Observations on the laws of mortality and disease, and on the principles of life insurance. With an appendix, containing illustritions of the progres of mania, melancholia, craziness, and demonomania, as displayed in Shakespeare's characters of Lear, Hamlet, Ophelia, and Edgar / By George Farran.

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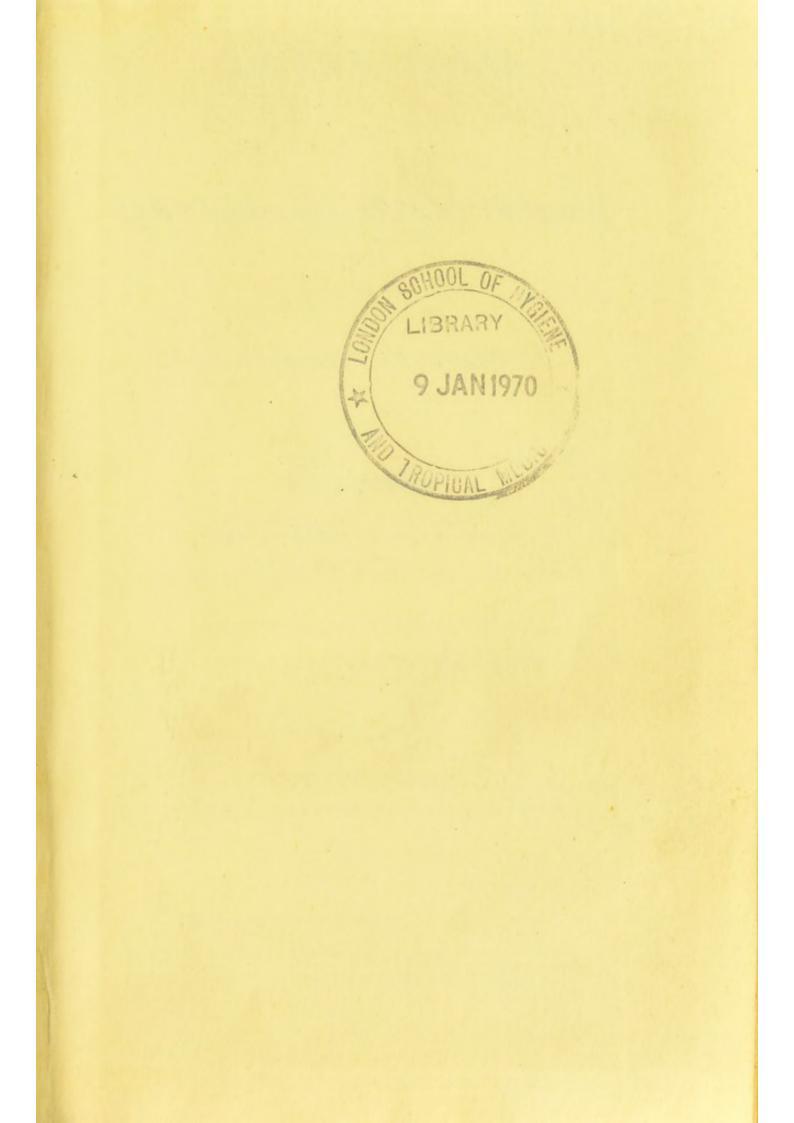


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OBSERVATIONS

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ON THE

LAWS OF MORTALITY AND DISEASE,

AND ON THE

PRINCIPLES OF LIFE INSURANCE.

WITH

An Appendix,

CONTAINING ILLUSTRATIONS OF THE PROGRESS OF

MANIA, MELANCHOLIA, CRAZINESS, AND DEMONOMANIA,

AS DISPLAYED IN SHARESPEARE'S CHARACTERS OF

LEAR, HAMLET, OPHELIA, AND EDGAR.

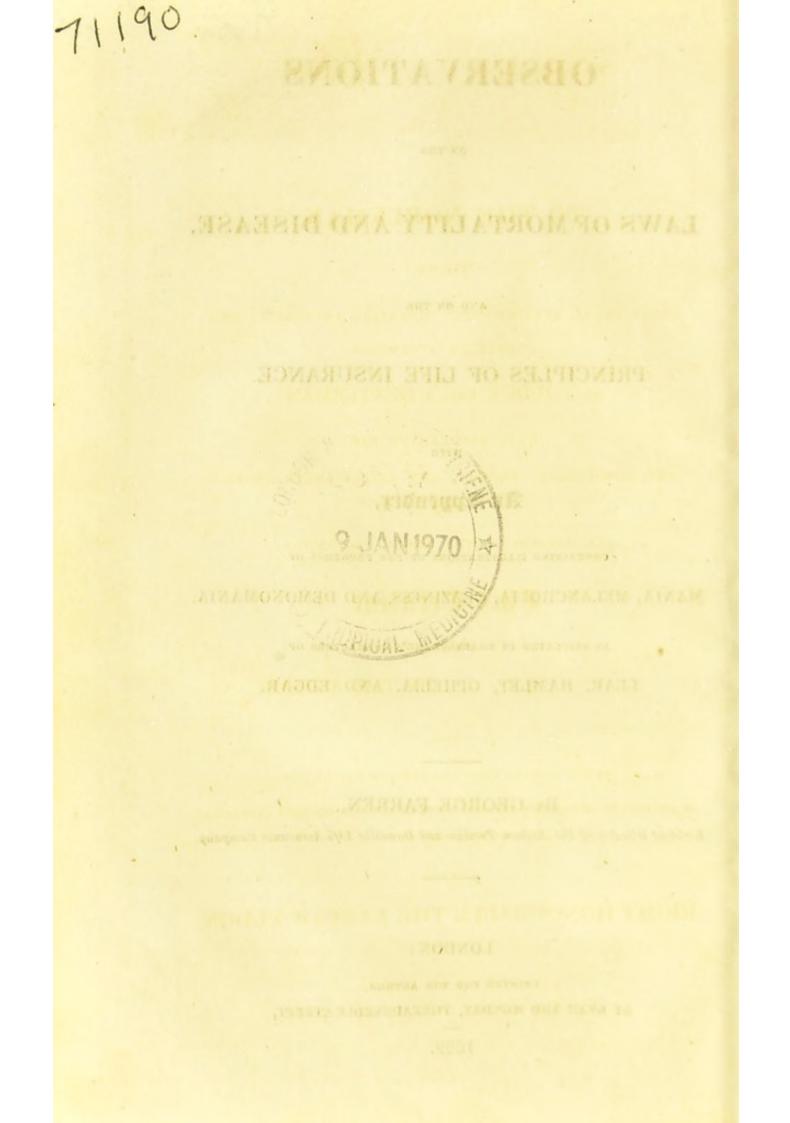
By GEORGE FARREN,

Resident Director of the Asylum Foreign and Domestic Life Assurance Company.

LONDON:

PRINTED FOR THE AUTHOR, BY DEAN AND MUNDAY, THREADNEEDLE-STREET.

1829.



TO THE NOBLEMAN

WHOSE

GREAT LEGAL ATTAINMENTS, IMPARTIAL INTEGRITY, AND COURTEOUS ATTENTION

AS A JUDGE AND A GENTLEMAN

HAVE SECURED TO HIM

THE ADMIRATION, RESPECT, AND AFFECTIONATE REGARD

OF

ALL CLASSES OF THE LEGAL PROFESSION,

This Treatise

IS DEDICATED

BY THE AUTHOR,

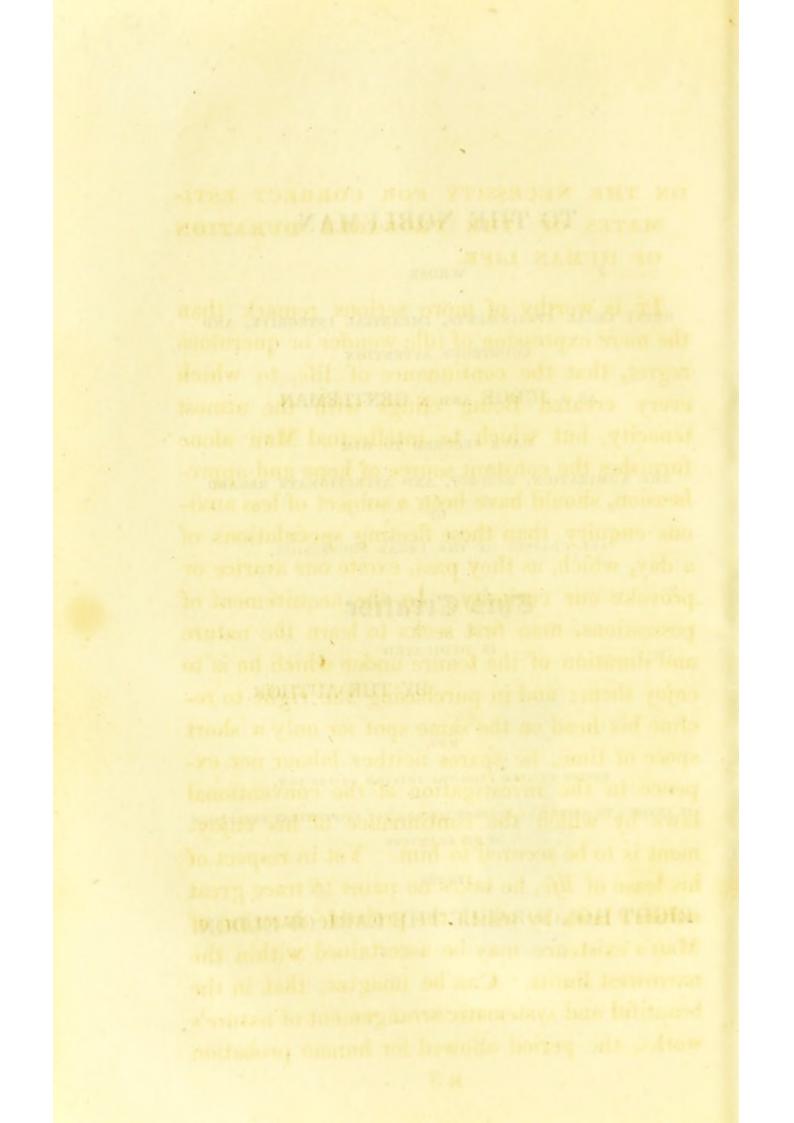
WHO,

HAVING RETIRED FROM THE PRACTICE OF THE LAW,

IS ANXIOUS TO OFFER THE PRESENT SINCERE BUT INSUFFICIENT EXPRESSION OF HIS GRATITUDE

TO THE

RIGHT HONOURABLE THE EARL OF ELDON.



ON THE NECESSITY FOR CORRECT ESTI-MATES OF THE PROBABLE DURATION OF HUMAN LIFE.

IT is worthy of more serious remark than the mere expression of idle wonder or querulous regret, that the continuance of life, to which every created Being clings with the utmost tenacity, but which to intellectual Man alone furnishes the constant source of hope and apprehension, should have been a subject of less anxious enquiry than those fleeting speculations of a day, which, as they pass, excite our avarice or provoke our curiosity. In the acquirement of possessions, man first seeks to learn the nature and duration of the tenure under which he is to enjoy them; and in purchasing the right to recline his head on the same spot for only a short space of time, he spares neither labour nor expence in the investigation of the conventional laws by which the continuance of his enjoyment is to be secured to him. Yet in respect of his lease of *life*, he takes no pains to trace great nature's law, by which the probable duration of Man's existence may be ascertained within the narrowest limits. Can he imagine, that in the beautiful and systematic arrangement of nature's works, the period allowed for human probation

should alone have been left as a matter of chance? If he mark her marvellous uniformities, and above all the undeviating proportion displayed in human births, shall he not incline to think that human deaths are equally the subject of a natural law? That the duration of human life should vary according to the influences of different climates, and be affected in individual instances by casual circumstances, is no more a subject of wonder, than that plants of different soils should vary in strength and duration, in season and in beauty. Each, in its class, has a separate, but equally well-defined, period of existence, "its entrance and its exit," its spring and fall.

The first estimates of the probabilities of life were made as far back as the third century, by Ulpian, the Roman lawyer, who had for his object to provide for the execution of the Falcidian law, by which testators were prohibited from leaving legacies to such an amount as would reduce the residue of the person, called in the Roman law "Heir," lower than one-fourth of the whole estate. It being common to bequeath annuities for life, as a provision or "aliment" for certain legatees, it was impossible in such cases to determine whether the law was observed, without calculating the value of the annuities. Ulpian's estimates will be found in Pandect. lib. xxxv. tit. 2, §. 68; and those appear to have been

sufficiently exact for the purpose before stated. The importance of ascertaining within narrow limits the expectation of human existence seems to have been duly appreciated by the Romans, who by their laws and customs provided perfect materials for making minute and accurate calculations of the probabilities of life at every age. Rome, in its census, had the most circumstantial and exact enumeration of all its citizens, in which not only the property of each was minutely set forth, his rank and profession, the number of his children and slaves, but the age of each of them was registered. (Florus i. 6; Pand. lib. l., tit. 16, § 3; Pand lib. xxii., tit. 3, § 10; Cicero de Leg. iii. 3.)-Rome had also its Bills of Mortality (rationes Libitinæ,) which were kept in the Temple of Libitina. Dionys Hal. 4. 15.

A total disregard of so excellent an example will serve as just cause for lasting reproach to the modern Governments, which whilst they vainly arrogate to themselves superior wisdom, merely because they possess superior means of becoming wise, foolishly neglect a subject of the deepest interest to the philosopher, and of great practical utility to the political economist.

England above all other countries in the world, must come under this censure; nearly every foot of her land is subject to laws of entail, copyhold tenures, or college and corporation leases, each involving questions of value founded on estimates of human life.

Her mercantile adventures abroad, her private dealings at home, are all more or less dependent for payment and profit on the lives of supercargoes and consignees, or on the active exertions of agents or debtors. Nay, there is not in any part of the globe any system of taxation or of contribution to the charges of a State, which must not necessarily be affected by the rates or laws of mortality among the natives, denisens, or visitors of the particular state exacting such contributions. Yet with all these inducements, and with the most simple but effective means of providing, by wise legislation, the most ample data for deducing the laws of mortality in every country, and amongst every people in the world, the government of England has suffered itself to become the victim of ignorance or knavery at the hands of those whose attainments would fully enable them to acquire, if their interest would permit them to communicate, the most perfect information on this important branch of knowledge.

It would be curious to trace the cause of this serious dereliction from public duty. Has the confidence of men in power been abused by those employed to collect and arrange proper materials on which to form calculations? or is the consequence attributable to ignorance resulting from a want of industry in prosecuting enquiry on this most important subject?

A partial solution of this enigma may be found, by contrasting the losses sustained by Government, with the exorbitant gains realized by private speculators,-whilst both have been dealing in securities dependent on the duration of human life. Government by granting certain rates of annuity to be paid during the lives of the purchasers, would consequently be considerable losers, if the annuitants lived longer than the expectations given to them by the table of mortality from which the rates were deduced. The Life Insurance Companies by receiving annuities (every premium for insurance being an annuity to the office,) during the lives of those at whose deaths the sum assured must be paid, would consequently be great gainers by extraordinary longevity. The Government and the Life Insurance Companies have been content to proceed on the same expectations of human life. The results will show which has had the better bargain.

It was not until 1693, that any scientific approximations of the values of life contingencies were made in England:—In 1783, Dr. Price published a fourth edition of his work on reversionary payments, with tables of annuities on lives, deduced from the probabilities of life at Northampton, and as observed in the king-dom of Sweden.

An excellent mathematician of the present day, in writing of this work, says, "Dr. Price's object was not so much to insert what was new, as to illustrate, by some striking examples, a few of the leading problems, with a view to oppose the pernicious schemes that disgraced the age in which he lived.—But those schemes having long since vanished, his observations may now be considered rather as a *beacon* to posterity."

In 1808, the Commissioners for the Reduction of the National Debt were empowered to grant Life Annuities, and these rates were founded on the expectations of life exhibited by the Northampton tables.

In 1828, the Finance Committee reported that "having in the course of their enquiries discovered that the conditions under which the Commissioners of the Sinking Fund are required by the Act for enabling the Commissioners for the Reduction of the National Debt, to grant Life Annuities, are extremely disadvantageous to the public, they feel it to be their duty to call the immediate attention of the House to the expediency of repealing that Act."

In proportion to the loss sustained by Government, in granting *annuities* on faith of the estimates of mortality exhibited by the Northampton tables, have been the profits realised by the private companies on sale of *Life Insurances* founded on the same estimates. The extent of these profits has been fully shown in the last edition of Dr. Price's work, (vol. 1, page 183,) published by Mr. Morgan, in which, on a comparison of the mortality exhibited by the Northampton Table with the *actual* mortality among the members of the Equitable Life Office, during a period of forty-two years, on a general average of deaths, only two out of every three presented by that Table, appear to have taken place, and at the early periods of life, only one out of two.

As this subject has been fully treated of by the present author in a letter which appeared in the Times newspaper, of the 1st July, 1828, the contents of that letter, which has never been replied to, may properly be set forth here.

EQUITABLE OFFICE.

To the Editor of the Times.

Sir,—Every person who takes an interest in life insurance, (and who does not?) probably will read Mr. Morgan's View of the Rise and Progress of the Equitable Society, because Mr. Morgan is well known to possess considerable mathematical attainments, and to have been the maker, if not the projector, of the very respectable office in which he is Actuary. A better publication would not be as generally read, if produced under another name; and a plain humble man like myself, if traduced, has no other chance of making his justification known, than by the powerful columns of such a newspaper as yours. I hope, therefore, you will not deny me that chance.

I am the founder and manager of the company alluded to by Mr. Morgan, when he says "I should be still more sorry to see the Society descend to the quackery of pretending to determine how many years should be added to the age of a person, according as he is affected with asthma, dropsy, palsy, &c. in order to fix the premiums at which his life is to be assured." I should never have presumed to impugn Mr. Morgan as the father of a system which has acquired the sanction of 60 years' experience, if Mr. Morgan had permitted the public to judge for themselves of the merits of the system of which I am proud to be known as the author. But surely it would be difficult to contend that so great a blessing as life insurance should be afforded to the healthy, the strong, and the domestic man, yet denied to persons who are feeble, decrepid, or travelling. The question of first and last importance in life insurance is, Are the data from which the rates are deduced to be relied on ? Mr. Morgan forces me to a comparison of the materials on which the Northampton Table is founded with those which I have been able to collect. From what data were his tables deduced? Chiefly from the bills of mortality of the town of Northampton! We will see if the result of 66 years' experience proves them to be correct. Mr. Morgan says, "In 1769, Dr. Price recommended the Equitable as the only society founded on the principles of strict calculation," and adds, "So far as regarded its premiums originally computed by Mr. Dobson, Dr. Price was certainly justified in his commendation of this Society." Yet in page 19 of the same pamphlet we find the same Mr. Morgan stating, that the same Dr. Price in 1776, among other important advice, urged to the Directors "the necessity of altering the tables of premiums then published in the short account of the Society, not only as being exorbitant, but absurd, and inconsistent with the result of all observations, alluding particularly to the female and youth hazards." In 1780, Dr. Price formed new tables " in lieu of the very imperfect table from which the Society's premiums had hitherto

been computed." In page 41, Mr. Morgan says, "the premiums have been reduced one-half. There is, however, one source remaining, from which it (the Society) derives its greatest security and success,—I mean the higher probabilities of life among its members than those given in the table from which its premiums are computed;" and in the very next page, he gives the following table of the decrements of life in the Society during the last 12 years, ending 1828.

