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SUGGESTIONS

TO

THE MEDICAL EXAMINERS

OF

THE DELAWARE

Mutual Life Insurance Company,

By D. W. MAULL, M. D.,  
Chief Medical Examiner.



WILMINGTON, DEL.  
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## INTRODUCTION.

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THE plea for the production of these "suggestions" is the frequent embarrassment the Home Office is subjected to from inability to base a just and correct final decision upon incomplete medical reports. A risk cannot be thoroughly comprehended or properly graded, if the record of the examination is imperfect or deficient in essential statements. The result is, time is lost and labor expended in a correspondence to elicit additional, and the requisite, information.

To obviate in part, the embarrassments from this source, by offering some hints or general directions which an experience has shown are required on certain points, is the object of the present paper.

This essay does not assume to be full and comprehensive in instructions, indicating all the diseases and disabilities that disqualify; neither does it claim to make any marked addition to Life Insurance Medical Literature, nor to usurp the place of any of the manuals that have been published for the guidance of the Examiner; its province is simply to suggest to the Examiners of the "Delaware Mutual" for whom it was exclusively designed, in what manner they may so develop and record the main facts in an examination, that the Officials at the Home Office, may, with greater facility and precision, determine the exact character of the risk.



# APPLICATION

TO

The Delaware Mutual Life Insurance Company.

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Questions to be answered by the person whose life is proposed to be insured, and which form a part of the contract.

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1. What is your name in full? Residence, Occupation, Address.

2. *A.* Is your life now insured? *B.* If so, in what office or offices, and in what year? *C.* Has any Life Insurance Company declined granting a Policy on your life? *D.* If so, when, by what company or companies, and for what reasons?

3. Sum to be assured? What kind of a Policy is now applied for?

4. Is the premium to be paid yearly, half yearly or quarterly?

5. State the place and date of your birth, year, month, day.

6. *A.* What is your age at your nearest birth-day? *B.* Are you married or single?

7. *A.* Have you resided out of the United States? *B.* If so, where and for what purpose?

8. Have you been vaccinated? Are you at this time in your ordinary state of health?

9. Have you ever had any of the following diseases? If so, state particulars of their character and duration:

Aneurism, apoplexy, asthma, bronchitis, colic, consumption, disease of the heart or any vital part, disease of urinary organs, disease of digestive organs, dropsy, epilepsy, fistula, fits, gout, inflammation of the lungs, hæmorrhoids, habitual cough, liver complaint, neuralgia, palpitation, paralysis, rheumatism, rupture, scrofula, small pox, spitting of blood, syphilis, vertigo, yellow fever.

10. Have you had any serious illness, local disease, or personal injury? And, if so, of what nature? And how long since?

11. Have you now to the best of your knowledge or belief, any disorder, or any infirmity or weakness tending to impair your constitution?

12. Are your habits of life correct and temperate? Have they always been so?

13. Are you in any military or naval service? or employed on a rail road or steamboat? If so, in what capacity?

14. Are your parents living or deceased? Father, age if living? State of health? Age at death? Cause of death? Mother, age if living? State of health? Age at death? Cause of death? How many Brothers have you had? Number living? Ages? State of their health? number dead? Ages? Cause of death? How many Sisters have you had? Number living? State of their health? number dead? Ages? Cause of death?

15. *A.* Have either of your parents, brothers or sisters ever had pulmonary, scrofulous, cancerous, or any constitutional or hereditary disease? *B.* Have your grand parents (paternal and maternal) reached old age?

16. State the name and residence of your usual medical attendant.

17. State the name and residence of an intimate friend to be referred to, for information as to your present and general state of health.

18. Has any material fact, bearing upon your physical condition and family history, been omitted in the foregoing questions?

19. What is the name in full of the person for whose benefit the insurance is applied? Residence? What is his or her relationship to you?

20. Has the above named person an interest in your life to the full amount now applied for?

It is hereby declared that the above are fair and true answers to the foregoing questions, and it is acknowledged and agreed by the undersigned, that this application shall form a part of the contract for insurance, and that any untrue or fraudulent answers, any suppression of facts, shall and will render the Policy null and void.

### Questions by the Medical Examiner for the Company.

1. Name and residence of the person examined.

2. State the approximate weight, height, figure, general appearance and measurement of chest on forced expiration and forced inspiration.

