

INSURANCE MATTERS.

LIFE INSURANCE DOES INSURE.

The annual statements made recently by the life insurance companies to the insurance departments of different states show most clearly that life insurance does insure. A very superficial examination of these statements is sufficient to substantiate the statement made in this question. And had it not been for an unjustifiable attack on the business by parties either ignorant of the facts in the case or possessing a disposition to ignore those facts, no defence of the business would be needed except that found in the annual statements of the companies. In these statements, for at least the last six or seven years, the income from premiums alone and the amount returned to policy holders or their representatives have been presented in such forms that no man of ordinary intelligence could fail to see that life insurance does insure. It is not surprising that all the laboured and successful reply has been offered. We refer to the article on the subject by Stephen H. Tynge. It is however, well to discuss the facts in this article, in a split and manner of treating the subject and the length to which he has carried the discussion, there is still room for more to be said. For some will still claim that although the facts have been established beyond all doubt by one advocate. Consequently it may well to corroborate evidence and arguments which in themselves and alone are conclusive and unassailable.

In attempting to do this we shall look at the business as it has been conducted in England during the ten years ending with the year 1879. During these ten years the total premium income amounted to £113,331,300. The amount of claims paid to £92,137,255. This reduced to our money makes the premium receipts \$51,916,158, and the claims paid \$448,853,823. The latter sum is 81 per cent. of the former. For every £100 in premiums received there was returned to the insured \$81. In addition to this, the amount of accumulated life insurance fund was increased from £93,719,192 to £122,575,734, an increase of £28,856,542. This shows that the amount of the fund was increased over 30 per cent. during the whole period. Now add this increase of £28,856,542 to the amount paid on claims, £92,137,255, and we have £122,575,734, which is the amount of premiums paid—offer due in favour of the insured £68,417. From this showing the inference is irresistible that in England insurance does insure. The above figures are taken from the *Annual Abstract (London)* for the year 1881, and may be trusted as trustworthy.

From the same document we get some valuable information in regard to the amount of life insurance in the 1879 the life companies of that country, seventeen in number, wrote new business amounting to £13,394,872 and received in premiums £259,963, and settled on claims £199,898. The difference between amount settled and premium receipts £443,725. At the end of the same year the amount of outstanding policies in force exceeded the amount at the close of the previous year £9,795,319. From these figures it is evident that life insurance is still popular in France, and this fact would go to prove that the French people believe that life insurance does pay. It is equally true of the people of Great Britain, in that country the premium receipts on life insurance have increased during the last ten years with the exception of one year. At the end of the year 1879 the amount of life insurance in force in the three countries, France, England and America was over \$2,853,015,006. On this vast sum premiums had been paid during the year, which gives a very good idea of the magnitude and extent of the people's confidence in paying returns from the business. These premiums amounted to over \$1,350,000,000. But if it is still claimed that life insurance does not insure, what a fearful comment on the intelligence of the men interested in the above facts and figures. But the reader may say that these facts and figures present only the favorable side of the subject. They leave out of view the number of life companies that have become bankrupt and the amount lost by the insured in consequence of bankruptcy. To this we would say that all that can be truthfully and honestly said is that insurance, let every dollar that has been lost be counted; let every man that has been disappointed by companies failing to be numbered, and every pang that has followed be weighed in the scale, does it amount to? The loss in money will not amount to one per cent. of the sum which has been entrusted to all the companies that have been organized.

So insignificant, as compared with the losses sustained, that it is not a breach of commercial business, that we do not check the increase or prevent men from keeping nearly \$3,000,000,000 of insurance in force, or from paying annually more than \$1,350,000,000 in premiums to keep the amount assured alive. Men have been paying these premiums for so many years, and all these years such heavy losses occurring, how does it follow that they do not get up and seek to protect themselves and families from loss, in case of death, by some other means? In no other business that can be named, men are not so foolish as to entrust their money where the loss is greater than the