	Age.		No.	Died.	Should have died.
20	to	30	4,720	29	63
30	to	40	15,951	106	243
40	to	50	27,072	201	506
50	to	60	23,307	339	545
60	to	70	14,705	426	502
70	to	80	5,056	289	290
80	to	95	701	99	94*

* The present is, in fact, the only correct table of the decrements of life in the Society. But I do not see that it can be applied to any practical use, at least as to lives under the age of 50. By the annexed table, the decrements of life, at all ages, are as two to three.

Great allowances ought, certainly, to be made in deference to Mr. Morgan's age, and the prejudice consequent on early impressions and opinions being carefully cherished for upwards of half a century; but surely Mr. Morgan will not induce his readers to put faith in the observations on which the Northampton Table is founded, after the declaration he has made in his own pamphlet, concluding with a proof, that only two deaths have actually taken place where three are charged for by the Northampton Table. By neglecting to give any precise explanation of the mode in which the figures contained in the second and third columns of the above table have been obtained, Mr. Morgan has, as he says, rendered it of no practical use; but I will venture a supposition as to the mode pursued by Mr. Morgan, and will give my reasons for thinking I am right in my suggestion,-although, if right, it might convict Mr. Morgan of error in calculation, either by design or accident. The sum of the numbers given in the second column amounts to 91,512, which divided by 12, gives 7,626, which is the probable mean number of the Members of the Equitable, as we are told that "in 1809 the members amounted to more than 7,300;" that since 1816 "the number of assurances has continued much the same." In page 45 it is said "The great majority of assurances in this Society is from the age of 40 upwards. On young lives, especially on those under the age of 30, they are comparatively few, and hardly of sufficient number to form any safe conclusion as to the probabilities of life among them. Under the age of 8 no assurances are made, and very few under the age of 20."

From the above extracts it is obvious that during the space of 12 years there could not have been so many as 4,720 members who entered on the 21st year, nor so many as 27,072 who entered upon their 41st year. The numbers in the second column in all probability represent the sum of the numbers living at each interval of 10 years of age as given by twelve annual enumerations; and the third column represents the corresponding number of deaths, in the same intervals of age. Not being informed how the numbers are distributed year by year in the intervals of 10 years of age, a general mode of distribution only can be collected from the scanty materials furnished. Hence it appears that the number of members at each year of age are on the increase from 20 to about 50, and thence decline. It may be assumed as sufficiently near the truth,-that the mean age of the living between 20 and 30 was 28; that 37 was the mean age of those living between 30 and 40; 46 the mean age in the next interval, 55 in the next, 64 in the next, 73 in the next, and 83 in the last. Then supposing that all the living between 20 and 30 are subject to the same law of mortality as if they had all been of the age of 28, and similarly of the living in the other intervals,-then the last column of the following table will give the rate according to the Northampton Table :---

Age	No.	Actual Deaths	Mr. Morgan's representation of the Northampton Tables.	Should have died, according to the Northampton Tables.
20 to 30	4,720	29	68	78
30 to 40	15,951	106	243	310
40 to 50	27,072	201	506	666
50 to 60	23,307	339	545	781
60 to 70	14,705	426	502	678
70 to 80	5,056	289	290	408
80 to 95	701	99	94	133
20 to 95	91,512	1,489	2,248	3,063

Thus it should seem that instead of 1,489 deaths which actually occurred, 2,248 ought to have happened according to Mr. Morgan's own representation of the Northampton Table: whereas 3,063 will be found to be the correct number, according to that table. The mortality, therefore, according to the Equitable experience, is to the mortality from which the premiums have been computed as 1,489, to 3,063, or in the proportion of one to two, very nearly.

It is certainly difficult to believe that the error in the fourth column of Mr. Morgan's table is attributable to accident, when it is seen that the tendency of the error is to remove the impression that the terms of the Equitable Society are unfavourable to the public.

So far I have only spoken, and I hope not disrespectfully, of the results from the materials for calculation collected by Mr. Morgan, who has designated by the opprobrious name of *quackery*, any attempts to determine the premium at which the life of a person affected with asthma, dropsy, palsy, &c., ought to be assured. I will here pause to ask Mr. Morgan whether there is not at this moment, or at least whether there was not as recently as 1819, when Mr. Morgan published his address of 1816, an order of a General Court of his Society in the following words:—

"Ordered, that for the extraordinary risk attending the

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lives of military persons, an addition be made after the rate of 221. per cent. upon the respective premiums so increased: and for the risk of small pox or gout, an addition after the rate of 111. per cent.: the said extra charges being proportionable to the charges which are now made for those risks respectively."

Can Mr. Morgan favour us by publishing the *data* from which he ascertained that the risk of military life required an increase of 22*l*. per cent., or that the risk of small pox or gout required an addition of 11*l*. per cent.?

Does not the Deed of Settlement contain a clause, which at this hour is unrepealed, to the following effect?---

"For the assurance of the lives of girls and of women under 50 years of age, and of men whose occupations shall be hazardous, upon payment of such advance on the premiums above-mentioned as shall be adequate to the hazard and agreeable to the nature of the case respectively."

Has Mr. Morgan calculated tables of mortality in different trades?

Really these extracts seem to denote an *inclination* to *quack-ery*, but, unfortunately, Mr. Morgan and his Directors have not gone to the labour and expense of collecting materials on which to trade. So that if they do not *descend* to estimate what ought to be charged for asthma, dropsy, &c., it is because they are perfectly ignorant of such matters.

I will now most respectfully submit to Mr. Morgan the materials which I think sufficient, and which I am able to show may be collected, for insuring the lives of healthy and diseased persons in England and of those travelling to foreign climates.

1st. As to the law of mortality in England.

An enumeration of many thousands of the population in towns situate East, West, North, and South, and in sea-ports and inland towns, in which the ages are set forth, and the bills of mortality among that population in which the ages are also stated. These materials, I submit, will give the probabilities of life at every age, more nearly than the bills of mortality of the town of Northampton 60 years ago.

2d. As to chronic diseases, &c.

One hundred and twenty thousand cases, in which are detailed the ages and occupations of the parties when attacked, the course of treatment pursued, the period of duration of the disease, ending in death or cure. These, reduced into a tabular form, will, I respectfully assert, show the probable duration of life of a person so afflicted, with much greater certainty than the bills of mortality of the town of Northampton 60 years ago. Four or five thousand cases of child-birth will give the risk of pregnancy with sufficient precision, and show the comparative dangers of first and subsequent labours.

3d. As to death by the influence of foreign climates.

An annual enumeration, during twenty-four years, of the civil and military European servants of the East India Company, in which the ages are ascertained with accuracy within three years, and the annual bills of mortality among the same servants in which the ages are distinguished with the same precision, I think are better materials for showing the expectation of life which an European would have on going to India than ever Dr. Price or Mr. Morgan could get from the town of Northampton. Materials equally worthy of credit may be collected to give the law of mortality among Europeans in every part of the globe; nay, if Mr. Morgan should desire it, I could show him several triennial enumerations of many hundred thousand black Creoles in the West Indies, in which the ages, names, marks, and diseases of those negroes are carefully set forth, with the exact periods of death among them, to which the ages are appended with equal precision.

Mr. Morgan has devoted a long life to one object, namely, to perpetuate the Equitable Society. He is now declining into the sear and yellow leaf, bearing all the honours which mental capacity, considerable attainment, persevering industry, and unimpeachable integrity, must always obtain for their possessor; let him not at the end of a well-spent life under-

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rate and stigmatize the exertions and humble acquirements of men as honest and industrious as himself, merely because they are endeavouring to extend the blessing of a system which he himself has cherished and supported, to thousands from whom his limited means have withheld that blessing.

It is manifest from Mr. Morgan's own statement, that if at a particular age, only one death took place, where two deaths were represented by the table of mortality from which the premiums were deduced, the parties insuring at that age would have paid double the price which the true risk required. Now although this shameful excess may not be sufficiently apparent when the premium is paid *annually*, it becomes perfectly obvious, if the insurance be paid for by one sum, instead of by an annual premium. Mr. Bailey, in his excellent work, published in 1813, exposes this imposition in its true light:—

"A person aged 20 is desirous of assuring his own life for $\pm 5,000$. The sum demanded for this purpose, by all the Assurance Companies (in 1813) is $\pm 2140 : 2 : 0$. But the true value of such sum, as deduced from the Sweden Observations, is no more than $\pm 1422 : 10 : 0$, if we take the rate of interest at 4 per cent. and no more than $\pm 1128 : 10 : 0$, if we take the rate of interest at 5 per cent. Or, when deduced from the observations of M. De Parcieux, it is no more than $\pm 1358 : 2 : 0$, taking interest at 4 per cent. and no more than $\pm 1078 : 16 : 0$, taking interest at 5 per cent."

In computing the value of $\pounds 5,000$, payable at the death of a man aged 20, by a table deduced from the most correct modern observations, and agreeing most accurately in result with the actual mortality among the Members of the Equitable Society during a period of forty-two years, it is found to be only $\pounds 1276: 7: 0$, taking interest at 4 per cent. and only $\pounds 995: 19: 0$, taking interest at 5 per cent. being in the former case little more than half, and in the latter case considerably less than half the price charged by the Assurance Companies in existence at the time Mr. Bailey wrote.

Such is the difference, in a single instance, between the values of Life Interests calculated according to the Northampton Table of Mortality, and those deduced from correct modern observations. And hence it may be inferred how prejudicial a reliance on calculations founded on the Northampton Table must have been to the Government in *selling life annuities*, and to the public in *purchasing life assurance*.

The want of proper calculations of the value of human life, was long ago most feelingly, and most prophetically deplored by Lord Chancellor ELDON, in the case of PEARCE v. PIPER, (in the course of which BUCKLEY v. CATER before Lord Thurlow was mentioned:) The Bill stated Articles of Agreement, dated 25th June, 1798, for the establishment of a Society under the title, "The amicable Society of Master Bakers," for raising an Annuity fund, containing provisions for the payment of annual subscriptions, &c. and that every subscriber, who should have been a Member seven years, and should have attained the age of sixty years, should be entitled to a clear annuity of £60 for life, and the widow of every such annuitant to an annuity of £30, or, in certain cases, £60 for her life, if she continued a widow; in giving judgment, his Lordship said, "The parties who formed this Society proposed to establish, certainly, a very useful institution, to the success of which every one must wish fairly to contribute, and regret the failure, if there is in the original constitution some error fatal to its existence, arising from the desire of different individuals to have, towards the close of life, that degree of ease and comfort which a proper application of the fruit of the labours of their more early years might produce. If they cannot agree on some plan, I must refer it to the Master to make similar enquiries to those directed by Lod Thurlow, taking the assistance of a Calculator; and to inform me, if this Society cannot longer exist, what will be an equitable distribution of the funds subscribed. But that course is not to be taken, unless the Court shall be unable to do more justice, by securing to those who have and may become entitled to annuities the enjoyment of them."

In DAVIS v. FISK, also, the same learned judge observe, "The hardship or injustice of the case may be urged: but many Gentlemen of the Bar must remember the cases of the unfortunate annuitants—widows who had subscribed small sums during a certain portion of their lives, to receive annuities after they had reached a particular age. The one case was before my Lord Thurlow, and the other before myself. That learned Lord felt most acutely his inability to afford relief, by reason of the situation of the parties: and, however much he might have lamented his want of power, I am sure I suffered as much on my own account."

The private Companies seem to have been better advised than to have granted annuities on the estimates from which their premiums of insurance were deduced.

The Author does not arrogate to himself more ability than has been possessed by some who have written on this branch of science, but he professes to withdraw the veil which they have carefully thrown over the subject, or rather he seeks to dispel the mist by which the eyes of the public have been blinded, and which has been designedly cast over the sight of those whose acuteness of vision, if left to itself, would have *directed* the public.

C 3

ON THE LAWS OF MORTALITY AND DISEASE, AND OF THE DATA NECESSARY FOR AS-CERTAINING THEM.

The proportion of births of male to female children throughout

England and Wales, is as	104.26	to	100
	104.29	to	100
	104.77	to	100

a very striking uniformity in numbers, certainly; but as there will be found to be constantly in existence a greater number of females than of males, an erroneous conclusion might thence be drawn, that nature had given greater powers of endurance to women than to men: this supposition would be somewhat aided by the fact, that the female is subject to all the maladies which can affect the male, with the addition of cancer, and the diseases of pregnancy peculiar to herself. But there are many causes to reduce a male population, from which women are exempt-anxieties of mind in worldly transactions, unwholesome occupation, voyaging, and war. If deaths from these causes could be accurately ascertained, it seems highly probable that the proportions of male to female deaths, would be found to be as uniform as the proportions of births in the two sexes. That human mortality, without such distinction, follows a law, can be satisfactorily shown.

Let it be taken by way of hypothesis, that the rate of mortality perpetually increases from the age of *ten*, to the end of life; that these rates (distributed in the order of age) form two geometrical series; that in the first series, the rate of mortality increases *one third* every *ten* years; that in the last series, the rate of mortality *doubles* every ten years; that the first series ends, and the second begins, near the age of 50.

This hypothesis will be justified by the best observations on the mortalities in different parts of the world,—the rate, of course, will vary according to climate and selection.

Rates of Mortality, per cent. per annum, in General Life, in Classes of 10 Years of Age.

Between Ages.	10 & 20	20 & 30	30 & 40	40 & 50	50 & 60	60 & 70	70 & 80	80 & 90
Swed. 1795 Hypothesis	·65 ·66	·89 ·90	$ \begin{array}{ccc} 1 & \cdot 15 \\ 1 & \cdot 20 \end{array} $	$ \begin{array}{ccc} 1 & \cdot 60 \\ 1 & \cdot 60 \end{array} $	$2 \cdot 38 \\ 2 \cdot 40$	4 ·89 4 ·80	9 ·96 9 ·60	17 ·90 19 ·20
Swed. 1805 Hypothesis Milne's				-	$2 \cdot 48 \\ 2 \cdot 50$	4 ·78 5	10 ·6 10	20 ·8 20 ·0
Carlisle . Hypothesis				$ \begin{array}{ccc} 1 & \cdot 42 \\ 1 & \cdot 42 \end{array} $	$\begin{array}{r} \cdot 04 \\ 2 \cdot 13 \end{array}$	$ \begin{array}{r} 4 & \cdot 19 \\ 4 & \cdot 26 \end{array} $		

The inspection of these tables, will show how very nearly the fact agrees with the hypothesis in general life. Although in the two Swedish tables, the rates greatly differ, yet they both agree with the hypothesis. In the *new* Swedish table, however, the second series commences at the age of 47,— whilst in the *old*, it commenced at 55. The Carlisle table of mortality, as exhibited by MILNE, would disagree with the hypothesis (about the age of 60), if the intervals of 10 years were to be taken from the age of 10; but when the intervals are taken, beginning at the age of 11, the hypothesis agrees very nearly with the fact; which shows that the former discrepancy arose from a deficiency in the number of observations.

Rate of Mortality for a Select Class of People, the selection being made at one and the same age for all the lives, viz. about the age of 20.

Between Ages.	20 82 30	30 & 40	40 & 50	50 & 60	60 Ez 70	70 & 80	80 & 90
Deparcieux Nuns Hypothesis	·80 ·80	1 ·04 1 ·07	1000	$2 \cdot 34 \\ 2 \cdot 30$	2.4	and the second s	
Deparceiux Monks Hypothesis	·78 ·90	·94 1 ·20			$5 \cdot 20 \\ 5 \cdot 40$	and the second sec	and the second

The rate of mortality among the Nuns agrees very nearly with the hypothesis, but the rate among the Monks differs in the first 20 or 30 years: this is to be attributed to the effect of selection, as Deparcieux says that none but persons in good health were admitted. The selection among the Monks appears to have been performed much more carefully than among the Nuns.

Between Ages.	10 * 20	20 & 30	30 & 40	40 & 50	50 & 60	60 * 70	70 & 80	80 & 90
Dep. French Tontines Hypothesis	·76 ·65				$2 \cdot 22 \\ 2 \cdot 25$			18 ·23 18
Dutch An- nuitants Hypothesis	·90 ·90							17 ·61 16 ·81
Finlayson's Annuitants Hypothesis	·65 ·63				51.87 1.95			13 ·95 14

Rate of Mortality among a Select Class of People, the selection being made at all ages.

The three last Tables, with the exception of the French Tontines, rest on doubtful authority. But from their mode of construction they cannot confirm or invalidate the hypothesis in any considerable degree. The continued influx of newly-selected lives, will have the effect of showing an apparent rate of mortality considerably lower than the true one:-understanding by the true rate, that which would be found, by knowing the time of death of each individual out of 20,000, all of whom were selected at the same early age as ten. It may be seen, however, in the three tables of selected lives, that in the latter years of life, in proportion as the effect of selection diminishes, the hypothesis coincides the more nearly with the fact.

The tables, deduced from general and select " classes, furnish in themselves sufficient evidence of the existence of the law and the truth of the hypothesis; but a most extraordinary confirmation may still be given in materials drawn from independent sources, and applying to a distinct race of beings,-materials of more perfect character than were ever before collected as data for calculations on human life,-enumerations of the whole Black Population of the West India Islands and Colonies. These enumerations comprise upwards of 700,000 persons at different periods, together with the deaths and births in those periods. In some of the general returns, the ages of the living and dying are distinguished, and males also from females; the particular returns contain deaths of 3458 Creoles and 2494 Africans, which took place in 9 years, on an average population of 14,408 Creoles, and 7361 Africans. In some of these returns the ages of the living and dying are distinguished in periods of ten years; in the remainder the precise ages are specified. An idea may be formed of the excellence of these materials by comparing them with the materials on which the best English table of mortality, viz. the Carlisle, is founded, which was confined to 1840 deaths in 9 years, out of an average population of only 8177. The particular returns of so extensive a number as 21,404 of a stationary population, confirmed by general returns of 700,000, entitles the deductions to the greatest confidence, as being founded on the widest possible basis. These deductions leave no doubt that the law and the hypothesis will hold in every part of the world, since they apply equally to the natives of Sweden, France, and England, and to the black population of the West Indies.