3. *A.* Is the respiratory murmur clear and distinct over both lungs?

*B.* Is the character of the respiration full, easy and regular?

*C.* Are there any indications of disease of the organs of respiration?

*D.* If so, state explicitly the result of percussion and auscultation, locating the seat and extent of the disease.

4. *A.* Is the character of the heart's action uniform, free and steady?

*B.* Are its sounds and rhythm regular and normal?

*C.* Are there any indications of disease of this organ or of the blood vessels?

*D.* If so, state the full extent and location of the disease.

5. *A.* State the rate and other qualities of the person's pulse.

*B.* Does it intermit, become irregular, or unsteady at this examination?

6. Is the person subject to cough, expectoration, difficulty of breathing or palpitation?

7. *A.* Has the person ever had any disease of the brain, the muscular or nervous system?

*B.* If so, state full particulars.

8. *A.* Has the person ever had any disease of the abdominal or urinary organs?

*B.* If so, give the specific gravity of the urine and other particulars.

9. Have the person's ancestors, parents, brothers or sisters, been afflicted with pulmonary or other hereditary diseases?

10. *A.* To what extent does the person use alcoholic stimulants?

*B.* To what extent does the person use tobacco?

*C.* To what extent does the person use opium?

*D.* Are there any indications that would lead you to suppose that the person has led or leads, other than a sober and temperate life?

11. *A.* Has the person now, or has he ever had any serious disease, personal injury, the loss of any limb or rupture?

*B.* If so, has it permanently affected his constitution?

12. If the person is a female, the following questions are to be answered:

*A.* Has she passed her climacteric period? *B.* How many children has she borne? *C.* How many miscarriages has she had?

*D.* Has she any organic disease of the uterus? *E.* Has she any scirrhus disease of the breast, or were her mother or sisters ever thus affected? *F.* Is she now pregnant?

13. *A.* Is the applicant in all respects a first-class, healthy risk?

*B.* Do you recommend that a Policy be granted for the full amount applied for?

I hereby declare that I have given true answers to all the questions put to me by the Medical Examiner, and that I am the same person described in the accompanying application.

..... **Person Examined.**

I hereby declare that I have attentively considered the application annexed, and carefully examined Mr. ....

I have also witnessed the same person's signature as above.

..... **Medical Examiner.**



I.  
THE MEDICAL EXAMINER.

It is evident upon the least reflection, that in order to give success to a Life Insurance Company, to secure to policy-holders the prospective advantages of their relations to that company, and to inspire and deserve the confidence of the community, none but *lives selected with the greatest care and deliberation*, should be assured. No company having a due regard for its interests and reputation as a business organization, desires questionable risks; and no Medical Examiner is doing the Company a service in accepting risks which are at all doubtful; he may be adding by such means to the number of policy holders, but he is, at the same time, weakening the force of the Institution for good, and periling the savings of the co-insurers—those who have honestly assured their lives, with the hope and expectation that their heirs shall reap the fruits of their prudence.

Upon the judgment and discrimination of the Medical Examiner, in selecting cases to be insured, much depends. The Directors, Trustees and Officers may be men well versed in the subject of Life Insurance,—excellent business men and devoted to the administration of the affairs of the office, and the Actuary may be thoroughly accomplished in the Science of Life-Tables and Rates, but if the Medical Examiner to whom is confided the judicious selection of risks, is careless in

his examinations, and but slightly impressed with the grave importance of his duties in guarding the Company against the acceptance of worthless risks,—all the efforts of the other officers are rendered nugatory.

It is true that all applications are carefully scrutinized at the Home Office by the President, Vice President and Chief Medical Examiner, who, in the light of the facts brought out, are competent to approve or disapprove, but it is equally true that the Local Medical Examiner who has personally examined the case, has the better basis for founding a correct and decided opinion of the merits of that case; hence the medical man to whom the company has delegated the office of examining men who desire to become insured, should be able not only to determine as to the advisability of the risk, in his own mind, but should be able also to satisfy the Company, from its stand-point, as to the true character of such risk. His "Yes" or "No" is not always sufficient; he must, if possible, make the case as clear to the apprehension of the Company as it has been to his.