gain. Certainly there must be something wrong somewhere. Either that class of men who readily pay for life insurance are, in that particular, fools, or there is a great mistake in regard to the amount lost when compared with the amount gained. If the actual amount lost is less than the amount sufficient to justify the statement that life insurance does not insure, how does it come to pass that the above facts and figures are matters of official record? Or, if the statement is true, the men who charge that life insurance does not insure are either ignorant of the facts in the case or have some doubtful objection to accomplish. On no other ground can we reconcile the facts and figures presented above with the fact that, as a rule, the men who insure their lives and persist in paying premiums are among the most prudent, close calculating men to be found, and in very many cases where forfeiture of policies are made they are made reluctantly and because of pecuniary embarrassments, and not for want of confidence in the business or in its management. Let those who have any doubts on this subject, ask for a careful and impartial consideration and we do not fear the result. Neither do we fear the result of discussion, which brings all the facts involved, and fully before the insuring public.—*Western Insurance Review.*

The scheme of the Scottish-American Accident Company seems to have fallen through, the report having been called here that it was abandoned for want of capital.

Little is now said about the plans of the Inchoate Mutual Fire, of New York, since the promoters very courteously give information concerning the progress of the enterprise, but ask for the common courtesy of suspension of judgment until their plans can be perfected.

The Canada Accident Company steps in at this juncture, and Manager Hulings visited this city June 10th and 11th, representing that a deposit had been made of the entire amount, and that he was making an effort to obtain \$500,000 subscribed capital, one-half paid up. The Boston papers report that the company desire to place \$100 of the stock in that city, and the future plans of the Canada Accident are still uncertain.

The assignment of the National Fire Insurance Company, of Philadelphia, the fraudulent concern managed by the notorious Hoffmann, have just succeeded in obtaining a final decree against that worthy, the president of stein, who was president and treasurer, and Isaac Hüntzinger and Jacob K. Ely, the latter two having been directors, for \$331,992. Of this sum \$53,465 stands against Ely, and the rest against his associates. It is a long and difficult task, but getting the money will, we opine, prove a vastly harder one.

The directors of the City of London Fire Insurance Company have determined to send a United States branch, led by a Mr. H. H. Owen, to Philadelphia shows that they mean to move safely and surely. In his own good time the manager will visit this country, and will then perfect such arrangements as his judgment, assisted by the advice of practical men upon the spot, may deem to be most advisable. Manager Phillips has no novice with regard to the hazards of American insurance, since he was for many years chief clerk of the London and Lancashire Commercial Union Assurance Company, and is familiar with the American experience of other English companies. His company is in vigorous youth, and he will adopt no measures tending to impair its efficiency.

The arrangements of the American British and Colonial Insurance Company are not perfected, but those who are active on this side say that everything will be completed by the middle of July. Mr. H. H. Owen, arrived in New York from London on June 15th to make the necessary inquiries. He reports that the whole capital stock has been taken in London, where Mr. Anderson, the proposed United States manager, is at present. The New York committee called on June 17th that they would take 20,000 shares of the stock already subscribed and place them in New York, wherever the company was established. The committee is composed of gentlemen, who hold now an important agency of a foreign company, and he already has nearly a hundred applications for policies from highly respectable insurance firms.

Fire Marshal Sheldon's report, just filed, for the three months ending June 30, of fires in New York, shows the following facts: There were 401 fires, involving a total estimated loss on buildings of \$37,371, and on contents of \$230,430; \$184,225, and on contents \$1,594,163; the uninsured losses on buildings were \$5,615, and on contents \$9,087; 23 fires occurred where the losses were \$1,000; 21 between \$1,000 and \$5,000; 2 between \$5,000 and \$10,000; 2 between \$10,000 and \$20,000; 2 between \$20,000 and \$30,000; 1 between \$30,000 and \$40,000; 1 between \$40,000 and \$50,000. During the quarter last year there were 480 fires, involving an estimated loss on buildings and contents of \$44,368, while the insurance was \$3,660,272. During the quarter \$1

fires were caused by the carelessness of occupants and employees, 18 from children, 12 from smoking, 10 from faulty chimneys, 5 were of incendiary origin, and 22 occurred from the explosion and upsetting of kerosene lamps. Convictions were obtained in two cases of arson, and in one case of burglary, and the fourth degree, and the convicted are now undergoing punishment.