Between Ages.	10 & 20	20 & 30	30 & 40
Jamaica Slaves Hypothesis		$\begin{array}{ccc} 1 & \cdot 47 \\ 1 & \cdot 52 \end{array}$	

It is almost unnecessary to pursue this enquiry further; but as the observations on the mortality among slaves apply to the first series only, it may be curious to try the hypothesis by the actual experience among the members of the Equitable Life Office, the observations on which would apply to the second geometrical series only.

Between Ages.	40 & 50	50 & 60	60 & 70	70 & 80
Equitable experience Hypothesis		$ \begin{array}{r} 1 & \cdot 40 \\ 1 & \cdot 40 \end{array} $	$ \begin{array}{r} 2 & \cdot 84 \\ 2 & \cdot 80 \end{array} $	5 ·76 5 ·60

Since the present work has been in the press, the writer of a letter in a late number of the Philosophical Magazine, has made some observations on the uniformity with which the decennial rate of mortality increases among the members of the Equitable Society. He has found good grounds for believing that the rate of mortality doubles every ten years, after the period of *middle life*, and he hence rashly concludes that the *same* computation may be adapted to the *earlier* stages. This *theoretical* writer in order to prove how lightly he regards the fetters of *practice*, adopts as probable, and publishes to the world the consolatory notice, that at the age of 25, only 1 death takes place in a year, out of every 512 living, and at the age of 15 only 1 death out of 1024 living. If this theory were true, 2s. 6d. would be an ample charge for the assurance of £100 for one year, on a life of 15. Now, as the Equitable charges 17s. 11d. and the Asylum 13s. 11d. for the same risk, perhaps the writer flatters himself that he has discovered the cause of the unexampled prosperity of those two societies. G. F. Assuming it to have been proved that human mortality, taken from general population, follows a law, the point of next importance would be to arrange the deaths in classes, not only as to the decrement in every year of age, but also as to the causes by which death has been produced.

It is scarcely to be doubted that the rates of mortality will vary with the occupations of different classes of persons. The mechanic and field labourer, the surgeon and the lawyer, the soldier and the divine, cannot have the same expectation of life. They are exposed to perfectly distinct influences, and each pursuit will be found to have its peculiar diseases, or at least it will be found that certain maladies operate to a much greater extent on one class than on another. It is perfectly practicable to collect materials worthy of full confidence, to show the rate of mortality in every trade and profession, and by every disease, whether engendered at home or abroad, in Europe or out of Europe.

For want of such a classification, to what serious consequences are thousands of persons exposed? Take the case of a military officer for instance! Subject to all "the natural shocks which flesh is heir to," he is also exposed to vicissitudes from which mankind in general are exempt. In the service of his country, he must voyage to uncongenial climates, and if he have vigour of constitution sufficient to sustain

the attack of new influences, under a tropical sun, he will scarcely have become familiar to them, when he may be called away to experience fresh constitutional assaults in another part of the world, or that which is probably as bad, to return to his own climate, the influences of which will then be new to him, and possibly little less dangerous than those foreign influences, which his constitution may be said to have so recently learnt to bear; when to these are added the fatigues, and consequences of the state of actual warfare, it becomes difficult to limit the sympathy to which the soldier is entitled. Yet this man, alone, whose hardships for his country entitle him to our deepest respect, is the only man who, by the variety of hazards to which he is exposed, is deprived of all chance of providing for his family by an insurance on his life. To estimate and fix the rates of mortality among British soldiers in different parts of the world, whether in peace or in war, has occupied the time and serious attention of the Author of these remarks, and he has received the kindest and most prompt assistance from those whose stations enabled them to afford the most valuable materials from the most perfect sources of information.

For constructing a table of the mortality which prevails in a particular climate, enumerations, for several years, of the whole population, distinguishing natives from foreigners, must be obtained; and in these enumerations, the ages must be correctly set forth. The lists of burials, in the same classes, are also indispensible; and in these likewise the ages must be carefully stated.

In tracing the probable duration of a chronic disease, many other data will be necessary.

The ages of some thousands, who have suffered under that malady, must be marked, care being taken to find out the age of each person when first attacked by it, and at its determination by cure or death. This is the first step towards ascertaining the period of life at which the particular malady is most likely to prove fatal.

The distinct species of disease appertaining to men, women, and children, certainly cannot be brought lower in number than five hundred, including those of syphilis and pregnancy. Of these, many, as plague and various kinds of leprosy, belong to foreign countries alone; while others are so rare as to be hardly worth noticing; whence five hundred *contingent* diseases may be reduced to about two hundred and fifty *current* diseases; of which, the *acute* are somewhat more numerous than the *chronic*, in the proportion of about 140 to 110.

The reader need not apprehend that essays on those one hundred and ten, or the means of showing their probable duration, will be given in the present work-the author is unequal to such a task; and if he were competent to it, his readers would probably be but few in number. His purpose is merely to call attention to the practicability of collecting and arranging materials so as to fix, with sufficient accuracy, the values of annuities and the rates of insurance on the lives of persons suffering under chronic disease; and he has selected Mania for his subject, for several reasons,-because less is generally known of it than of any other disease,because the published accounts are less to be relied on; and because Shakespeare (who has been described by the author of the best work on insanity now extant, as "the highest authority in every thing relating to the human mind and its affections") has presented several of his characters suffering under mental derangement; these may serve to amuse the reader, whilst they distinctly mark the progress of the disease. Lear, Hamlet, Ophelia, and Edgar, display, with great correctness, those varieties in madness commonly called Furious (or raging) madness, Melancholic (or melancholy) madness, Sorrowing distraction, (or craziness,) and Obsessi, (those who fancy themselves possessed by devils, or, as we should say " beside themselves.")

There was, still, another reason for the selection. Mania is frequently attendant on the puerperal state, it therefore may be considered as one of the dangers of pregnancy. It is transmitted from parent to child, it therefore involves considerations on the hereditary predispositions which are unfavourable to longevity. The death of maniacal persons is generally produced by apoplexy, and apoplexy frequently determines life in old age. Thus the state of the mother before and at the time of giving birth, and every period of the infant's future life may be treated of under the head of one disease,—a disease which is too certainly inheritable by man, which affects him through life, and which in the end produces his death.

ON PREGNANCY, CHILD-BIRTH, PREDIS-POSITION TO DISEASE, AND MANIA.

Pregnancy is so usually consequent on an intercourse between the sexes, that it is pretty generally believed to be a state favourable to health and long life. It is certainly presumptive evidence of the party's being in health. An enquiry whether the state of celibacy or of pregnancy be the more favourable to longevity, would admit of much being said on both sides.

Some physicians of great attainment and very extensive practice are of opinion that "breeding women are liable to all the diseases of women who do not breed, (with a very trifling difference,) and besides these to the diseases peculiar to lying-in." Others of equal merit and observation affirm, that "the pregnant state renders the constitution less susceptible of receiving various diseases to which all persons are liable. That the constitution in breeding women is so intent on the work of bringing to maturity the fruit of the womb, as to be less acted on by causes which under other circumstances would be sufficient to produce disease; and that it is well known that the progress of various diseases, but especially consumption, is not uncommonly suspended and sometimes entirely stopped by pregnancy."

No useful purpose would be answered by setting the question at rest and showing the different rates of mortality amongst single women, breeding women, and married women who do not breed; the work of procreation would not be retarded or promoted by an accurate knowledge of the results; but as it rarely happens that a sufficient number of cases come under the personal observation of any one medical man, to enable him to ascertain correctly the comparative danger of child-birth amongst women of different ages and in different labours, and as no professor has hitherto taken the trouble to arrange and publish observations on a point of certainly some importance, a few remarks will be here introduced on the subject. Indeed it is the fault, or misfortune of the most able professors, that they omit, or have not time to note as they occur, many curious and important facts, by which their own judgments and opinions are swayed, and which might prove of vast importance in enabling others to form a prognosis in similar cases.

The following singular question affecting the title to a peerage, has recently undergone discussion, and may be properly introduced in this chapter: "Whether it is possible from the course of nature that a child should be begotten on the 30th of January, and born at an interval of three hundred and eleven days—that is, upon the 7th or 8th of December?"

To this question, Doctor Augustus Bozzi Granville, after citing various cases, answered that he was not aware of any circumstance that could render it impossible.

Dr. John Conquest knew, in the course of his practice, of one woman that was certainly pregnant for at least ten months. He addedat that time, I disbelieved all the cases which I had previously heard. I had been in the habit of laughing at them as a public lecturer; but so strong was the evidence, from the most minute investigation of this case, that I was compelled to admit the accuracy of this woman's statement, and my former convictions were very much shaken. The same thing occurred to this woman at her subsequent confinement; she exceeded the time then, certainly, four weeks; she has since borne three children at the expiration of the ninth month; the three last children have been considerably smaller than the two intermediate children .- I have also had, under my immediate observation, the case of a lady who has borne nine children, and who, on some account or another, has been able five times to determine exactly the day on which she should

be confined, and her predictions have been verified in some cases; but in one confinement she exceeded the time by a month and two days, and this woman brought forth by far the largest child I had ever seen, after a very protracted labour; her labours in general being so slight, that in by far the majority of cases, the children have been born before either nurse or medical attendant could be at hand —After labour has commenced, I have known the time for its perfection to be extended by mental agitation, in at least fifty cases.—I have also known cases of gestation protracted by mental agitation, cases in which the mental affection has been so great as to destroy the vitality of the child.

John Sabine, esq. and Doctor Samuel Merryman said, that although the usual period of gestation was two hundred and eighty days, or nine months, that instances had occurred in which this period had been considerably extended.

On the other side of this question, there is also a great weight of evidence. In the last edition of *Dr. Beck's* Elements of Medical Jurisprudence, the subject is fully treated of. The author when speaking of protracted delivery, says, "It is astonishing, and I will add ridiculous, to view the ardour with which writers have advocated this doctrine. I shall devote this section principally to the statement of some cases which have occurred at various times, and been made the subject of legal investigation." After referring to a variety of cases, he mentions one, "that enlisted all the medical talent of France in its discussion."

"The opinion of Louis was asked, and he dechared that the offspring was illegitimate: among the arguments which he adduces, are the following :- 'That the laws of nature on the subject are immutable;-that the foetus at a fixed period has received all the nourishment of which it is susceptible from the mother, and becomes, as it were, a foreign body ;- that married females are very liable to error in their calculation;-that the decision of tribunals in favour of protracted gestation, cannot overturn a physical law; --- and finally, that the virtue of females is a very uncertain guide for legal decisions. If we admit,' says he, 'all the facts reported by ancient and modern authors, of delivery from eleven to twenty-three months, it will be very commodious for females, and if so great a latitude is allowed for the production of posthumous heirs, the collateral ones may in all cases abandon their hopes, unless sterility be actually present.'

"This reasoning appears to me," says Dr. Beck, "to carry great weight; and Mahon in his chapter on the subject, adds several sensible remarks in confirmation of it. He observes that if the doctrine be true, that the children of old people are longer in coming to maturity, it would have been confirmed by experience, which it is not. Grief, also, and the depressing passions are much relied on as possessing a delaying power, but certainly, these are more apt to produce abortion than protracted gestation. He accounts for the mistakes of married women by suggesting that the menses may be suppressed, not only from disease, but from affections of the mind, or accidental causes which do not immediately impair the health while the increase of volume in the abdomen may originate from this or from numerous other causes. Towards the conclusion of his remarks, he states a difficulty which I believe cannot be readily overcome. If the doctrine be allowed, how shall we distinguish a delayed child from one that is born at nine months, and by what means are we to detect fraud in such cases? Certainly, as far as we can judge from the narratives given, the infants born after protracted gestation were not distinguished for size, or other appearances of maturity.

"A calm and deliberate examination of these histories must certainly, I think, lead to a total disbelief of the doctrine of protracted gestation.

"There are many that evidently bear the impress of vice, while the most favourable are so liable to have arisen in error, that scepticism

must appear unavoidable. That a limited variation may from extraordinary circumstances sometimes occur, I shall allow so far as to believe it proper that legislation should make allowances for it. The best and most accurate observers have sometimes met with cases where the period seemed to be somewhat prolonged, but I will venture to add, that the more closely they are investigated, the less will the number appear. Dr. Smellie mentions two instances in which the females exceeded their reckoning by eight weeks, and Dr. Bartley confirms them by a similar case in this own practice. All these, however, were calculated from the cessation of the menses, and is it not possible the same peculiar circumstances might have caused this, particularly as it was the first pregnancy in two of them ?

"I will add, that in England, and certainly in America, cases of protracted gestation, are rarely heard of. They appear to have occurred in countries where the administration of justice was arbitrary, or at least fickle and unsteady."

Some of the most celebrated and experienced physicians are of opinion that these supposed prolonged pregnancies are more rationally and probably explained in other ways. Indeed what *Dr. Jemmat* said in giving evidence in the great Annesley cause, may fairly be applied on the present occasion. On being asked, "On your oath, sir, are there any rules in your profession, by which a pregnancy can be discerned from a tympany, or any other like disorder?" He answered, "By virtue of my oath, that question would puzzle not only the Colleges of Physicians of England and Ireland, but the Royal Society into the bargain."

It is not within the scope of the present work to publish tables of the numbers who die by the act of labour. Little faith would be placed in them, even though they were published by a physician, unless he should give his data also. The enquiry necessarily involves many nice distinctions; women are reported as dying in childbed whose deaths, strictly speaking, are not at all attributable to pregnancy or child-birth. If a woman die during the month of child-bed of consumption, scarlet fever, typhus, or any other disease, she is reputed to have died in child-bed, and her death is so registered. The same report is frequently made in cases where premature labour is excited by any disease of which the woman dies, although that disease was in no way consequent on or incidental to the puerperal state .- These few circumstances may serve to show the impracticability of publishing satisfactory data even as to the general number of deaths in child-birth; but when in addition to these it is considered, that the number of deaths by the first and every subsequent labour at every year of life in which pregnancy can happen, must be ascertained and made a subject of comparison, it will be obvious that a publication of the materials, or reasoning, to justify a prognosis, would be next to impossible.

The mortality in first labours, selected from the general mortality by child-birth, will appear to be in the proportion of 114 to 100, and there is no reason to doubt that first labour is attended with greater danger than the second, third, fourth, fifth, or sixth, among young women; but that after several labours, the *immediate consequences* of child-birth are still more dangerous to life than the *act* of a *first labour*, and that every subsequent birth is attended with increased risk.

Where a first pregnancy takes place in the middle of life, the same consequences which frequently follow the birth of a ninth or tenth child by a young woman, may be expected at a fourth or fifth labour of a woman of more advanced age.

These remarks are intended to apply strictly to the dangers of *child-birth* and its immediate consequences, distinguished from the state of *pregnancy*, with respect to which a very different prognosis might be formed.

Puerperal mania is of frequent occurrence, and has been treated of in one of the papers of Medical Transactions, by Dr. Robert Gooch. He says, "It is well known that some women who are perfectly sane at all other times become deranged after delivery, and that this form of the disease is called Puerperal Insanity. The most common time for it to begin is a few days or a few weeks after delivery; sometimes it happens after several months, during nursing, and soon after weaning. It is said sometimes to arise at the commencement of labour.

"The approach of the disease is announced by symptoms which excite little apprehension, because they so often occur, without any such termination;—the pulse is quick, without any manifest cause; the nights are restless, and the temper is sharp. Soon, however, there is an indescribable hurry and peculiarity of manner, which a watchful and experienced observer, and those accustomed to the patient will notice; her conduct and language become wild and incoherent, and at length she becomes decidedly maniacal. It is fortunate if she does not attempt her life before the nature of the malady is discovered.

"When the disease appears under the form of melancholia, it commonly begins some months after delivery, and comes on gradually: the patient has suffered in her health from nursing, experiences a failure of memory, confusion of mind, and an irresistible and inexplicable depression of spirits; she finds it difficult to think on any subject long; her domestic accounts bewilder her, she is dissatisfied about herself, and full of anxiety. This state continues in a greater or less degree for several weeks. At length it becomes more marked; her countenance is mournful and downcast, she is silent and thoughtful, fancies that she has some serious disease, accuses herself of some moral depravity, and supposes herself an object of punishment and scorn.

"It is needless here to give a minute and detailed description of mania and melancholia in child-bed or suckling women; it is generally like mania and melancholia under other circumstances; but I may here remark, (what those who have carefully observed the affections of the nervous system will readily acknowledge), that when once its functions are greatly disordered, there is no end to the diversity which the symptoms are capable of assuming.

"When once it has begun, its duration is very different in different cases; sometimes it subsides in a few days, or even hours;—but this is rare;—it commonly lasts several weeks, or even months; but of ninety-two cases of puerperal insanity admitted into the hospital de la Salpitriere at Paris, two lasted two years; and thirtysix (that is, more than one-third,) went uncured. It is a common opinion that puerperal insanity is harmless to life: most cases, it is true, terminate favourably. Those who consider puerperal mania as a disease ultimately harmless to life and understanding, will be surprised at the proportion of incurables and deaths in this hospital; the only way to explain it is by supposing that none but those cases which resist the ordinary treatment at home, that is, the picked bad cases, find their way to this institution.

"Some women are so liable to insanity in the puerperal state, that they have been deranged in many successive confinements; this, however, is far from being always the case. I have known several who having been affected with mania after lying-in in the country, have, in their next confinements, come to town to be attended; they were long and carefully guarded from noise and agitation, dieted cautionsly, purged frequently, and although apprehensions were long entertained about them, completely escaped their former attack.

"As to the causes of this disease, the chief seems to be that peculiar state of the sexual system which occurs after delivery; in many instances the only remarkable circumstance about the patient, is,—that she has been delivered, or is nursing; yet there is another cause which greatly contributes to the excitement of this disease,—a considerable interruption of that mental tranquillity so requisite during the susceptibility of the puerperal state; the frequent admission of boisterous persons into the lying-in room; an officious, eager, irritable nurse, or relative, who, with the best possible intentions, is continually doing the worst possible things; sudden and violent agitation, domestic anxieties, and misfortunes, have preceded and apparently contributed to the appearance of the disease. Still patients often lie-in, are shocked, without becoming insane; hence we must take into the account at least a predisposing cause—a susceptibility of the brain.