Without a minute and careful investigation as to the physical condition of the applicant, with his hereditary tendencies, and without the developments of that inquiry having been clearly recorded in the report, the Home Office may be perplexed in its decision and uncertain as to the propriety of the endorsement of the Examiner's action.

Furnished with clear, plain and comprehensive statements of a given case, the officers are relieved from the embarrassment of making decisions on insufficient evidence, and from the sacrifice of time and labor con-

sequent upon the return of applications for additional data which might and ought to have been obtained and noted at first. Care in investigations and the same care in recording the results of those investigations are rules of primary moment.

The Medical Examiner has the same occasion for the exercise of a rare caution and penetration as had the army surgeon in the late war, and like him, is to be always on his guard, lest he be made a victim of the misrepresentations of others; the latter was often deceived by simulated ailments; the former is liable to be imposed upon by a pretended exemption from disease; as many persons very anxious to be insured, will make out as favorable a case as possible, giving little significance to symptoms, that, if fairly stated, might, in the critical and professional eyes of the Examiner, be regarded as a sufficient cause for rejection.

In his capacity as an inspector of all of the material out of which the Life Insurance fabric is being raised, the Medical Examiner can readily leave the impress either of his conscientious care or his carelessness upon the structure; each first-class risk he accepts building up and strengthening it, while each hazardous one weakens and tends to destroy.

## II.

### THE HEALTH STANDARD DESIRED.

A Life Assurance Institution laboring for the highest financial success and permanence, would naturally desire the highest life condition among its insurers; indeed the degree of prosperity is commensurate to a great extent, with the sum of the health standard secured among its policy holders. No argument is required to demonstrate that the greater the longevity of these policy holders, the greater is the profit accruing to the Company; such life extension defers the time for the payment of the policies.

Applicants whose life-chances are best are the desirable ones; those who approximate to that state described as "a sound mind in a sound body;" to a condition where there is harmony of function, and no undue exaltation of one organ at the expense of another. And though we can reasonably expect to find but in a comparatively few applicants for insurance, such physical perfection as would mark the man whose portraiture Hufeland paints as the one who is destined to a long life, yet the nearer the applicant approaches to this condition, the more readily does he commend himself to the favor of the Company.

The following is his sketch of the man whose chances for lengthened days are most favorable, and who

would be considered "a first class risk" in any life company.

"He has a proper and well proportioned stature, without however, being too tall. He is rather of the middle size and somewhat thick set. His complexion is not too florid; at any rate too much ruddiness in youth is seldom a sign of longevity. His hair approaches rather to the fair than the black; his skin is strong, but not rough. His head is not too big; he has large veins at the extremities, and his shoulders are rather round than flat. His neck is not too long; his abdomen does not project; and his hands are large, but not too deeply cleft. His foot is rather thick than long; and his legs are firm and round. He has also a broad, arched chest, a strong voice, and the faculty of retaining his breath a long time without difficulty. In general there is a complete harmony in all his parts. His senses are good, but not too delicate; his pulse is slow and regular. His stomach is excellent, his appetite good and his digestion easy. The joys of the table are to him of importance; they tune his mind to serenity, and his soul partakes in the pleasures which they communicate. He does not eat merely for the sake of eating, but each meal is an hour of daily festivity; a kind of delight, attended with this advantage, with regard to others, that it does not make him poorer but richer. He eats slowly and has not too much thirst. Too great thirst is always a sign of rapid self-consumption. In general he is serene, loquacious, active, susceptible of joy, love and hope, but insensible to the impressions of hatred, anger and avarice. His passions

never become too violent or destructive. If he ever gives way to anger, he experiences rather an useful glow of warmth, an artificial and gentle fever, without an overflowing of the bile. He is fond also of employment, particularly of calm meditation and agreeable speculation; is an optimist; a friend to nature and domestic felicity; has no thirst after honors or riches, and banishes all thoughts of to-morrow."

Dr John H. Griscom of New York, in a late essay on the "Physical and Physiological Indications of Longevity," besides accepting many of these features as indicative of the long-lived man, added some others to the sketch; viz:

"A fully developed osseous frame, and muscular organization.

Stature rather middle size; a capacious chest.

Pulse strong and regular; veins full at extremities.

Skin strong, smooth and clear.