When the United States Lloyds was reorganized with a new membership under the management of Messrs. Higgin & Cox, a system of compensation to the managers was inaugurated on 1st July, and since that date the annual premiums have not reached \$1,000,000. Through the courtesy of a gentleman familiar with individuals underwriting in New York, the following important facts may be learned: The original capital obtained: Eight years ago the original deposit of each one of the hundred members was \$1,000. The profits for the years 1873-79, inclusive, were \$6,888,480, and the total profits since that date have been \$2,037,37. The amount of cash withdrawn hereafter has been \$3,037,37, and the division for 1880 was \$2,037,37, making the amount paid back in eight years, on an investment of one thousand dollars, \$4,947,25, and still the net profits are \$1,000,000 the credit of each subscriber on January 1, 1881, after making a full deduction for each and every liability, either known or reported. Whether equally good results would be obtained in any other city, Lloyds is an unsolved problem. During the past two weeks significant fires have occurred in Brooklyn—one containing an elevator used for drying corn, and the other burning two of the most popular storage houses, which have been in use for twenty-two years, being managed with great care. The first estimate of the last loss was extravagant, but doubtless \$400,000 will be a prudent estimate. The Produce Exchange will doubtless have a large amount of warehouse property to insure.

The Produce Exchange appointed a committee of seven to carry out a proposed plan of the Lloyds' insurance companies, which would be a great benefit to each one of whom should make a deposit of \$1,000, and advance fifty dollars each for expenses. As many of the most active members are subscribers to the present Lloyds, it is probable, they propose to follow the same old plan of organization, and to limit the individual liability on any risk to \$100. The points upon which the committee sets its claims for support are undoubtedly the most important: a large constituency and a minimum of expenses. Nearly four hundred names have already been pledged and the committee finds it harder to decide upon the question of the rate. Brains to use the capital are now in demand. The history of individual underwriting in New York has been uniformly successful. The United States Lloyds called for nine hundred members, and Messrs. Robinson and Cox, transacted an enormous business, amounting in some years to \$2,500,000 in premiums. This volume of business was stimulated by the fact that the members received a dividend of five per cent on the gross receipts, and there was always an opportunity of getting another five per cent. on the amount necessarily reinsured.

Let the inferior office cannot compete with high dividends to associates, and a want of proper reserve brought the Lloyds into difficulty, and on closing out the account each member was required to pay back \$7,000 to settle his individual liability. The committee is paying out this large sum, the members found the annual average profit had been twenty per cent.

The State Departments at present take their reservations upon gross premium—Lloyd's office of 50c. when the inferior office calculated net premium as the basis of the reservation cannot, as a rule, increase the reserve liabilities upon the policies in force. The weaker or less creditable office, offering the higher rate of loading, necessarily offers the company is to be continued say yearly a rate adequate to sustain an inferior organization and give a profit to a superior one. But the inferior office cannot compete on equal ground with the superior one, and undercuts to \$1.30. With the parallel rate yet to run equally six months, there is no justifiable reason why the inferior office should be continued. The liability of 65c. and the other 70c. As to fire liability solely, however, both offices are, by the not standard, equal, and in this respect both offices are equal. The inferior office has really but 40c. for the inferior office is incomplete without a dual reservation, both, and distinctively, from the net premium and the loading thereon, charging each office for expenses at a separate rate. In fact, however, propose even to enter upon a subject which but expands the more the more it is considered. A right rate is unquestionably the only true basis for a right reservation, but in this particular the company asserts itself in its rating, and to render equity to the companies respectively involves a great many questions not yet broached. The practice of the inferior office, in this respect, is certainly conservative, should they set up a premium standard of their own, exempt from the depreciation of demoralizing competition, and freed from the influence of irresponsible and incompetent parties. It might only be a fair basis for reservation, but otherwise helpful and healthy to its influence. Like many other matters, in-