"Whenever it is possible, the patient should be confided to a nurse accustomed to the task; she is not equally safe under the care of any other, however intelligent and discreet; these nurses learn by experience all the arts which such patients employ for the attainment of their object, and regularly and methodically secure the knife, garter, door, and window, &c. There is no contrivance to which the patient can resort, which they have not learnt by practice to anticipate; it is a striking example of the superiority of ordinary mind, disciplined, over a fertile but undisciplined cunning."

In another part of the paper, Doctor Gooch says, "above all things, never attempt the removal of her delusions by argument; and when the violence of the disease has subsided, facilitate the recovery of her natural feelings and faculties by presenting their natural objects."

It would be difficult to add any thing to this

excellent paper which might be useful to the general reader. The whole progress of the disease is so clearly and so correctly marked, that those who have ever watched a case of puerperal mania will at once acknowledge its truth; and those who have never been led to such observation may almost trace the growth of the malady in the statements so familiarly put forth by *Doctor Gooch*.

One remark of importance may be made to guard the reader from misunderstanding the *means* of "facilitating the recovery of natural feelings and faculties by presenting their natural objects."

When the violence of the disease has subsided--the husband should see the patient but seldom, and then only in the presence of other persons. Powerful reasons render this precaution absolutely necessary, even during convalescence; and several months should elapse after the patient appears to have perfectly recovered before any closer intercourse ought to be allowed.-On a rigid observance of this may the happiness of future Issue depend .- Many a wretch has suffered death under the laws of his country, by reason of a mental incapacity to receive moral impressions .- This is a consideration of the most appalling kind. The propagation of mania, epilepsy, or fits, may be looked to as almost inevitably consequential on a renewal of sexual

intercourse before the perfect recovery of the female from a state of puerperal mania. The mere apprehension of entailing on a child such horrible maladies ought to render men cautious, but to condemn from its birth a human being to a state of mind susceptible of the worst impulses of the brute, but wholly incapable of receiving moral or religious impressions, is a crime at which wickedness itself might start back appalled. Well may it be said that-He who inflicts on any one individual the worse than deadly wound of insanity, knows not the numbers to which its venom may be communicated; he poisons a public stream, out of which multitudes may drink; he is the enemy, not of one man, but of mankind.

Dr. Reid has justly observed that "To be well born," is a circumstance of real importance; but not in the sense in which that expression is usually employed. The most substantial privileges of birth are not those which are confined to the descendants of noble ancestors.

"Mysterious as the subject is," says Dr. Good, in his 'Study of Medicine,' "we have perpetual proofs that a peculiarity of mental characters is just as propagable as a peculiarity of corporeality; and hence, wit, madness, and idiotism, are as distinctly an heir-loom of some families, as scrofula, consumption, or cancer."

All observations concur in acknowledging,

that there are many circumstances in which children resemble their parents: It is very common to see them resemble one of their parents in countenance; and when there are several children, some will bear the likeness of the father, and others of the mother. Children often possess the make and fashion of the body, peculiar to one, or other, of their parents; together with their gait and voice. The transmission of personal deformities, is equally curious. "I am acquainted," says Dr. Haslam, in his excellent work on insanity, "with a person in this town, whose middle and ring finger are united, and act as one: all the children of this man carry the same defect. A toe nail, particularly twisted has been traced through three generations, on the same foot and toe. Abundant instances might be adduced on this subject: there is scarcely a family that cannot produce something in confirmation. Is it then surprising that diseases should be hereditary? or at least, that the children of parents suffering under them, should be more susceptible of those particular diseases, than if they had sprung from an untainted stock."

It has been truly observed that, in attempting a definition of madness, it is difficult to draw the line between real disease and habitual waywardness. Arnold says, Notional delirium is peculiar to madness, and asserts, that the bulk of mankind morally, if not medically, are more or less affected by it. Socrates and the Stoics considered every foolish or wicked person as insane. "All fools," says Cicero, "are disordered in mind: all fools, therefore, are insane; they who are carried away, either by ungovernable desire or by immoderate anger are out of their own power."

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Some definitions of madness are so narrow, as to set at liberty half the patients in Bedlam; others so loose, as to give straight-waistcoats to half the world. What Lord Chesterfield said of a lady's reputation may be fairly applied to a fool:—"You have not *lost* your senses, they are only *mislaid*."

It may be safely asserted that there is nothing in the form of the head, or brain, to indicate madness. The best observations are strong on this point. Greding, Pinel, and Haslam, all agree. The observations of Bonetus, Morgagni and others, so carefully collected by Arnold, and noticed by Crighton and Good, establish no principle in cases of insane persons which would not equally apply to the appearances on dissection of persons who had died from other causes than mania. Indeed there is nothing in the appearance of the brain itself to show it to be the seat of thought. Spurzheim, it is true, holds that the faculties of the mind are double, and says, that each hemisphere of the brain contains a distinct set, and quotes *Tiedman* for the case of a man, who was insane on one side, and observed his insanity with the other. *Gall* also speaks of a minister who constantly heard on his left side reproaches and inquiries, and turned his head on that side to look at his assailants. This is hunting after Phrenology with a vengeance.

The exciting causes to madness are various and uncertain.

"The causes which I have been enabled most certainly to ascertain," says Dr. Haslam, "may be divided into Physical and Moral. Under the first are comprehended-repeated intoxication; blows received upon the head; fever, particularly when attended with delirium; mercury largely and injudiciously administered; cutaneous eruptions repelled; and the suppression of periodical or occasional discharges and secretions; hereditary disposition; and paralytic affections." "By the second class of causes, which have been termed moral, are meant those which are supposed to originate in the mind, or which are more immediately applied to it. Such are the long endurance of grief, ardent and ungratified desires, religious terror, the disappointment of pride, sudden fright, fits of anger, prosperity humbled by misfortunes; in short, the frequent and uncurbed indulgence of any passion or emotion, and any sudden or violent affection of the mind."

It has been considered that intellectual labour frequently produces insanity; that those who are in the habit of exercising the faculty of thought for the perfection and preservation of the reason of others, are thereby in danger of losing their own. *Crighton* enumerates as an exciting cause to madness, "Too great or too long continued and abstract calculation; and the deliria to which men of genius are peculiarly subject."

"We hear much of this," says Haslam, "from those who have copiously treated of this disease, without the toil of practical remark; whose heads become bewildered by the gentlest exercise, and to whom the recreation of thinking becomes the exciting cause of stupidity or delirium. What species of delirium is that which succeeds long-continued and abstract calculation? Newton lived to the age of 85 years; Leibnitz to 70; and Euler to a more advanced period; yet their several biographers have neglected to inform us that their studies were checquered with delirious fermentations. The mathematicians of the present day (and there are many of distinguished eminence) would conceive it no compliment to suppose that they retired from their labours with addled brains, and that writers of books on insanity should impute to them miseries which they never experienced. What is meant by the deliria to which men of

genius are peculiarly subject, I am unable, from want of sufficient genius and delirium, to comprehend."

It is easy to believe that vanity and ambition operating on minds, puny by nature and undrilled in intellectual exercises, to attempt to grasp that which they are unable to embrace—have frequently produced insanity. Dr. *Reid* says, he attended an idiotic man of erudition, whose head in its best estate was a mere repository for other men's ideas, not a soil out of which an idea ever grew. But it is worthy of remark, that mathematicians and natural philosophers have in general attained a considerable age. So that abstract calculations, or correct thinking upon any subject, do not appear, even with the aid of delirious visitations, to shorten the duration of human life,

The following extract from Dr. *Pinel* is in direct variance with the former supposition, and may be thought amusing when it is remembered that it is written by a physician,—one of the select few.

"It is well known, that certain professions conduce more than others to insanity, which are chiefly those in which the *imagination* is unceasingly or ardently engaged, unmoderated in its excitement by the exercise of those functions of the *understanding* which are more susceptible of satiety and fatigue. In consulting the Registers of the Bicetre, we find many priests and monks, as well as country people, terrified into this condition by the fear of hell torments; many artists, painters, sculptors, and musicians; some poets extatized by their own productions; *a* great number of advocates and attornies. But there are no instances of persons, the exercise of whose professions require the habitual exercise of the judging faculty; not one naturalist nor a physician, nor a chemist, and, for the best reason in the world, not one geometrician."

The Doctor must have intended to be jocose in complimenting Advocates and Attornies on the possession of ardent *imaginations* unmoderated by the functions of the *understanding*. Members of courts of law are pretty generally anxious to exercise the JUDGING faculty.

It is an old opinion, and continues still to prevail, that maniacs are influenced by the change of the moon. In the fourth chapter of St. Matthew's Gospel, verse 24, will be found the word " $\sum_{\epsilon \lambda \eta \nu (\alpha \xi o \mu \epsilon' \nu o \nu \varsigma)}$ " which is rendered in the English version, those which were lunatic. Hippocrates, a philosopher, and correct observer of natural phenomena, does not appear, however, to have placed any faith in this planetary influence.

This popular superstition is important, from the consideration that the existing law in this country, respecting insane persons, has been established on the supposed prevalence of this lunar regulation. A commission is issued de lunatico inquirendo, and the commissioners are particular in their enquiries whether the patient enjoys lucid intervals, a term properly connected with the word lunacy when insanity is supposed to be periodical, for it is a fair inference that the patient is rational in the intervening spaces of time. Dr. Haslam, however, says, that he kept, during two years, an exact register, but without finding, in any instance, that the aberrations of the human intellect correspond with or are influenced by the vicissitudes of the moon.

It is more than probable that this supposition originated in the case of some female, who happened to become insane, from a *particular* cause, when the moon was at its full. On the recurrence of the same cause, at the end of four weeks, when the moon would again be at its full, her mind would inevitably become more violently disturbed. This is a necessary coincidence, and should be distinguished from effect.

Insanity, especially of the melancholy kind, is supposed, by many, to prevail so much more in England than elsewhere, that foreigners call it the J^rnglish-disease. *Arnold* thought there was some foundation for the supposition. *Sauvages*, among the species of melancholy, has one under the title, Melancholia Anglica, and says, "It differs from all others, in being unaccompanied by fury, owes its existence to weariness of life, and leads to suicide." This impression has been strengthened by an assertion of Dr. *Powell's*, in his official tables, in which he says, "Insanity appears to be considerably on the increase;" and shows an increase, in a given time, in a proportion of 129 to 100. That insanity is a disease peculiarly prevalent in England, seems to rest on no established basis; and the suicides of Paris, Berlin, and Copenhagen, are in proportion to the relative population of London, as five to two for the first, five to three for the second, and three to one for the third.

Pinel thought there were more maniacs in England, than in France; and complimented Willis on his power of controlling maniacs by his penetrating eye. But *Haslam* ridicules both suppositions, and adds, "However Dr. Pinel may be satisfied of our superiority in this repect, it is but decorous to return the compliment; and, if any influence were to be gained over manaical patients by assumed importance, protracted staring, or a mimicry of fierceness, I verily believe that such pantomine would be much better performed in Paris than in London."

Shakespeare also ridicules this prejudice in, the play of Hamlet.---

Grave-digger. He that is mad and sent into England. Hamlet. Ay, marry, why was he sent into England? Grave-digger. Why, because he was mad; he shall recover his wits there; or, if he do not, 'tis no great matter there.

Hamlet. Why?

Grave-digger. 'Twill not be seen in him there; there the men are as mad as he.

Insanity, in England, is more prevalent among women than men, and is so far distinguishable from most other diseases, common alike to male and female. This singularity may be accounted for by the natural process which women undergo previous to conception, at parturition, and when preparing nutriment for children. Indeed the diseases to which they are subject at those periods, are generally remote causes of insanity.

The life of an insane or idiotic person cannot be considered even under the best system of regulation, cæteris paribus, equal in the probability of its duration to one of sound mind. There are indeed instances of lunatics attaining the age of eighty years—of idiots there is no such record; and it is probable that such insane persons had been seized with mental affection at a late period of life, and might have had a still longer existence, had not insanity supervened. Insanity tends to propel an undue quantity of blood to the brain, and in the majority who have died, the termination of existence has been considerably hastened by paralytic affection or apoplexy.

Insanity seems to be more frequent with per-

sons between thirty and forty than during any other equal period of life; the period between twenty and thirty is next in order, and then between forty and fifty. The French and English observations agree in this classification. The sufferers recover in proportion to their youth, and the disease is rarely cured at an advanced period of life.

Patients who are in a furious state recover in a larger proportion than those who are depressed and melancholic.

There is a marked distinction between derangement and decline of intellect: the former may frequently be remedied; the latter admits of no assistance from art. Where insanity commences with a loss of mental faculty, and gradually proceeds with increasing imbecility, the case may be considered hopeless.

All authors agree respecting the difficulty of curing religious madness.

From observations worthy of confidence it would seem, that persons of dark complexion and black hair are more generally the subjects of mania than those of fair skin, with light, brown, or red hair, in the proportion of 132 to 30; and it has been thought that the mania of the former is characterized by violence, while the latter sinks into gloom and incurable fatuity.

Of the organs of sense, which become affected, in those labouring under insanity, the ear more particularly suffers. Few lunatics are blind, but numbers are deaf. It is also certain, that in these persons, more delusion is conveyed through the ear than the eye, or any of the other senses. Indeed in the soundest state of our faculties we are more likely to be deceived by the ear than through any other organ of sense.

It is not unusual for those who are in a desponding condition, to assert that they distinctly hear the devil urging them to self-destruction.

A considerable portion of the time of many lunatics is passed in replies to something supposed to be uttered.

Insane people will often for a short time conduct themselves, both in conversation and behaviour, with such propriety that they appear to have the just exercise and direction of their faculties; but if the discourse be protracted until the favourite subject shall have got afloat in the madman's brain, his disease will instantly become palpable.

A beautiful illustration of this is contained in the writings of Dr. Johnson, where the astronomer is admired as a person of sound intellect by Imlac, who always finds information and delight in his society. At length, he gives Imlac his unbounded confidence, and imparts to him the momentous secret: "Hear, Imlac, what thou wilt not, without difficulty, credit. I have possessed, for five years, the regulation of the weather, and the distribution of the seasons. The sun has listened to my dictates, and passed from tropic to tropic, by my direction. The clouds, at my call, have poured their waters, and the Nile has overflowed at my command. I have restrained the rage of the Dog-Star, and mitigated the fervour of the Crab. The winds, alone, of all the elemental powers, have hitherto refused my authority: and multitudes have perished by Equinoctial tempest, which I found myself unable to prohibit or restrain. I have administered this great office with exact justice; and made to the different nations of the earth, an impartial dividend of rain and sunshine. What must have been the misery of half the globe, if I had limited the clouds to particular regions, or confined the sun to either side of the Equator?"

To attempt an arrangement of the various theories which prevail in mania, would be an endless and an useless task, indeed there is no reason to doubt that they all spring from one and the same disease. Even the terms mania and melancholia, raise a distinction without creating a difference. There are maniacs whose lives are divided between furious and melancholic paroxysms, who under both forms retain the same set of ideas;—as however, Crighton has given as four species,— Mania furibunda, Melancholia, Mania Mitis, and

Demonomania,—

those varieties will be illustrated by Essays in the Appendix.

ON LIFE INSURANCE, AND OF THE SYSTEMS BY WHICH IT MAY BE EFFECTED.

A great spirit of enquiry has developed to the people of England during the last ten years various avenues to intellectual gratification, and has opened new fields for the exertion of genius, and the improvement of fortune. Information in the various branches of literature, science, and trade is more generally diffused; men now write for the world, not for a learned oligarchy; the public are capable of appreciating the merits of a *Milne*; and a *Babbage* submits his labours for the judgment of the people.

As the means of intellectual and moral improvement have multiplied, it is not surprising that Life Insurance should have become a subject of general enquiry, and of serious consideration; for, as few men live on the interest of accumulated wealth, and as the most successful exertions in the early periods of life seldom afford a permanent provision for families, after those exertions shall have been terminated by untimely death, or impaired by the paralizing effects of accident or disease,—so every prudent and well-disposed man will naturally turn his thoughts to the best means of making a certain provision for those, who, during life, are the dearest objects of his affection, and who, at the approach of death, would engage his most anxious solicitude.

The course which first presents itself, as most likely to lead to so desirable an end, is that of sparing from annual income such a sum as circumstances will fairly allow, to accumulate and form a fund for those for whom provision is to be made; and if a certain duration of life, in one particular instance, could be relied on, and the savings from income were so considerable as to be capable of being improved at compound interest, no better mode could be devised. But as premature death might prevent a sufficient accumulation, and as inconsiderable sums cannot be invested with full advantage, recourse must be had to more certain means to effect the object desired. Out of such considerations various Establishments for Life Insurance have arisen; and " Every assurance made for providing for a surviving family, in whatever office it is effected," has been described by Mr. Morgan, as " not only a private, but a public good."

The value of this "good," however, must be estimated by the sacrifices necessary for its attainment, and the means of securing it when those sacrifices shall have been made. Even "a good" may be purchased at too high a price; and would completely change its character, if the acquirement of it were doubtful after payment of the price. Economy in contribution, and certainty, united with facility, of obtaining the sum assured, must surely go far to constitute excellence in a Life Institution, and in these the old system of Mutual guarantee or partnership, appears to be lamentably deficient.

Mutual Guarantee is a system whereby a great number of persons assure each other; for instance, in an Association of 100 persons, each man would guarantee to the Representative of 99 others the various sums for which they were respectively assured. Thus A, who was himself assured for £100 only, would guarantee to B £1000, and to C £5000. Or, if they were all of the same class of Assurers, each would guarantee to the others respectively £100: each makes an annual contribution according to the amount for which he is assured, and if the gross amount of contributions be more than sufficient to provide for the sums assured, it is professed that each man's policy is to be encreased by his fair proportion of that excess. If a partnership founded on such a system were in the present day to be seriously proposed for the first time, the parties addressed would consider such an appeal intended as an insult to their understandings. It would be asked-Have the sums which ought to be contributed by persons of different ages been ascertained with accuracy? because if each is to make an excessive contribution, a proportionate excess should be taken in every case. Has a principal of division of the excess or savings been agreed on? because the rights of each partner should be clearly defined, that he may be satisfied his share of the partnership fund has been fairly allotted to him. In conclusion it would be asked, How can the rights of the partners be *enforced* in case those who hold the funds should refuse to part with them, or should attempt a partial or unjust distribution of them in favour of particular partners?

The answers to these questions will be found in the results of the Equitable Society after an experience of more than half a century.

And first as to the economy of the contributions and the justice of the divisions, in that celebrated society. From excessive rates of premium several millions have been accumulated beyond proper provision for outstanding policies. This excess ought to have been added from time to time, to existing policies; but having been permitted to accumulate to an enormous extent, must have been contributed to by many who have died without participating in it. The economy of those who made such contributions does not require a comment.