Teeth sound; eats slowly; excretions all regular and free.

No violent passions. Temperament sanguine with a little of the phlegmatic."

Though this standard may be the ideal of the perfect man, and be difficult or impossible of attainment on the part of the average number of those seeking assurance of their lives, it is well to keep this delineation before the mind, as an object of comparison with the physical structure and appearance of the persons from time to time presenting themselves for examination.

The desideratum, as the concluding question of the examination would denote, is "a first-class healthy risk"

one who will, in all probability—barring the results of casualties and other non-natural causes—survive the ordinary period of expectation. Such a risk is made up of certain elements—a physical frame free from deformity of all kinds, and conforming nearly in height, weight, measurement and expansive power of lungs, to the accepted standards; a former exemption from ailments which injuriously and permanently affect the system, a freedom from any present disease and drift towards grave complaints; an inherent force, or permanent principle of reaction, as it is styled by Bichat, with capacity to oppose disorganizing agencies; an evident promptness to co-operate with nature in her efforts at the re-establishment of health; a steady power of endurance, with muscularity and other qualities which go to the making up of a robust constitution: good habits and an unexceptionable family record. If the subject is thus endowed and favored, he has the advantage of being such a risk. He may be a good, fair risk of the average kind, however, without having all of these qualifications: one or more may be wanting, and the life force still be unimpaired and entitling him to insurance.

### III.

## THE APPLICATION.

THE numerous questions in the application addressed to the applicant are designed to bring out all the essential points and facts in the case, so far as he is cognizant of them; to determine what organ has been or is now most obnoxious to disease; what function, according to his confession, has been most frequently disordered, and what is the direction of the physique; and to develop for the observation of Agent and Examiner, the circumstances of family history, present surroundings and personality.

The answers to these questions are the Medical Examiners starting point in his investigations, and he should always attentively consider the application, carefully studying the answers to gain all possible guides to a knowledge of the physical status of the applicant.

It is not the design to convey very specific instructions in this manual, applicable to all the cases to be rejected or accepted, and it is impracticable to enumerate in this connection all the various diseases or special forms of disease which should insure rejection. The physicians own judgment, with his knowledge of those physical infirmities whose tendency is to a fatal termination sooner or later, is to be his guide; but it is deemed fitting that certain general directions should be given,

by the aid of which Medical Examiners may understand what the "Delaware Mutual" desires in the way of risks.

The blank form for application used by this Company, embraces the following questions to the applicant which have a bearing upon the case, and the list of diseases which are most common, and from which Insurance Companies are most liable to suffer.

RESIDENCE? As a question of Medical Topography, this would naturally incite the Examiner to revolve in his own mind, the circumstances of temperature, climate, situation with regard to the sources of malaria, as large ponds, marshes, and swamps, and the probable bearing of these meteorological agencies upon each individual case offering.

OCCUPATION? This has a sensible influence over life, and it becomes an interesting subject of study to determine its true relation to longevity. The statistics on this important point are copious, and from many authors, and harmonize well in all essentials. Farmers, gardeners, agricultural laborers, and those generally who lead a simple, active, out door life, are more likely to attain advanced age than any other class. The clergy are more favored in length of life than lawyers, and the latter than physicians. Painters, workers in lead, compositors, bakers, millers, stone cutters, brewers, dyers, confectioners, have generally a lowered life force, because of the irritant impression of the fumes and minute particles upon the membranes of the air passages. Bar and restaurant keepers are considered to be very indifferent risks, because of the nature of their calling

which subjects them to late hours and temptation to drink. Blacksmiths, carpenters, cabinet makers and coopers, commonly are good risks: merchants and musicians also. Persons of fixed sedentary habits are not of the best class of risks, since the exercise needed for the maintenance of digestion is wanting, whilst it is asserted that no instance can be found of an idler having attained to a remarkably great age.

HAS ANY LIFE INSURANCE COMPANY DECLINED GRANTING A POLICY ON YOUR LIFE?

If answered in the affirmative, the Examiner has an added responsibility in his decision, as he may be sure that the previous Examiner or the Company which he represented, had or thought they had sufficient reasons for the declension: hence the greater necessity for a rigid examination as to the causes for the former rejection, and the need of the greater deliberation in forming the judgment. If he accepts, he should explicitly state his reasons for the acceptance, and demonstrate satisfactorily to the Company that the previous condition which necessitated the rejection, no longer exists.