stances is a state of revision and evolution. Many tactics which were current ten years since are dying out faster. Nothing a decade ago could pass with greater confidence as indisputable than Mr. Whiting's saying: "The liability of two companies writing the same policy (each for the same liability)." Such confidence takes its place with other delusions. Fire cost, like every other cost, has its absolute and contingent components, and the contingent varies with the underwriter. The same like cloth, sold at one dollar per yard by two dealers, does not, as a rule, represent the same profit or loss to both, and consequently does not represent the same cost to each dealer.—*Western Exchange and Review.*

SCIENTIFIC AND PRACTICAL.

CANDLE POWER AND THE ELECTRIC LIGHT.

Some wild statements, involving wonderfully divergent estimates, have been made about the light giving power of the different lights. A standard sperm candle, yet to be found, is used to measure gas by, is a very poor standard for the electric light. None of the various modes of measurement in use seem to apply exactly to this light, and the standard of measurement of the factors is yet to be found. Much is said about the subdivision of the electric light by certain gentlemen, who hope to distribute it throughout our houses from one central spot, and furnish it cheaply and abundantly in our cities. I am not of those who do not believe in the impossible, but I say that, with our present knowledge, this problem is unworkable. Sir William Armstrong can only keep thirty-seven lamps going, and Lenoir's only only about a dozen. Professor Adams could only produce from the most powerful dynamo-electric machine, by calculation, one hundred and forty lamps. Where is the subdivision? The only subdivision which can be assumed is an inexhaustible source of electricity. Their opponents reply that there is but a very limited source of energy in every dynamo-electric machine. It may be that more powerful machines and engines of lower resistance may enable us to light up a greater number on one circuit, but this is not subdivision, it is multiplication.—*W. H. Preece, in Popular Science Monthly for July.*

THE FIRST SHODDY "DEVIL."

Mr. Davis, the inventor of shoddy in London, had made it by means of tearing his blankets up with curryscombs, and when Parr and Law constructed a machine to do this, they were very properly rewarded by the curryscomb as his basis. No drawing of their early machine exists, nor has any description of it been published heretofore that we can discover, but from a minute one furnished us verbally by a gentleman who has seen one of the two gentlemen who can remember it, the following was its construction: The framework was the same in form as that of a carding engine, but instead of the carriage, was a machine, the "devil" or "awit" as it is now called, was about a foot wide, and only two feet in diameter; or, to use the phrase of one of our informants, "not bigger than a grindstone." This machine was fixed across the face with staves, and the machine was saw-tooth, and on each of these indentations a strong steel curryscomb blade was firmly screwed, so that one slightly overrope the other. These worked in a row, and in the opposite direction on smaller staves rollers. It was fixed at both ends with rags, and as from the diagonal position of the combs on the drum they soon choked, a rapidly revolving bar was fixed below, which swept the shoddy out of the combs and swept the hair pulled out of a horse when his curryscomb is clogged. The machine was run by hand, with true Yorkshire work. The "devil" owing to the sliding rags being produced from the grooves and articles with which it tore up the rags consigned to its mouth. It was erected at the Old Mill, Batley, in a partitioned off room, and if we are rightly informed, the late Mr. John Fenion, who was employed confidentially by Parr, worked it with as much privacy as possible. This gentleman (Mr. John Fenion) afterwards became the founder of the shoddy trade, and was the partner of John Fenion, and of John Carr, Dewsbury. In spite of precautions, however, the very thing Law had wished to avoid—the discovery of his secret of making shoddy—overtook him immediately. A well-to-do farmer and one of the villagers in a couple of years the time entered vigorously into the trade, and in 1818, the late Mr. Joseph Jubb, John Fox, Phoenix Fox, George Newbould, and John Barnley, all of Batley, were employed to construct a machine, such as the model of one seems to have been the matter of doubt, Joseph Jubb went to the "Thrum" Grinder of Brigbouse, and John Fenion, named Jubb, under the presence of buying put up the machine, and party suspecting a "shell," refused to admit the blacksmith into his premises. However, Jubb was allowed entry to look at the prepared waste he wished to purchase, and he was allowed to see the machine as to enable the smith to construct a workable copy, which was put up at a small and very old corn mill, called Howley Mill, and driven by water power. The mill was still in existence, and afterwards a fall into the hands of Benjamin Parr, in whose family we believe it continues to the present day.