The holders of policies of a certain number of years standing, at a particular day, have said— We will not permit any persons hereafter to participate in that immense Surplus-Capital, until a splendid division shall have been made among ourselves!—A strong argument in favour of the *impartiality* of the system of distribution.

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But suppose it should be said by a majority in number of those old members-No more policies shall be granted at all, but the accumulated millions shall be added to our own policies! What could prevent such a measure? There is no law to perpetuate such a Society against the wills of the only persons who at present have an interest in the original Fund. Nay, it will be seen from the cases, WATERS v. TAYLOR, FOR-MAN v. HOMFRAY, and CARLEN v. DRURY, that a Court of Equity would not interfere, to continue a partnership trade, even if the partners were hostile to a division; though it might be induced, under particular circumstances, to wind up the partnership concerns. What, then, should prevent the holders of policies in such an Association, and in such circumstances, dividing the Fund among themselves and discontinuing the Society? This is not urged to lead to an inference that it would be unjust in them to do so,--on the contrary, there would be neither sense nor justice in their abstaining. The Representatives of those who had died were well content with what they received, and there would be no legal nor moral obligation on the present holders of policies to deprive themselves of a great advantage, merely to benefit

new contributors, or those who might at a future day insure, but who never furnished one shilling towards the fund, sought to be divided, and who never were Members of the Society.

This illustration shews that the system itself is defective, and fraught with extravagance, instead of economy; as the enormous mass which would, in such a case, be the subject of division at the present time, must have been improperly contributed by those who had died, and would be as improperly supported by contributions from the living Members, for the sole purpose of benefiting the remote posterity of others, who, in their time, might be wise enough to divide it among themselves. This is the very worst species of Tontine-a sinking fund, which the Managers may cut up for the Members of a particular day, or which may never be divided at all. Wise men would not be disposed to tolerate the payment of excessive sums, in the first instance, for the mere chance of benefiting their own posterity; but it is drawing too largely on any man's good nature, or, rather, on his credulity, to persuade him to pay excessive premiums to raise a fund in perpetuity, or remotely to benefit the posterity of others.

The original inducement to making an excessive contribution of premium was a promise that the excess would be returned under the name of *bonus*. This would lead to an inference that the distribution of bonuses was a matter of such obvious facility, that no doubt or difficulty could exist as to the proper mode of distributing them. But the reader, if not already acquainted with the fact, will be surprised to learn that, on cases stated by the Committee of the Law Life-Assurance Society, as recently as May, 1823, for the opinions of several scientific men, no two of the gentlemen consulted agreed on the mode of making such distributions, so as to do justice to the several parties concerned, though they were unanimous in declaring (and Mr. Morgan himself was of the number) that the mode adopted in the Equitable Institution is certainly not the correct mode.

The following is an extract from the Report referred to :--

"Your Committee, in pursuance of the directions of the last general meeting, have taken into consideration that part of the 35th Rule, which relates to the mode of distributing, among the respective policies, that portion of the profit which is to be assigned to the Assured; and they have submitted to Mr. Morgan of the Equitable Office, to Mr. Milne of the Sun Assurance Office (both of whom have written treatises on the subject of Life Assurance, and the latter of whom is the Actuary in an Office where no division of profit is made among the assured, and who is therefore not pledged to any particular mode), as well as to three gentlemen who have announced their intention of becoming candidates for the office of Actuary to this Society, a case, for the purpose of ascertaining what is the correct mode of distributing the profit among the respective Assured; and if the correct mode be impossible or too difficult to be used in practice, what would be the most just mode that could be practically adopted.

"Your Committee have to state, that all the gentlemen consulted concurred in opinion upon two points: 1st, that the mode proposed in the 35th Regulation, as it formerly stood, is incorrect, and unfit to be adopted; and, 2d, That the mode adopted in the Equitable Office is not the correct mode. But upon the three following points, namely, What is the correct mode of distributing profit? Whether the correct mode be the practicable mode? And what would be the expedient mode for the Society to adopt?—they all differ in opinion."

If it be difficult to distribute bonuses among persons of the same class who at the time of effecting insurance were all in perfect health, residing in the same country, subject to the same influences, and whose rates of contribution according to the several ages, were all estimated from the same table of mortality, how much more difficult it must be to divide partnership profits among men who at the time of insuring are suffering under different diseases, or who are voyaging in different climates, exposed to different influences and different maladies, and whose contributions ought to be calculated from tables of mortality, derived in every case from perfectly distinct, but equally authentic, sources.

The extent of those difficulties may be illustrated by an example, and such an illustration is necessary to warn the public of the danger to which they may expose themselves, by fancying that because the Equitable Society has accumulated millions, every other Company which holds out a Parnership in Life Assurance must inevitably realize similar advantages to the policy-holders.

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Suppose an Institution so constituted as to make two classes of partners, giving one portion of profits to shareholders, and another to policy-holders. The division among the latter ought to be proportional to the amount of premiums paid by the respective parties assured. If then 10 Englishmen, respectively aged twenty, were insured for equal sums, each would pay a correspondent premium; and all being healthy and resident in England, all would have the same probable duration of life;-a like degree of certainty could be attained as to the probable duration of life of 10 men aged forty. All would be subject to the influences of the same climate,-those influences, although producing different results on persons of different ages, would operate nearly in the same degree on persons of the same age,-the probable duration of life at every age would be ascertained by estimates of the mortality of the whole kingdom, and the several premiums for insurance being calculated from those estimates would be rateably increased for safety or for profit. But the moment any one of the assured should go to a climate, in which a higher rate of morta-

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lity prevails amongst Englishmen, he ought in fairness to be charged a higher rate of premium .- Suppose one of the men, aged 20, who in England should pay £1:10:7 per cent. and one of those aged 40, who should pay $\pounds 2:19:10$ per cent. were to go to the West-Indies for a year-it would be absurd to increase each man's premium according to the sum he paid in England; or to add an even extra sum to each; because whilst in Europe the life of the younger man is more valuable than the life of the elder, and consequently he would have been properly charged a smaller premium : whereas, if during the first year of residence in the West-Indies the mortality among Europeans aged 20, be higher than amongst Europeans aged 40, the younger man's life in Jamaica would be less valuable than the life of the elder, and consequently he should be charged a larger premium.

Indeed it is utterly impracticable to ascertain the effects of hot climates on Europeans at every age with sufficient precision to fix the rates of mortality among them with the same degree of certainty as among the native residents of England. Enumerations of the military and civil servants of the East India Company, and the bills of mortality in that population, will furnish excellent materials for calculating the rates of mortality from the age of twenty to the end of life among Europeans residing in India; but will

the rate of mortality among the civil servants aged 40, be the rate of mortality among Men going to India for the first time at that age? Certainly not, as the civil servants will have resided there for many years and have become inured to the climate. Is there no difference in the value of life, in St. Lucia or Demerara, among Europeans aged 40, who go there for the first time, and among Men who have attained that age after a residence there of four or five years? Does the same rate of mortality prevail among Europeans in all the West-India Islands and Colonies? Is the same premium to be charged for Barbadoes as for Kingston in Jamaica, or English Harbour in Antigua? How then are the true rates to be ascertained with sufficient. precision to enable a Company to apportion the exact excess of premium which each person should pay for each, and every place? The true rates could only be obtained from enumeration of large numbers at every age going to each place, and the lists of deaths at every age among those numbers; nay, sufficient numbers must go at the same time, as different influences and maladies rage at different places in different seasons and in different years: it is quite impossible to procure such materials, and the numbers going to the several places are not large enough to furnish means of constructing tables of the decrement of life at every place at every age.

The materials for showing the rates of mortality in one country may be more worthy of confidence than the materials from which rates have been deduced for another conntry, and each may be sufficiently correct to enable a Company of proprietors to estimate the premiums for which to sell a fixed and settled amount of assurance without increase or diminution to the policyholder, dependant on profit or loss; but when the persons assured are all to become partners with each other, the contribution which each is to make ought to be measured by the same degree of certainty in every case; whereas, to admit persons voyaging to or residing in different climates, as partners with each other and with those who are residing in England, in the profits or loss arising from insurances on their several lives, is to be guilty of the most serious injustice to all,-it is impossible to say on whom the injustice will fall; the domestic rates may be too high, and the foreign rates too low, or the excess may be the other way; but still as the rates are not deduced with the same degree of certainty in every case, it will be impossible to apportion the excess beyond the true rate which each person ought to pay, to entitle him to a certain portion of the profits, if profits should be made, or to fix on him his proportion of loss, if the premiums should be insufficient. One man may claim profit when he shall already have contributed too little to cover the risk of loss to the partnership funds from the extraordinary hazard to which he has been exposed.—The extra sum he had paid, although insufficient for the risk, would nevertheless be carried to his credit in account, and his share in the distribution would be increased accordingly. Thus many might be made to run the risk of loss, without a correspondent chance of gain, and when the rights of partners cannot be clearly defined, it is highly improbable that they can long avoid disputes and litigation with each other.

The statement made by the Directors of the Equitable Society at the General Court held on 22nd January, 1829, contains the following remarkable passage:—" The Society is kept together by the mutual faith of its members; by the confidence which they repose in the regularity and certainty with which its affairs are administered: any alteration which shall destroy the certainty will impair the confidence.—If the alteration be not adjusted with perfect nicety, fresh and conflicting interests will arise—questions of law and equity will be litigated—the first effect of which may be to suspend the division of the surplus; and perhaps the payment of any claims on the Society."

It is deeply to be lamented that in a business of so much importance as life insurance, the unwary public should involve themselves and their families in the frightful responsibility which such anomalous partnerships must inevitably entail on those who become members of them.— Let the reader, whilst he peruses the following chapter, only fancy himself a party to a chancery suit, by which a multitude of such partners seek to discuss, define, and protect their respective rights,—he will probably congratulate himself, that he is at present a free man and can secure the blessings of Life Insurance, by much more simple and effectual means.

ON THE LAWS OF PARTNERSHIP.

The legal difficulties which may be thrown in the way of claimants on partnership societies will now be considered under two heads—As to the policy-holder or partner, who merely seeks to recover the sum assured;—and as to the policy-holder or partner who seeks to prevent an unjust appropriation or an injurious division of the funds in which he is interested as such partner.

The affairs of these Institutions are managed by a Board of Directors,—men, personally, of great respectability; any three of whom sign the policies, but who, by doing so, contract no personal responsibility, except so far as they are bound to perform the contract expressed by the policy itself, but who, even though they were personally liable, could not by any possibility be worth in their own private estates a hundredth part of the amount to which they affix their names.

This latter point is thought of no importance, because all they contract for by the policy, in most cases is—that, if the Assured shall regularly pay his premiums during his life, the funds of the Society shall be liable for the sum assured at his death.

That this is the true construction of such a contract, may be seen from the Judgment of the Court of Common Pleas, in ANDREWS v. **ELLISON** and others, (Directors of the National Union.)

But the Directors have not the actual nor even the legal control of the funds, which are invested in the names of five or six other persons, called Trustees. Suppose, therefore, on the death of the Assured, payment of policies to a considerable amount should be refused. The holders having shewn, on a trial against the Directors, the funds of the Institution to be sufficient for the payment of losses, would get judgment against those Directors. But the Directors not being personally worth the money, and the funds being in the hands of other persons, the policy-holders would have a very insufficient remedy against those Directors, who themselves might have just cause to complain that the funds of the Institution had been withheld from them; and thus, either the holders of the policies in their own names, or the Directors for them, must necessarily commence proceedings in Chancery against the Trustees, to obtain possession of the funds. It is true that, in many instances, some of the Trustees sign the policies; but it must be evident, to

every man of business, that this by no means remedies the defect in the system, as money invested in the names of five persons can only be affected by the joint act of the five.

These difficulties attach equally to the Mutual Guarantee Associations, and to the Proprietory Companies giving bonuses, in which every man is a partner, and has an interest in the fund. Suppose then the funds to be withheld, a judgment at law obtained, and Chancery proceedings commenced, it will be seen, from Lord Chancellor ELDON's judgment in DAVIS v. FISK, that every member of such a Society must necessarily be made a party to the suit, and be brought before the Court; as every member has an interest in the fund, and is entitled to be heard in every proceeding which may affect it. But whether the parties must be made plaintiffs or defendants, seems to be a question of great legal difficulty.

It may be urged that the Trustees have no inducement for withholding the funds improperly, and are not likely to be guilty of such injustice; but, in answer to such a charitable supposition, it may be said that a man who pays regularly, during a long life, the outside value of a sum to be received at his death, ought to have a legal security, which may readily be enforced, that the money will be paid when the event shall happen, and ought not to be left to contemplate a chancery suit with several thousand partners, or suffer his family to be dependant on the good faith of parties with whom it is true he was in partnership, but to whom he is an entire stranger. In the ordinary affairs of life, a man has courage to meet disappointment; but, in a question in which the prosperity, nay, perhaps, the existence of his wife and children are at stake, and that too at a time when he will no longer be alive to see justice done them, he would naturally and properly look for such a contract as would insure them the protection bought by his and their privations during his life, and would shudder at the contemplation of such difficulties as are presented by the case of DAVIS v. FISK,

It is true that the greater number of the mixed Companies, that is to say, companies composed of Permanent Proprietors, who admit the assured as partners by giving them bonuses, have obtained Acts of Parliament, which go to the extent (and to that extent only) of pointing out the Secretary or other convenient officer, who shall, if necessary, bring actions in his own name on behalf of the Society, and who shall be the nominal defendant in any action brought against them. But all these acts expressly declare—"That nothing therein contained shall extend to INCORPORATE the Societies" to which they apply: and therefore, so far from removing any of the difficulties before stated, they merely substitute an inconsiderable Officer, as the person to be sued, instead of the more substantial Directors, who sign the policies. Indeed the actions and suits contemplated by these acts have been declared to be those by or against the Society with *strangers* not among the partners themselves.

In DAVIS and others v. FISK and others, (Directors of the Norwich Union) Lord ELDON said—

By the Statute against Monopolies, persons are forbidden to form speculative associations, or to raise transferable stocks; but it has been determined by the Courts that a dozen persons may insure or guarantee each other; and when once it was established that twelve might act on such a principle, it was impossible to put a limit to the number; and it is said, from the Bar, that 60,000 have combined for that purpose in the present instance. The inconvenience of administering justice to such a mass of people, all standing in the relation of partners, was soon discovered; for, as partners, they were bound to set forth the names of all their body when acting against a stranger, and it was equally incumbent on those who prosecuted claims against them, to bring all before the Court .- To obviate this difficulty, it has frequently happened that Acts of Parliament have been obtained, by which the Secretary, Treasurer, or some officer of the Society, is pointed out as a nominal Plaintiff or Defendant to sue or be sued, for or on account of the Association at large; and so far such an Association may be called a quasi corporation-having the power, emblems, and, to a given extent, the privileges of a body, without having been incorporated. I shall be very cautious not to extend those privileges. The policy of Acts of Parliament, in such cases, was to render

facility to justice, by making one person to represent a mass, which would of itself be immoveable; but the difficulties, as I foresaw and urged in my place in the House of Lords, were not so easily to be overcome; -- for although justice might be done in cases in which the Association was complaining, by the use of one name instead of 60,000, the same measure of justice could not be rendered in the person of one Defendant. The Secretary or Treasurer might not be worth the money for which he was sued, and the funds might be insufficient. But supposing the officer to be in possession of ample means, execution would go against him or his effects, and, having paid the money, he would have to seek just contribution from the Members, which might be practicable with a manageable number, but which must be next to impossible with 60,000 persons .-- The Acts of Parliament do not contemplate suits amongst the Members themselves, but speak only of actions by and against them.

The present record, therefore, derives no assistance from the Act, as it not only presents Members complaining of each other, but states that which is false (I do not use the word 'false' in its offensive sense, but merely as describing an assertion which is not strictly true), for it represents the Bill as filed on behalf of all the Members, whereas the Defendants appear to be Members also. In certain cases of covenant, where it is necessary to bring all parties before the Court, those who refuse to be Plaintiffs must be made Defendants, but a man cannot stand as Plaintiff and Defendant at the same time; and, for anything that appears on this record, there may be one half of the Members represented by the Plaintiffs, and the other by the Defendants, though all are called Plaintiffs.

In the Acts of Parliament (alluded to by Lord Eldon) granted to several of the more recent Institutions, the Legislature has caused the following provisions to be inserted, viz.

"That execution upon any judgment in any such nation

obtained against the person acting as Chairman of the Society or Partnership for the time being, or against the person acting as Secretary of the Society or Partnership for the time being, whether as plaintiff or defendant, may be issued against any Member or Members for the time being of the Society or Partnership: Provided always that every such Chairman or Secretary, in whose name any such action or suit shall be commenced, prosecuted or defended, and every such Member or Members against whom execution upon any judgment obtained in any such action, shall be issued as aforesaid, shall always be reimbursed and paid, out of the funds of the Society or Partnership, all such costs and charges as by the event of any such proceedings he or they shall be put unto or become chargeable with."

"That a memorial of the names of the several persons being Members of the Society or Partnership, in the form expressed in the Schedule annexed, shall be enrolled upon oath in the High Court of Chancery, within three months after the passing of the Act; and when any transfer of any share or shares of any Member of the Society or Partnership shall be made, a memorial thereof shall in like manner be enrolled as aforesaid, in the form and to the effect expressed in the said Schedule."

"That until such memorial as before mentioned shall have been enrolled in the manner herein directed, no action shall be brought by the Society or Partnership under the authority of the Act; and all the Members whose names shall be expressed in the last enrolment, shall continue liable to all actions, suits, judgments, and executions, until a memorial or memorials of transfer shall have been enrolled as aforesaid."

"That nothing in the Act contained shall extend or be deemed, construed, or taken to extend, to incorporate the Society or Partnership, or to relieve or discharge the Society, Partnership, or any of the Members thereof, or Subscribers thereto, from any contract, duty, obligation or responsibility whatsoever, which by law they now are, or at any time hereafter may be subject or liable to, either as between such Society or Partnership and others, or among themselves, or in any manner whatsoever." (Vide Stat. 54 Geo. III. cap. 79, sec. 2, 3, 4, and 7.)

