain expressed terms have any just rights, one is to be protected from any such clap-trap imposition as I have endeavoured to expose by the foregoing argument, or to receive exactly what they have applied for.

Under ordinary arrangements, no matter how high the reserve may be, a company is protected from loss through the premature termination of a policy, by the exaction of a suitable surrender or lapse charge, but the policyholder is not obliged to pay the penalty before he deserts his company.

There is no life insurance statute sanctioned by any State in the Union which is more offensive to