It is a plain ground in the history of every nation, being caught up in their development of the

By means of a French patent, an excellent substitute for the wool of the animal is made. It is said to be the result of the analysis can be detected.

Professor Charles E. Munroe, of Lowell, states that the ordinary turpentine, which was contained in apples, pears, plums, lemons, and other fruits. Some older which he had analyzed, which had been stored in a tin barrel, contained 17 milligrams of turpentine in the litre in solution. This was given, where the turpentine was preserved in tin can was found to be sticky, and tin only was found in fruit. Cottonseed oil was found to be referred to, and it is suggested that the solution was due to the soluble acid in the water.

Colour blindness as a cause of disease is not generally well recognized by the uneducated, but is a serious disease, as well as colour, are employed signals, and inability to distinguish colors may prove fatal as a liability to accidents. Sometimes it is persons having excellent vision, and persons, and the contrary is also true. But perhaps the gravest source of catastrophes, especially in railroad travel, is called absence of judgment, which when these men manage their motives for months and years on the same monotonous track.

Cold has a remarkable effect on caoutchouc, rendering it rigid and inelastic, and this circumstance is made use of in the manufacture of caoutchouc India rubber, soft and pliable, will expose for a few minutes to a temperature of 90° Cent., or the freezing point, and become stiff and brittle. Its original pliability may be restored by warming or by applying sufficient heat to it to extend it to three or four times its length. In each case it is restored to its original condition. In the case of the stretching and contracting that the effect is time to be evolved during that operation.

A Leipzig journal, which makes specialty of matters relating to the development of a method which it asserts will prevent lamp chimneys from cracking. The treatment will not only render lamp chimneys sturdier, but will also make them more durable, but may be applied with advantage to crockery, stoneware, porcelain, and China, chimneys, tumblers, etc. are put into a pot filled with cold water, and the water is heated to boiling. The process is simply one of annealing, and the slower the cooling part of it is conducted the more effective will be the work.

A ton of pulp made from sawdust is to be sent to an English paper mill for an experiment as it was feared that should it be approved by a company of Ottawa capitalists contemplate establishing a manufactory to convert sawdust into pulp.

The Anglo-American rapid knitting company contemplates starting another very shortly. The company will be a branch of the Anglo-American machinery. Their intention is to manufacture a better class of goods than have heretofore been produced in Canada, and to place these lines in the market at a price which will place them in competition with the goods of other countries. The company will import at great loss of time and at great inconvenience to dealers, and that their makes will be presented in awfully and in taking designs of other people.

Marriage insurance companies are not uniformly regarded with favor by the Judges of Pennsylvania, in which State they have suddenly become numerous. The methods of these concerns are various, but the common practice is to pay certain sums of money to the wife in the event of her death. Judge Hendricks of Lebanon County, refused a charter on the ground that marriage is not a legitimate subject for insurance, as it does not depend on contingencies beyond the control of the parties. Judge H. H. Schell, of Philadelphia, on the other hand, grants charters without hesitation.

The change in the riding habit worn by the Princess of Wales has been the subject of much talk and discussion among the aristocracy, and it may be interesting to horsemen to see the new riding habit is made with a hot skirt gored to the knee, as that the position of the rider is safer in the saddle being unnumbered. The new habit is made of light drapery, bluish brown. The skirt cannot be blown about, and is thus prevented from revealing the foot and ankle, which were never look graceful when she was riding. The skirt worn by the Princess is not much looser than an ordinary dress room costume, and light, easy to wear by the wearer without any danger of blowing a puff of wind to a coarsely