These clauses involve considerations of vast and serious importance to all who hold shares in, or who by participating in the profits become Members of the Institutions to which they apply. The Shareholder, at the time he pays his deposits on the formation of the Society, and enters his name for the number of shares for which he subscribes, is in most instances absolutely assured, by the Deed of Settlement or Foundation, that his responsibility is to be limited to "the amount of those shares. But, by the operation of the Act of Parliament (which is not obtained until some time afterwards), he suddenly finds himself made responsible for the full amount of the engagements of the Institution. It would be useless for him to urge to the holders of writs of execution that the Deed to which he subscribed expressly declared a limit to his responsibility. The answer would be (if the holder should deign to give an answer at all)-" The Act of Parliament, sir, declares you liable: the bargain between you and your Co-Shareholders cannot affect the rights of other persons. This is declared to be a public act, and every man, strictly speaking, is bound to take notice of its provisions; but your name is actually enrolled, on oath, as one of the persons against whom execution is to issue on judgments recovered. You, therefore, are not, or ought not to be, ignorant of the consequences."

The inconvenience and disquietude, which a man would labour under, if he were aware of such responsibility attaching to him, cannot be adequately described; and it would be difficult to fix a limit to resulting consequences. Engaged in his ordinary pursuits, and having invested a small sum to apparent advantage, he would not look to that investment as a source from which danger might spring .- Not being permitted to have a voice in the management of the Institution, he might not be aware that any litigation was pending, and would probably learn for the first time, from a newspaper report of a trial at law, that the Office of which he is a Shareholder, had met with a serious loss. Little could he fancy at the moment, that, if satisfaction of the judgment should be delayed, either by the want of funds, or by the contumacy of those who control them, the very bed on which he slept might be seized on for the amount;-nay, that the very knocker at his hall-door might shortly announce the arrival of the holder of a writ of execution, by which his person must be imprisoned if the money should

not be paid. It is difficult to suppose that any man would knowingly enter into so frightful a responsibility: and, as even the statutes which are of public interest are seldom examined by people in private life, it is most probable that 99 out of every 100 persons so involved are up to the present time wholly unconscious that they could, in any state of circumstances, be made liable to such an extent.-Once aware of the existence of this danger, a man's first wish might be to avoid it, by disposing of his shares. But, if he had been informed of his situation by means which were open to all, he might find it very difficult to meet with a person who would take his bargain even as a gift: and the Act of Parliament is imperative, that all the Members, whose names shall be expressed in the last enrolment, shall continue liable until a memorial of transfer shall have been enrolled.

The observations on these clauses have hitherto been applied to the Shareholders only. But the Sections of the Acts expressly declare, "That execution may be issued against any MEMBER OR MEMBERS FOR THE TIME BEING of the Society or Partnership."

Now, in the Mixed Societies every Policy-Holder, who is entitled to participate in profits, is a Member and a Partner. A man little thinks, at the time he effects an Insurance, on his own life, or the life of another, with such Societies, that if his name should be enrolled as a Member, he will be at the mercy of every attorney, who may obtain a judgment against the Office; and who, if the money be not tendered by the Office, the moment the judgment is complete, may, in malice or in sport, select him as the person against whom execution shall issue.

Mr. Francis Baily, in his excellent Treatise on the "Doctrine of Life Annuities and Assurances," (chap. xiv. page 519), describes the earlier of these Statutes as "these illusive Acts;" and censures the conduct of the Managers of those Establishments, who, under shelter of them, boldly claim the ambiguous quality of being "EMPOWERED BY ACT OF PAR-LIAMENT," and "SPECIALLY EMPOWERED BY ACT OF PARLIAMENT FOR THE IN-SURANCE OF LIVES, AND THE GRANT AND PURCHASE OF ANNUITIES;" adding, Surely this artifice is unworthy the respectable names at the heads of those Societies." And it is unworthy of them: for the "unwary public" (to use the language of the late Lord. Ellenborough, in the KING v DODD) may be thereby induced to believe that the Institutions. are actually INCORPORATED by Statute.

As Acts of Parliament are not necessary to the progress or prosperity of Life Institutions, when formed on a just and legal basis, the public will do well to enquire whether such Acts have passed or are in contemplation before they become Members of any Institution, either as Shareholders or Insured.

Lord ELDON's judgment in the case of DAVIS v. FISK, has been quoted to show the difficulties to which a policy-holder may be exposed when merely seeking his remedy against the funds for payment of a policy, on the death of the person whose life was assured when there is no dispute about the amount; with how much greater force will every word in that judgment apply to a set of partners who quarrel as to the proportion of the fund to which each will ultimately be entitled; or who seek to restrain an unjust division of the partnership effects amongst particular classes of the partners.

Suppose the case of one class of Partners desirous of dissolving the concern, and another class wishing to continue it, what would become of the funds? In concluding his judgment in DAVIS v. FISK, Lord ELDON said—

I do not say, that this record may not be so amended as to bring all parties properly before me, but I feel that it is very difficult to do so with 60,000 partners. I cannot hold that Societies may re-model and alter their Associations, so as to change their original constitutions; but I do not sit here to try offences. With these difficulties before me, and feeling that such a measure must be very extensive in its consequences, and should not be pronounced upon lightly, I cannot, on an interlocutory motion, anticipate what might be the nature of my decree in the cause, and therefore I cannot grant the Injunction." In ELLISON v. BIGNOLD, (Director of the National Union,) the same learned judge delivered his opinion to the following effect.

This is a Bill by some persons on behalf of themselves, and all others claiming an interest under a Deed professing to form what is called a National Association, being a sort of Insurance Company, governed by particular provisions. The question of the legality of this instrument is one that it is necessary for the Court to consider well before it decides that it can interpose at all. The general scheme of the Deed, laying aside the nonsense about agreeing and declaring without covenanting, and looking at the part only where the Members covenant with the Trustees, binding themselves to perform the articles, is to form a Society for the purpose of insuring the property, not of persons not belonging to it, but of those only who are members. It was constituted at first of only five or six persons, certainly not then enough to carry into execution this plan for the formation of a National Association; it is however intimated to me that there are now about two thousand members. Now, as I have understood the law (I will not say that I am correct, but I believe that I am,) when a number of persons undertake to insure each other, if the shares and interests in the money that is laid up, be not assignable and transferable to any persons who are not members, the Society is not illegal; but, if there may be assignments and transfers of the shares, I have understood that that made it illegal.

"But it is one thing to say that this Association is legal, and another to say that the Court is to lend its assistance in carrying it on. It is difficult to refuse its assistance when persons have equitable rights; but it is to be seen in what way those rights are to be enforced. Here the Directors are not to be personally liable; and the consequence is, as it strikes me, that, if the parties are not driven by a sense of honour to pay the losses, I do not see how they are to be recovered. An individual cannot come here to have an account taken of the effects of all the members that are liable. The Court, therefore, will not be astute to find the means of deciding that those, who must deal without its assistance in ninety-nine cases, shall not do so in the hundredth.

"Another consideration is, whether this plan can be carried into effect, looking at it with reference to the doctrine of those very distressing cases, where persons who have been expecting a provision for their old age, from benefit-societies, have found themselves at last disappointed, from the societies being founded on erroneous principles. The Court has there been obliged, the whole originating in a blunder, to put an end to them by a dissolution. (Pearce v. Piper, 17 Ves. 1. Reece v. Parkins, 2. J. and W. 390.) Now, attending to this, we find here a covenant by Bignold, positive in terms, to advance the sum of $\pounds 10,000$; and I think that, in all probability, the sum was looked upon as what was necessary to set the Society going. It is then to be considered, whether it can be carried on at all, if it has broken down by this article not being performed.

"Another view of the case, of great importance, is this: that, if it can be kept out of a Court of Equity, it should; and, therefore, the Court will not be astute to assist those who will not avail themselves of provisions in their Deed, which might perhaps have kept it away; I say, perhaps, for all those regulations probably could not obviate the sudden evils which a mischievous man might effect. There are, by this Deed, Directors, Trustees, Surveyors, Auditors, &c. to be appointed; the general management is to be in the Directors; they are to have meetings, and to be paid if they do their duty; if not, to pay forfeit; the auditors are to inspect the accounts; the Directors are to say where the books shall be kept. All this should have been done, if the Society had been regularly carried on according to these Articles. It does not now come before me as if it had hitherto been conducted on the principles of the Deed, but as a Society that has not been, and perhaps, for that reason, never can be conducted on those principles. I must consider the regulations of the Deed not to have been attended to; and we must look upon it as a general partnership, not connected with and depending on these particular stipulations; they cannot be relieved in the same way as if they had conformed to them. With these voluntary associations, the Court, before it interferes, must see that it is under an obligation to act, and that it can effectually act, for the benefit of the persons who have laid out their money in a way in which there must be so much difficulty in recovering it.

In CARLEN v. DRURY, Lord ELDON said-I do not enter into the question whether this partnership falls within the terms of the Act, which, according to the view I take of the present motion, it is unnecessary to consider. I also lay out of my view the small interest which the Plaintiffs possess in this concern, though bound to recollect the amount of their share compared to the whole value. Whether this concern, which commenced in 1808, be or not a nuisance within the terms of the Act, it is certainly of great importance to the parties interested to be aware of their rights and responsibilities. I hold it clear, in the first place, that, according to the rule of law, the person who takes upon himself the management, is answerable to the whole extent of his engagements: secondly, that each individual is, at law, answerable for the amount of the whole of the debts of the concern; and thirdly, that each individual is liable to a contribution for what the Agents have paid. But, where the nature of the institution necessarily requires a great number of persons to be concerned, it is impossible for the strong arm of the law, however powerful, to grasp them all. In the present instance, there is not only nothing to prevent, but the very terms of the Articles provide that 1600 persons may eventually be interested in the concern. I agree with what has been urged for the Plaintiffs, that if the means of redress provided by the parties themselves, in the Articles, are not effectual, this Court will interfere. These parties have, however, put themselves under the control of a Com-

mittee, as to many things of considerable importance to their interest. They seem to have been aware of the inconvenience arising from the number of proprietors, and as it was material for them to guard against disputes so likely to be generated under this order of things, Managers are provided; and, that this might not be insufficient, two annual meetings are to be held. It is true, these meetings are to be at the discretion of the Managers; but I have no difficulty in saying that this Court would compel the Managers to appoint meetings, this being but casus omissus in the Articles. They likewise provide for removing the Managers; and, not trusting entirely to their providence, make a provision for a standing Committee of twelve persons. If the conduct of the Managers came under the discussion of the Committee, there must, as I construe the Articles, be a subsequent meeting, to determine whether the Managers should be dismissed or not; but the Articles provide that a dissolution shall only take place in one instance. Here, however, I observe that there is a principle of a Court of Equity, paramount to these agreements, in respect of which this Court will interfere, but not in the first instance. In order to obtain that interference, a case of breach of engagement or abuse of trust must be established, to the perfect satisfaction of the Court; that persons will not, according to their duty, attend to the interests of the concern. The Managers of this concern are entrusted, to a great extent, to increase the capital at their discretion, which I take to be a very material circumstance. This Court is not to be required, on every occasion, to take the management of every Play-house and Brew-house in the kingdom; but if the case justifies the interference of the Court, it may appoint a Manager in the interim, for the purpose of winding up and putting an end to the concern. The Court, however, is not at once to assume that the Committee will not act. Here are twelve Trustees. Is it, then, founded in contract, that six can come here? That is a case actually shut out. They come here, then, on the ground, not that the contract furnishes no redress, but that there is bad management. Suppose that, after the appointment of a receiver, the second meeting should direct that the concern should go on as usual, or in some other manner, differently from the course I had ordered; what would be the result? If, however, a case of delinquency should be clearly made out, I do not hesitate to declare that the Court would act; but there must be a positive necessity for the interference of the Court, arising from the refusal or neglect of the Committee to act. That may raise a case for prompt and immediate interference, which I cannot say exists at present. I express no opinion on the questions,-Whether this is a legal partnership, and, taking it to be so-Whether the Plaintiffs can file a Bill for a dissolution on behalf of nearly three hundred other persons, observing merely the difficulty that must arise, if those other persons wish the partnership to be carried on, and if the Society be answerable to the Managers, and bound to a contribution to losses, &c. whether any one can institute a suit here, without offering to contribute; but, confining myself to the object of the present motion, I think I cannot now interfere, the Plaintiffs having a remedy in their own hands, to which they have not resorted; desiring to be understood not to repudiate the jurisdiction, but that I will not interfere before the parties have tried that jurisdiction which the Articles have themselves provided.

These are but a few of the many cases which might be quoted to show that even Courts of Equity will not act when called on to take the management, or to continue the business of large partnership concerns; but these are sufficient to make manifest the great imprudence of associating as partners in the business of Life Insurance, many hundreds of people who have no acquaintance with each other, whose interests lie in different pursuits, and in different parts of the world, and among whom consequently there can be no unanimity of sentiment or opinion. The words of Lord ELDON in the judgment in ELLISON v. BIGNOLD, cannot be too deeply impressed in the memory of the reader,—" Another view of the case of great importance, is this—That if it can be kept out of a Court of Equity, it should; and therefore the Court will not be astute to assist those who will not avail themselves of provisions in their Deed which might perhaps have kept it away: I say perhaps, for all those regulations could not obviate the sudden evils which a mischievous man might effect."

CONCLUSION.

The importance of ascertaining the expectation of life at every age, has already been fully discussed; and the many fallacies which have been held out to the public might be traced to the want of industry and of intelligence in those who profess to deal in contracts of indemnity to persons who shall contribute premiums for Life Insurances. Until the establishment of the Equitable Society in 1762, a few insurances only were effected by two chartered companies,—the Royal Exchange, and the Amicable; and so vague and conjectural were the modes of estimating the rates, that, in every case, whatever might be the age of the party or the term of the insurance, the same premium was charged.

For the next half century, the new life offices generally adopted the Northampton tables; some without any modification, and others by reducing the published tables of premiums by a pound rate. This latter was a noble instance of superior stupidity. The errors of the Northampton tables evidently arose from the imperfection of the materials, from which they were deduced, to show the decrement of life in the

several years of age. Thus the youthful were made to pay too much, and the aged too little. With a proper number of Insurances at every age, these errors might not materially have affected the ultimate prosperity of a Proprietory body selling insurances; although they would undoubtedly operate most unjustly to those at the earlier periods of life, who purchased at excessive prices The notable scheme of reducing the several premiums by a pound rate, however, preserved inviolate all the errors of the tables, whilst it discarded the advantages which might, in a certain degree, have served to counterbalance them. Indeed, until the Actuary of the Sun office published his able work on the subject, it seems to have been a prevailing opinion that the only materials necessary for establishing a Life Insurance scheme, was a large body of proprietors, a respectable directory, a splendid office, and a liberal provision for the projectors or managers, who in a majority of instances were men of broken fortunes, who sought to repair by assurance the disasters of trade.

Mr. Milne's publication proved to many, that the probabilities of life present an ample field for the exercise of science,—a field in which several men of great attainments have since delighted to labour. It is, however, still to be lamented, that in a few instances subordinate persons in endeavouring to follow the practice of their superiors, but without knowing the principles on which they proceed, or the motives by which they are impelled, have led the unwary into the fatal errors which have been exposed in the two last chapters. The Proprietory body of yesterday is to-day a Mixed Company, giving bonuses, as they are called, and may to-morrow be a Mutual guarantee association, and these in defiance of the highest legal authority in the kingdom. "I cannot hold," said Lord ELDON in DAVIS v. FISK, "that Societies may remodel and alter their Associations so as to change their original constitutions; but I do not sit here to try offences."

Such absurdities, it is true, are not likely to impose on multitudes, but insufficiency of numbers will only serve to make the fate of the unfortunate few the more inevitable. These anomalies may now be considered as nearly extinct, for as the practical utility of life insurance becomes more generally understood, Men advancing money on life policies will not be involved in such perplexities; and those who effect insurances on their own lives fully appreciate the importance of making policies available as securities, and therefore will not effect them in offices, the constitutions of which might expose executors or appointees to the perils of partnership. Life insurance has become a subject of such vast importance to all classes of persons, that every reasonable facility should be granted to those who are provident enough to court its advantages.

Simple and effectual means for obtaining the sum assured ought to be the first consideration. Unconstrained liberty to go to any part of the world, at fixed and settled rates, should be granted to the assured; and moderate rates of premium, arranged in periods of payment to meet the convenience of those who contribute them, ought to form leading inducements to proposers.

An institution founded on such principles, will certainly enjoy a decided preference over all competitors.

APPENDIX.

MANIA FURIBUNDA, OR RAGING MADNESS.

LEAR.

The word madness, is originally gothic, and meant anger, rage. Mgd (mod.)-Haslam.

Yet sawe I modnesse laghyng in his rage.

Chaucer.

This variety is displayed in the character of Lear. A temper, naturally irritable and impatient of contradiction,-the habit of giving unrestrained indulgence to its caprices, and the fractiousness and imbecility of age, sufficiently prepared Lear on the advent of disaster for a paroxysm of insanity.

Lear. Now, our joy, Although the last, not least: Speak.

Cordelia. Unhappy that I am, I cannot heave My heart into my mouth: I love your majesty According to my bond ; nor more nor less.

Sure I shall never marry like my sisters, To love my father all.

Lear. So young and so untender ? Cordelia. So young, my Lord, and true. Lear. Let it be so, thy truth then be thy dower; Here I disclaim all my paternal care, Propinquity and property of blood; And, as a stranger to my heart and me, Hold thee from this for ever.

Kent. Good, my liege— Lear. Peace, Kent, Step not between the dragon and his wrath.

When the authority of Lear is afterwards questioned by his daughter Goneril, he is so surprised, that he doubts of his personal identity. The approaches to insanity are introduced with great skill—they have a regular succession, and augment.

This is not Lear !

Does Lear talk thus? Speak thus? Where are his eyes?

The succeeding speech of Goneril calls forth the intemperance of his rage:—

Darkness and devils !

- And afterwards :-

Detested kite, thou liest.

At length comes his horrible denunciation, which is conceived in the sublimity of terrific grandeur, and conveyed in language admirably descriptive of the array of thought.

> Hear, Nature ! hear, dear Goddess, hear ! Suspend thy purpose if thou didst intend To make this creature fruitful ! Into her womb convey sterility ! Dry up in her the organs of increase,

That from her derogate body never spring A babe to honour her. If she must teem, Create her child of spleen; that it may live And be a thwart disnatured torment to her ! Let it stamp wrinkles in her brow of youth; With cadent tears fret channels in her cheeks; Turn all her mother's pains and benefits To laughter and contempt—that she may feel How sharper than a serpent's tooth it is To have a thankless child !

When he calmly considers the indignities that have been heaped upon him, and reverts to the ingratitude of his two daughters, reflection serves only to increase his tortures, and he feels an apprehension of supervening insanity :—

> Oh! let me not be mad—not mad, sweet Heaven! Keep me in temper—I would not be mad.

In many states of mental affliction, this presentiment is not uncommon. The conflict of passions produces palpitations and anxieties about the region of the heart; the blood ascends in flushes, and appears to scald the brain in its passage, and a crowded and increased assemblage of ideas produce confusion in the mind. Of these precursors, Lear experienced many intimations, and he exerts himself to suppress the kindling of his rage :—

> Oh! how this mother swells up tow'rds my heart, Hysterica passio ! Down, thou climbing sorrow, Thy element's below.

But at last he is goaded to fury by the contu-

melious insults of his two unnatural children, and perceives his impending distraction :---

O fool, I shall go mad.

When Goneril and Regan have barred him out, he alternately braves the storm with violent imprecations, and conciliates it with a wounded spirit.

Blow, winds, and crack your cheeks !

Again he endeavours to restrain the bursting torrent of his passion :---

No! I will be the pattern of all patience, I will say nothing.

And concludes a speech of exquisite beauty with a temperate and consoling reflection :---

> I am a man More sinn'd against than sinning.

The actual perversion of his mind is now fast approaching; the alarm for the continuance of reason increases; his restraints are less effectually imposed. Some internal sensations whisper that the mental eclipse is commencing :—

My wits begin to turn.

Lear next becomes aware that he sustains privations with extraordinary nerve, and that cold and hunger do not exert their usual influence on his frame. This insensibility to external impressions is a marked symptom of approaching and existing derangement, and it is physiologically accounted for by the inimitable author:—

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When the mind's free The body's delicate; the tempest in my mind Does from my senses take all feeling else, Save what beats there.

Still reason, though feebly and tremulously, holds the rein; and he feels a kind of instinctive horror, a soreness that penetrates to the quick, and at which he writhes when he adverts to his daughters:—

O Regan ! Goneril !

Your old kind father, whose frank heart gave you all; Oh! that way madness lies; let me shun that; No more of that.

Although Lear's mind had been strained by the torture it had undergone, he has only hitherto approached the confines of madness; he has perceived the dangerous brink on which he stands, and caught in momentary glimpses the distractions that hover round him. It is not till he comes in contact with the counterfeit lunatic that the fabric of his intellect loosens; and he presumes that no misfortune could have reduced another so low in the scale of humanity, but the sources of his own affliction. At sight of Edgar, (who feigns madness to answer a purpose,) he asks

What ! have his daughters brought him to this pass ? Could'st thou save nothing ? Didst thou give them all ?

How admirable is the contrivance, and how natural the result of this interview between Lear and Edgar. The king, with his mind oppressed and weakened by the ingratitude of his children, meets the pretended maniac, and concludes that

To such a lowness but his unkind daughters.

Adding-

Judicious punishment ! 'twas this flesh begot Those Pelican daughters.

The declension of Lear's mind into raving madness by force of sympathy created by the frantic appearance and manner of Edgar is exquisitely simple and natural. In stripping off his garments, to copy the nakedness of Edgar, Lear manifests the first overt act of insanity—

Off, off, you lendings :-- Come, unbutton here.

Delighted with the maniac, the pitiless pelting of the storm is disregarded, and he leaves his friends unheeded to form a nearer intimacy with his new acquaintance: his derangement magnifies the wretched and apparently brainless wanderer into an oracle of wisdom, and a sage preceptor; the remonstrance of his attendants is disregarded, he lingers " to talk with this philosopher," " this learned Theban," " this good Athenian." He adheres to him with an affection and confidence that banish all fears for his own safety; he seems inspired by his associate, and his madness blazes with a rival flame:—

> To have a thousand with red burning spits Come hissing in upon them.

And again, and no statement dealt tug starbastis

The little dogs and all,

Tray, Blanch, and Sweetheart, see, they bark at me.

seene Shalcespeare disp

The poet felt that the mere impertinency of madness could not be long sustained; it would fail to excite the attention, and would lower the dignity of the scene: the deprivation of reason is therefore supplied by acuteness of feeling, and an impassioned recurrence to the source of his derangement:—

"Then let them anatomize Regar, see what breeds about her heart. Is there any cause in nature that makes these hard hearts?"

In the ruins of his mind many fragments of the stately pile still remain entire; for even madness cannot extinguish pride and ambition; and in his wildest sallies recollection prompts him, "that he is every inch a king;" and that when a Monarch "stares" "the Subject quakes."—Even in our ashes live our wonted fires.

The dutiful and affectionate Cordelia, hearing that her father wanders about "mad as the vext sea, singing loud," is solicitous for his restoration by medical sagacity and experience. She is informed that he lacks repose; that there

> Are many simples operative whose power Will close the eye of anguish.

These remedial agents are employed with so much effect, that in the heaviness of his sleep his attendants put fresh garments on him. In this scene Shakespeare displays not only a perfect knowledge of the disease under which Lear labours, but an intimate acquaintance with the course of medical treatment which in those days, and indeed until very recently, was pursued with a view to its cure. It may fairly be presumed that some narcotic drug, some oblivious antidote, had been administered in order to procure the desired repose, as the king's first impressions when he is awakened by Cordelia are obviously the broken continuation of a distressing dream, as if he had been roused before the operation of the opiate had been exhausted :—

You do me wrong to take me out o' the grave :-Thou art a soul in bliss; but I am bound Upon a wheel of fire, that mine own tears Do scald like molten lead.

Cordelia inquires, "Sir, do you know me?"

Lear replies, "You are a spirit, I know; When did you die?"

The gradual and imperfect return of perception, the glance at his sufferings, and the doubt of his personal identity, are exquisitely drawn :—

Where have I been?

Where am I? fair day-light? I am mightily abused.—I should e'en die with pity To see another thus.—I know not what to say.— I will not swear these are my hands: let's see; I feel this pin prick. Would I were assured Of my condition! After these waverings he entertains suspicions of his sanity :---

------ And to deal plainly, I fear I am not in my perfect mind.

From repeated examinations he is impressed that Kent and Cordelia are not entire strangers; but the impression is feeble and obscure—the dawn of reminiscence :—

Methinks I should know you, and know this man; Yet I am doubtful.

At length comes that beautiful and pathetic burst where Nature, throwing off the imbecilities of age and the incumbrance of disease, by an instinctive act of recollection claims the dutiful Cordelia:—

Do not laugh at me; For as I am a man I think this lady To be my child Cordelia.

The concluding scene exhibits Cordelia dead in the arms of her father; and amidst the tumult of his distraction there are some vivid gleams of rational tenderness and parental anxiety, alternations of groundless hope and fatal discouragement. Here the poet has again manifested his metaphysical acumen, and his acquaintance with the laws of the human mind and its attendant passions. The monarch's lamentations are awhile suspended that he may relate the energy with which he slew the villain that hanged his daughter; and this temporary oblivion of his distress is an interval to recount his former magnanimous achievements. Again he returns to his departed Cordelia, and bewails her loss with wild lamentations and distracted sorrow. These pangs are too violent for continuance. Suddenly he feels the sense of suffocation from a rush of blood to the brain, a fatal return of the " climbing sorrow" he had felt before. The immediate feeling of self-preservation again interrupts his ecstacy of grief—he solicits assistance:—

Pray you, undo this button. Thank you, Sir.

His paroxysm again returns, an apoplectic seizure cuts short the accents of his despair, and he dies on the body of his murdered daughter.

Throughout this exquisite character the author has displayed such intimate knowledge of the human intellect, and so correctly painted the succession of mental operations, that the picture can only be viewed as the great masterpiece of phsychological delineation.

Cordelia describes her father as wandering about, mad as the vexed sea,

> Crowned with rank furmiter and furrow-weeds, With harlocks, hemlock, nettles, cuckoo-flowers, Darnel, and all the idle weeds that grow In our sustaining corn.

It would be unjust not to notice that these "simples operative whose power will close the eye of anguish," are all strongly indicative of the state of Lear's mind.

FUMITER (Fumeterre, French). Fumitory, Fumaria officinalis, Linn. It is common to our corn-fields and ditch banks. The leaves are of *bitter* taste, and the juice was formerly employed for its *bitterness*, in hypocondrism and black jaundice by Hoffman and others; and more lately by Cullen in leprosy.

FURROW-WEEDS. *Rank*, as they are here expressly called, or strong-scented, growing wild in the furrow, and disgusting to the taste and other senses.

HARLOCKS. Sinapis arvensis, Linn. The wild mustard of our corn-fields, called indifferently charlock, garlock, harlock, warlock, and, by Fitzherbert and other old English writers, hedlock. The seeds of this plant form the *pungent* Durham mustard, as those of Sinapis *alba* form the white mustard, and those of Sinapis *nigra* the common mustard. The plant rises with a stem of about nine inches, thickly set with *hairs* or bristles. Hence the proper name should probably be *hair*-lock, as in Danish they call the DARNEL heyre and heyre-grass. As the *bitter pungency* is referred to in the former case, the *biting pungency* is referred to here.

HEMLOCK. This plant requires no explanation; it is generally known to be *poisonous*.

NETTLES. Urtica urens, Linn. Called urens

from its well-known irritating power of stinging and burning.

CUCKOO-FLOWERS. Cardamine pratensis, Linn. These flowers, the sysymbrium of Dioscorides, were employed among the Greeks and Romans for almost all affections of the head. They at present hold a place in the Pharmacopœia, as a remedy for convulsions, epilepsy, and other diseases of the brain or intellect.

DARNEL. Lolium temulentum, Linn. Called temulentum from its *intoxicating* or *narcotic* powers, when taken alone, or intermixed with malt. From this deleterious property it is termed by Virgil *infelix lolium*, lurid lolium, and by the French *ivraie*, whence our own vulgar name for it of *wray*-grass or *drunkard*-grass.

These plants are all wild and uncultivated; of bitter, biting, poisonous, pungent, lurid, and distracting properties. Thus Lear's crown is admirably descriptive or emblematic of the sources and variety of the disease under which he labours. The mixture of such flowers and plants could not be the effect of chance. Yet none of the Commentators have given Shakespeare credit for the arrangement.

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MELANCHOLIA, OR MELANCHOLY MADNESS.

HAMLET.

Melancholy.—Melancholie, French: from $\mu \epsilon \lambda \alpha \nu \sigma \varsigma$ and $\chi \sigma \lambda \eta$, a kind of madness in which the mind is always fixed on one object:—Johnson.

MELANCHOLY denotes a morbid affection of mind, an extreme depression of spirits, and a disrelish of those enjoyments that constitute, to a certain degree, the happiness of others. As the symptoms advance, and the disorder becomes exasperated, there is generally some existing delusion. The wealthy often insist that their property is annihilated, and expect to be a burden on the parish.—Those of exemplary morals conceive themselves the perpetrators of the blackest crimes; and this persuasion is usually accompanied by an intolerance of life, and a crafty contrivance of means for its destruction.—Such a case is Hamlet's.

Shakespeare's Hamlet appears to have been by nature a volatile and ardent Prince, whose temper and dispositions had suffered deep impression by the death of his father, the speedy marriage of his mother, and the suspension of his own right consequent on that marriage. These circumstances, operating suddenly on a mind predisposed to gaiety and to the follies which spring from youthful effervescence, give a tinge of melancholy to his train of thought which speedily but imperceptibly produces an instability of intellect. Whilst thus suffering from mental depression, the suspicion of his father's murder induces him to put on an antic disposition, that, under colour of madness, he may be less liable to scrutiny, and more free scope be thereby afforded for the measures he shall take to arrive at full conviction. From this period, he strives to "wipe from the table of his memory all trivial fond records that youth and observation copied there," except as those pressures may tend to the accomplishment of his object; and thus, in cherishing a favourite design, and permitting the ghost's

> Commandment all alone to live, Within the book and volume of his brain, Unmixed with baser matter,

he gives growth and maturity to a malady, the seeds of which had germinated in his mind, until in the end he actually labours under the infirmity which his previous declaration shows he but intended to feign.

Here it may be proper to observe, that feigning madness, is frequently a favourite theory with insane persons.

Soon after the second marriage of his mother,

Hamlet's feelings assume a *morbid* character, and in his first soliloquy, in the second scene of the play, *he debates on suicide*—

O, that this too, too solid flesh would melt, Thaw, and resolve itself into a dew ! Or that the Everlasting had not fix'd His canon 'gainst self-slaughter ! O God, O God, How weary, stale, flat, and unprofitable Seem to me all the uses of this world !

Whilst thus contemplating the evils of life, and chastening his feelings by the reflection that the Everlasting had fixed his canon 'gainst selfslaughter, the supernatural appearance of his late father is communicated to him. When Hamlet receives the intelligence, his surprise is natural, and not devoid of tenderness; his examination of the persons who had seen the figure of the late king, minute and pertinent; and he properly resolves to watch in person, in order to be convinced of the reality of the vision.

Although he had not hitherto let fall any hint or conjecture respecting the death of his father, yet, when alone, he displays an apprehension—

My father's spirit in arms! all is not well :

I doubt some foul play. Would the night were come.

Having promised to remember the injunctions of the ghost, whilst Reason holds her seat within his brain, he contemplates vengeance on his uncle, and determines to assume madness, the better to gratify his revenge; but takes no measure towards the accomplishment of his purpose.

Speedily after, he is again musing on the evils of a long life. "The satirical rogue says here (alluding to the book he holds), that old men have grey beards." By the satirical rogue, he means Juvenal in his tenth satire.

Da spatium vitæ, multos da Jupiter annos: Hoc recto vultu, solum hoc et pallidus optas. Sed quam continuis et quantis longa senectus Plena malis! deformem, et tetrum ante omnia vultum, Dissimilemque sui, deformem pro cute pellem, Pendentesque genas, et tales aspice rugas, Quales umbriferos ubi pandit Tabraca saltus In vetulâ scalpit jam mater simia buccâ.

In the subsequent scene with Rosencrantz and Guildenstern, which commences with quaint jest and indelicate levity, he furnishes, without affection or reserve, a lamentable but natural picture of gloom and despondency.—

" I have of late, but wherefore I know not, lost all my mirth, forgone all custom of exercise; and, indeed, it goes so heavily with my disposition, that this goodly frame, the earth, seems to me a sterile promontory; this most excellent canopy, the air, look you—this brave o'erhanging firmament, this majestical roof fretted with golden fire—why, it appears no other thing to me than a foul and pestilent congregation of vapours."

Abruptly his thoughts creak on the worn hinges of his uncle-father and aunt-mother, whom he states to be deceived—that he is but mad, "North-north-west; when the wind is southerly, I know a hawk from a handsaw."

The soliloquy that ensues, in which he reproaches himself for tardiness and irresolution, is an unconnected assemblage of intruding thoughts and conflicting passions. At length, he appears sensible of it himself, and starts to his project of the play " about my brain."—Although he had before declared to Horatio, that it was " an honest ghost," he now begins to waver, and timidly debates—

Hamlet, in the first act, describes—all the uses of this world as "stale, flat, and unprofitable;" and fancying that he has nothing to do in life, wishes for death; but is fully impressed with a belief in a future state, and in the punishments awarded against self-murderers. At this period he is studious, religious, and virtuous. Whilst in the very act of serious reflection on an hereafter, Horatio communicates to him that his father's spirit is in arms, and the ghost afterwards makes a communication which

" Shakes his disposition with thoughts beyond the reaches of his soul."

I

Thenceforth his mind takes "a more horrid hent;" until, in the third act, he endeavours to recover the train of thought in which he was indulging at the time the horrid communication of his father's murder was first made to him. This is a very common effort with those who have suffered mental aberrations, and the poet shews his intimate acquaintance with these affections, by making Hamlet endeavour to recur to the very subject he was considering at the moment the prevailing theory first entered his mind.

Accordingly, Hamlet in soliliquy proposes the very question which he had previously fully considered and disposed of, namely—what it is to be, and to cease to be. Scarcely, however, has he stated the premises, when he loses the connection, and instead of debating whether it is nobler to suffer the ills of life, than to end them by an act of violence, proceeds to consider whether it is possible to end them; becomes unmindful of all his former impressions and religious persuasions—questions a future state of existence—doubts every thing which he had previously believed, and comes to a conclusion which outrages religion and philosophy.

The inimitable author, instead of displaying correctness of metaphor, closeness of reasoning, and soundness of deduction, in this celebrated soliloquy, has skilfully given the appearance of rationality to the impertinence of madness. A less clever poet would have thrown an extravagance into the soliloquy, foreign to the *disease* under which the character laboured; whereas, the great master, with pathological correctness, has given to Hamlet " a happiness of reply that often madness hits on."

The last instance that will be adduced of the uncontrollable sallies that constituted his mental calamity, is his conduct at the grave of Ophelia. After a season of fastidious moralising with Horatio, and an interchange of gross repartee with the grave-digger, during the funeral procession, the prince recognises Laertes, who, in a transport of grief, leaps into his sister's grave, and, frantic with affliction, calls out

Now pile your dust upon the quick and dead !

When these words, the desponding effusions of a brother's love, reach the ears of Hamlet, unconscious of the solemnity of the scene, wholly forgetful of his former unkindness, insensible that he had slain the father of Laertes, and that the death of Ophelia was the result of disappointed love and filial sorrow, he bellows from his covert

It is only necessary to peruse the remainder of the scene to stamp this violent explosion with the character of madness. After his mind has been seriously occupied on another subject, and reflection returns, he expresses to Horatio his extreme regret, and, as is usual in such cases, assigns an unsatisfactory reason—

> But I am very sorry, good Horatio, That to Laertes I forgot myself: For by the image of my cause, I see The portraiture of his. I'll court his favour. But sure the bravery of his grief did put me Into a towering passion.

The first symptoms of *Melancholia Attonita*, and their progression to and ultimate determination in confirmed madness, are illustrated with singular exactness in the character of Hamlet; and it is a remarkable coincidence that every predisposing and exciting cause by which the author, consistently with the story of his play, could denote an intention of making his hero subject to paroxysms of insanity, has been clearly developed in the course of the five acts. Indeed the stages of the disease are distinctly marked, in regular progression, from the first scene of Hamlet's appearance, when he expresses a disrelish of life, until the violent explosion of his madness at the grave of Ophelia.

Mr. Stevens is certainly right in saying that "Those gleams of sunshine, which serve only to shew us the scattered fragments of a brilliant imagination crushed and broken by calamity, are much more affecting than a long uninterrupted train of monotonous woe." Shakespeare well knew how to exhibit these successions. He was fully aware that reason cannot blend or amalgamate with insanity; but he had observed from nature that they may constitute alternate strata; and that, at different seasons, the same intellect may shine forth in reason, blaze in madness, and sink in melancholic depression. MANIA MITIS, OR CRAZINESS.

OPHELIA.

Crazy is borrowed from the French ECRASE, crushed, broken; as we say a person is cracked.

The mental distemper of Ophelia is that of sorrowing distraction. Confiding in the sincerity of Hamlet, she had listened to his addresses, and

Suck'd the honey of his music vows,

sufficiently to imbibe the contagion of love.

Laertes, aware of the state of her affection, cautions her against the attentions of the Prince. Her feelings, however, are on every occesion made subservient to the views of her father, who after commanding her to have no speech with the Lord Hamlet, now bids her walk *alone* that she may have an interview with him—

> _____Read on this book, That show of such an exercise may colour Your loneliness.

I hear him coming—let's withdraw, my lord. The conduct of Hamlet, during the remainder of the scene, excites strong sympathy towards the fair Ophelia, who is made to feel that all her hopes of reciprocal affection are for ever blighted.

The conflicts of duty and affection, hope and fear, which successively agitated Ophelia's gentle bosom, were of themselves sufficient to dissever the delicate coherence of a woman's reason. Her lover's ardent passion seemed to her to have subsided into cold indifference. Delicacy of sentiment had been succeeded by indecent scoffing and contemptuous insult, and when the hapless maiden saw her aged parent sink into the grave, not in the course of natural decay, but by the reckless infliction of that hand she had fondly hoped to unite with her own, her susceptible mind, unable to sustain such powerful pressures, sank beneath their accumulated weight :

Nature is fine in love: and where 'tis fine It sends some precious instance of itself After the thing it loves.

In the madness of Ophelia there are no intervals of reason; she exhibits a state of continuous distraction, and though she is presented to observation in only two short scenes, the duration is sufficient for the effect; for the poet has contrived, with exquisite skill, to dart through the cloud that obscures her reason occasional gleams of recollection, to indicate that disappointed love and filial sorrow still agonise her tender bosom.

Ophelia, (Sings.)

White his shroud as the mountain snow,Larded all with sweet flowers,Which bewept, to the grave did goWith true-love showers.

To-morrow is saint Valentine's day, All in the morning betime, And I a maid at your window To be your Valentine.

Then up he rose and don'd his clothes, And dupp'd the chamber door, Let in the maid, that out a maid Never departed more.

It is impossible to conceive any thing more perfect than the picture of disease given by Shakespeare in this scene of Ophelia's. Every medical professor who is familiar with cases of insanity, will freely acknowledge its truth. The snatches of songs she warbles contain allusions strongly indicative of feelings of an *erotic* tendency ($\xi_{p\omega 5}$ -amor,) and are such as under the chaster guard of reason she would not have selected. This slight withdrawing of the veil, without disgusting by its entire removal, displays at once the pathological correctness and the exquisite delicacy of the Poet.

Throughout the short display of Ophelia's derangement a mournful sympathy is kindled, and it is evidently heightened by our previous acquaintance with her beauty, gentleness, and modesty. The incoherent fragments of discourse, abrupt transitions, and absurd images, that ordinarily provoke levity, here awfully repress it :

They say that the owl was a baker's daughter-Lord! we know what we are, but know not what we may be.

I hope all will be well. We must be patient: but I cannot choose but weep to think they have laid him i' the cold ground. My brother shall know of it, and so I thank you for your good counsel. Come, my coach! good night, ladies; good night, sweet ladies, good night, good night.

That reader or spectator is little to be envied who could smile at Ophelia's distraction, which from gentle breasts must extort sighs, and sobs, and tears—those attributes of feeling that ennoble our nature.

If any thing could heighten our admiration of Shakespeare, after a careful examination of the life of the unfortunate Ophelia, it would be the exquisite contrivance of her death :—

Your sister's drown'd, Laertes.

There is a willow grows ascaunt the brook, That shows his hoar leaves in the glassy stream ; Therewith fantastick garlands did she make Of crow-flowers, nettles, daisies, and long-purples, That liberal shepherds give another name, But our cold maids do dead-men's-fingers call them ; There on the pendant bows her coronet weeds Clambering to hang, an envious sliver broke ; When down her weedy trophies and herself Fell in the weeping brook. Her clothes spread wide ; And, mermaid-like, awhile they bore her up, Which time she chaunted snatches of old tunes, As one incapable of her own distress, Or like a creature native and indu'd Unto that element : but long it could not be, Till that her garments, heavy with their drink, Pull'd the poor wretch from her melodious lay To muddy death.

The admirable selection of plants which formed the fantastic crown of Lear, has been already noticed. The coronet wreath of the lovely Ophelia furnishes another instance of Shakespeare's knowledge and admiration of flowers.

The queen describes the garland as composed of crow-flowers, nettles, daisies and long-purples; and there ought to be no question that Shakespeare intended them all to have an emblematic meaning. "The crow-flower" is a species of lychnis, alluded to by Drayton, in his Polyolbion. It is the lychnis flos cuculi of Linnæus and Miller, and the l. pulmaria sylvestris of Parkinson; the l. cuculi flos of C. Bauhin. It is of considerable antiquity, and is described by Pliny under the name of adontitis. The more common English name is meadow-lychnis, or meadow-campion. It is sometimes found double in our own hedge-rows-but more commonly in France, and in this form we are told by Parkinson, it was called " The fayre Mayde of France." It is to this name and to this variety that Shakespeare alludes in the present instance.

The "long-purples" are commonly called "dead-men's-hands" or "fingers."

Our cold maids do dead-men's-fingers call them.

The "daisey" (or *day's-eye*) imports "the pure virginity," or "spring of life," as being itself "the virgin bloom of the year."

The intermixture of nettles requires no comment, their stinging properties have been already noticed.

Admitting the correctness of this interpretation, the whole is an exquisite specimen of emblematic, or picture-writing. They are all wild flowers, denoting the *bewildered* state of the beautiful Ophelia's own faculties; and the order runs thus, with the meaning of each term beneath:—

CROW-FLOWERS. NETTLES.DAISIES.LONG-PURPLES.Fayre maydestung to
the quickHer virgin
bloom.under the cold
hand of death." A fair maid stung to the quick, her virgin bloom under

the cold hand of death."

It would be difficult to fancy a more emblematic wreath for this interesting victim of disappointed love and filial sorrow.

DEMONOMANIA, OR OBSESSI, "ONE BESIDE HIMSELF."

EDGAR.

DEMONIACUS or Demoniaci be the Latin words. In Greke, it is named, Demonici. In Englyshe, it is named, He or they the which be mad, and possessed of the devyll, or devylles; and their propertie is to hurt and kyll themselfe, or els to hurt and kyll any other thynge; therefore, let every man beware of them, and kepe them in a sure custody.

The cause of this matter.

This matter doth passe all maner sicknesses and diseases, and it is a fearefull and terrible thyng to see a devyll or devylles should have so muche and so greate a power over men, as it is specified of such persons dyvers tymes.

> Doctor Andrewe Boorde's Breviary of Health, published in 1557.

The madness of Edgar is an assumption, but must have been drawn from suffering nature, and furnishes another proof of Shakespeare's intimate acquaintance with the varieties of madness.

> " The country gives me proof and precedent Of Bedlam Beggars, who with roaring voices Strike in their numm'd and mortified bare arms

Pins, wooden pricks, nails, sprigs of rosemary: And with this horrible object, from low farms, Poor pelting villages, sheep cotes, and mills, Sometime with lunatic bans, sometime with prayers, Enforce their charity."

Such counterfeits as Edgar describes were very common at the period at which Shakespeare wrote.

Before the diffusion of a philanthropic spirit had provided a receptacle for lunatics that were incurable and dangerously disposed, they were suffered to wander and levy contributions by moving compassion or exciting alarm. The sentiment of pity has always been largely extended to those that are bereft of their reason; some weak and superstitious persons have even considered their incoherence to spring from inspiration, and believed their denunciations to be prophetic. By the considerate of the lower classes, they were generally relieved: but when their hallucinations were afloat, when fantastically arrayed they exhibited their ridiculous antics they become the mischievous sport of the younger of both sexes, and were hooted and chased from the village: and when their importunies were bolder, or they committed depredations, they fell under the serious displeasure of the magistrate and were "whipt from tything to tything, and stocked, punished, and imprisoned."

Although these wretched persons received the

means of subsistence from private charity, yet they were interdicted from all intercourse with society: like lepers, they were kept at arms' length; the morsel that supported nature was cast them as to a dog; and, by permission, they reposed in outhouses, deserted hovels, or the stalls of cattle. These interdictions, the result of fear, disgust, or contempt, fortunately prevented the malady from descending to posterity.

This scant benevolence, extended to the real victims of intellectual calamity, soon created a swarm of impostors, who ranged in all directions, counterfeiting this severe affliction, and prostituting intellect, the fairest gift of heaven, to excite charity by the simulation of madness. They pretended to have been discharged as incurables from Bedlam, or as being under cure, and exhibited a brazen badge fastened round the arm, with an inscription purporting that they belonged to that hospital, and were proper objects of compassion and relief,

Privation of reason being considered the greatest affliction to which humanity is subject, wandering lunatics were regarded as objects worthy of as deep commiseration as Lazarus himself, and were called *Abraham's men*; and the impostors were said to be *sham* Abrahams.—Hence the origin of the vulgar phrase of *shamming Abraham*.

Randle Holme, in his academy of arms and blazons, describes these impostors—"The Bedlam is in the same garb, with a long staff, and a cow or ox horn by his side; but his clothing is more fantastick and ridiculous; for being a madman, he is madly decked and dressed all over with ribands, feathers, cuttings of cloth, and what not, to make him seem a madman or one distracted, when he is no more than a dissembling knave."

In Decker's Bellman of London, is another account of these wanderers :—"He swears he hath been in Bedlam, and will talke fantastically of purpose; you see pinnes stuck in sundry places of his naked flesh, especially in his arms, which paine he gladly puts himself to, only to make you believe he is out of his wits.—He calls himself by the name of "Poore Tom" and coming near any body, cries, "Poore Tom is a-cold—'"

Aubrey, in his M.S. remains of Gentilisme and Judaisme, says, "Before the civil wars, I remember Tom a Bedlams went about begging; they had been such as had been in Bedlam, and come to some degree of sobernesse, and when they were licensed to go out, they had on their left arme an armilla of tinne printed about three inches breadth, which was sodered on."

So considerable was the inconvenience created by this profligate system of mendicity, and so greatly had the impostors augmented, that the deception was publicly exposed in the London Gazette, in the year 1675.— "Whereas several vagrant persons do wander about the City of London and countries, pretending themselves to be Lunatics, under cure in the hospital of Bethlem, commonly called Bedlam, with brass plates about their arms, and inscriptions thereon; These are to give notice, that there is no such liberty given to any patients kept in the said hospital for their cure, neither is any such plate, as a distinction, or mark, put upon any lunatic during their being kept there, or when discharged thence; and that the same is a false pretence to colour their wandering and begging, and to deceive the people, to the dishonour of the government of that hospital."

Enter Edgar, disguised as a Madman.

"Away ! the foul fiend follows me !"

*

"Who gives any thing to poor Tom? whom the foul fiend hath led through fire and through flame.—Tom's a cold—do poor Tom some charity whom the foul fiend vexes."

"This is the foul fiend Flibbertigibbet; he begins at Curfew and walks till the first cock—he gives the web and the pin," [diseases of the eye—a cataract,]

" squints the eye, and makes the hare-lip; mildews the white wheat, and hurts the poor creature of earth."

"The Prince of Darkness is a gentleman; Modo he is called, and Mahu."

"Frateretto calls me, and tells me Nero is an angler in the Lake of Darkness. Pray innocent, and beware the foul fiend...."

Under this variety of madness, all the bodily affections, whether of disease or privation, are solved by a mysterious origin, and attributed to supernatural agency. There is a magnificence in the supposition of demoniacal controul, admirably adapted to the exuberant fancy and exalted pride of madness.

The vitiations of taste or the oppressions of the stomach from indigestion are readily interpreted by the wretched sufferers as the effects of malignant fiends, and the machinations of invisible poisoners—

" Poor Tom drinks the green mantle of the standing pool."

" Hopdance cries in Tom's belly for two white herrings :

" Croak not, black angel, I have no food for thee."

The diseased perceptions by the ear are reconciled, as the fatal communications of diabolical power,

"Frateretto calls me; and tells me, Nero is an angler in the Lake of Darkness."

At length a system is formed, which is the consummation of insanity, and life passes away in the fancied enjoyment of beatic visions, or is painfully spun out under the terror of tyrannic infliction by infernal masters.

Some curious accounts of Demoniacs are given in *Dr. Harsnet's* Declaration, printed in 1603— Frateretto, Flibbertigibbet, Hobbididance, (all mentioned by Edgar), were three devils of the round, or morrice.

"Five fiends have been in poor Tom at once; of Lust, as Obidicut; Hobbididance, Prince of Darkness; Mahu, of stealing; Modo, of murder; Flibbertigibbet, of mopping and mowing; who since possesses chambermaids and waiting-women."

Warburton, speaking of the imposture exposed by Harsnet, says, "While the Spaniards were preparing their Armada against England, the Jesuits were here busy at work, to promote it by making converts: One method they employed was, to dispossess pretended demoniacks; by which artifice they made several hundred converts amongst the common people. The principal scene of this farce was laid in the family of one Mr. Edmund Peckham, a Roman-Catholic, where Marwood, a servant of Anthony Babington's (who was afterwards executed for treason,) Trayford, an attendant upon Mr. Peckham, and Sarah and Friswood Williams and Ann Smith, three chambermaids in that family, came into the priest's hands for cure. But the discipline of the patients was so long and severe, and the priests so elate and careless with their success, that the plot was discovered on the confession of the parties concerned, and the contrivers of it deservedly punished."

Thus Shakespeare, instead of making the assumption by Edgar a mere display of fantastic absurdity, skilfully used it as a medium for satirising the follies and vices of the age in which he lived.

Lear. "What hast thou been ?"

Edgar. "A serving man, proud in heart and mind; that curled my hair; wore gloves in my cap; wine loved I deeply, dice dearly, and in woman out-paramoured the Turk. False of heart, light of ear, bloody of hand, hog in sloth, fox in stealth, wolf in greediness, dog in madness, lion in prey." Harsnet says, "Shortly after they (the spirits) were all cast forth, and in such manner as Mr. Edmunds directed them, which was, that every devil should depart in some certaine forme, representing either a beast or some other creature that had the resemblance of that sinne whereof he was the chief author; whereupon the spirit of pride departed in the forme of a peacocke; the spirit of sloth in the likeness of an asse; the spirit of envie in the similitude of a dog; the spirit of gluttony in the form of a wolfe; and the other devils also had in their departure their particular likenesses, agreeable to their natures."

This explanation by *Dr. Harsnet* (Archbishop of York) leads to the consideration of another theory in madness, which *Sauvages* speaks of in the following terms. "Duos lycanthropos se vidisse testatur Donatus ab Altomari que per avia vagabantur, cadavera humana aut partes eorum secum gestantes; de cætero luridos, siccos, adustos, sitientes eos depingit, at locomoriam omnino referant."

This variety is called Malancholia Zoanthropia, and the sufferer labours under the delusion, that he is a *wolf*, and howls in imitation of that animal. The classical reader will probably associate the term *lyconthropos* with what he has read or heard of the *Neuri*, a people of Livonia, who were supposed to have the power of transforming themselves at pleasure into wolves, and who are noticed by Pomponius Mela, Herodotus, and others .- On considering Harsnet's exposure of the course pursued by the priests to deceive their patients, with the classification of the species of insanity by Sauvages, it appears probable that the whole of the tradition is founded in mental disease : the Greeks certainly had a malady to which they gave the name of Lycanthropy, a frenzy in which the patient fancied himself possessed by a wolf; and wolf-mania has frequently come under the observation of physicians in England. Arnold would class it under the species notional delirium. Impostors are frequently seen in country towns, who have a method of heaving their stomachs, to impose a belief, that they have, as they say, a wolf in the belly. This is a species of mendicity, similar to that assumed by Edgar, only the pretended demoniac makes a wolf his devil.

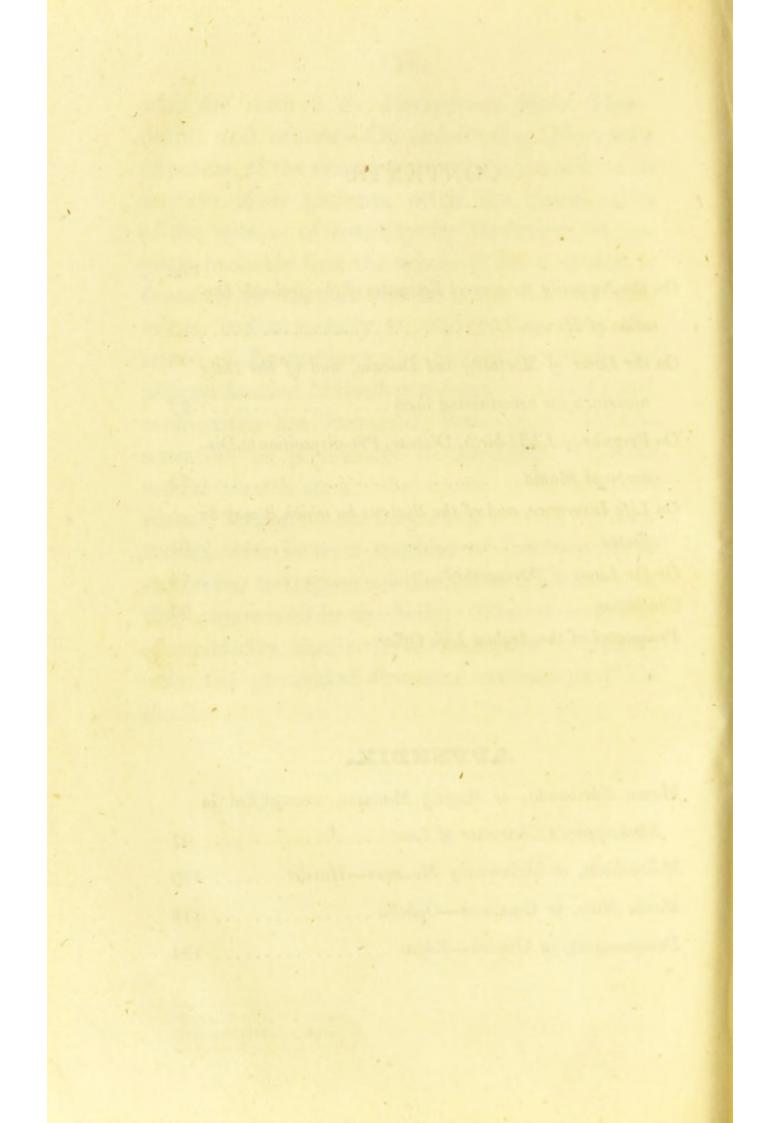
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