AGE? In the language of Hufeland "every created being passes through three periods: that of its growth, that of its being stationary, and that of its decline;" he adds that "the duration of life in that being will be proportioned to the innate quantity of vital power, the greater or less firmness of its organs, the speedier or slower consumption, and perfect or imperfect restoration." Buffon states that "the total duration of life may be estimated to a certain degree by that of the

duration of an animal's growth," and that "a man who takes thirty years to grow, lives ninety or a hundred years." Other authors have the multiple for the duration of life, five times the period of growth.

This consideration of the age has an intimate relation with the question of the risk, more especially under circumstances of hereditary *vice* or tendencies. With the progression of age beyond thirty-five or forty years, the exemption from these hereditary inflictions increases: hence a Medical Examiner would feel safer in accepting a man beyond this age, whose father, mother, brother or sister had died of phthisis in their earlier years, than one who had not reached the age at which some one of them had died.

A table of Life Expectation based upon the Carlisle table of mortality is subjoined.

AGE.	EXPECTA- TION.	AGE.	EXPECTA- TION.	AGE.	EXPECEA- TION.	AGE.	EXPECTA- TION.
0	38.72	18	42.87	35	31.00	52	19.68
1	44.68	19	42.17	36	30.32	53	18.97
2	47.55	20	41.46	37	29.64	54	18.28
3	49.82	21	40.75	38	28.96	55	17.58
4	50.76	22	40.04	39	28.28	56	16.89
5	51.25	23	39.31	40	27.61	57	16.21
6	51.17	24	38.59	41	26.97	58	15.55
7	50.80	25	37.86	42	26.34	59	14.92
8	50.24	26	37.14	43	25.71	60	14.34
9	49.57	27	36.41	44	25.09	61	13.82
10	48.82	28	36.69	45	24.46	62	13.31
11	48.04	29	35.00	46	23.82	63	12.81
12	47.27	30	34.34	47	23.17	64	12.30
13	46.51	31	33.68	48	22.50	65	11.79
14	45.75	32	33.03	49	21.81	66	11.27
15	45.00	33	32.36	50	21.11	67	10.75
16	44.27	34	31.68	51	20.39	68	10.23
17	43.57						

MARRIED OR SINGLE? This question has its significance. Single men, everything else being equal, are not so desirable as married ones, as there is a conviction

with many authorities that marriage is essential to longevity, one having ventured the declaration that there is not "one instance of a bachelor having attained to a great age." The same favorable hygienic condition which marks the married male, appears to attach to the married female, making the risks of maternity but little greater than the ordinary risks of single female life.

VACCINATED? The frequent prevalence of Small Pox, with the well-known mortality from this source, makes it important that there should have been a successful vaccination. If the applicant has never been vaccinated, the Examiner should either perform the operation, or influence the applicant to have it done: but should not accept him during the progress of the vaccination.

PRESENT STATE OF HEALTH? Postponements may be and ought to be made in some instances; for instance when the applicant has a severe cold or catarrh, with some roughness of respiration, or laryngeal or bronchial irritation; as these symptoms might merge into fixed disease, a few days delay would be judicious as giving time for developments. It is safe to await the subsidence of all present symptoms. Again the existence of a boil of any magnitude, carbuncle or abscess of any kind, would be sufficient to delay the acceptance, since these local affections might, by the supervention of erysipelas, become constitutional as to results.

HAVE YOU HAD ANY SERIOUS ILLNESS, LOCAL DISEASE, OR PERSONAL INJURY? AND IF SO, OF WHAT NATURE, AND HOW LONG SINCE? This question should be pressed, as it might bring to light the former existence of some di-

sease which has left its mark upon the system : it would embrace the occurrence of accidents, fractured bones and surgical injuries generally.

ARE YOUR HABITS OF LIFE CORRECT AND TEMPERATE? AND HAVE THEY ALWAYS BEEN SO? This is one of the most important questions in the entire list, and in view of the prevalent indulgence in alcoholic stimulants at the present day, and the well-known pernicious results of this indulgence, too much emphasis cannot be laid upon the need, on the part of the Examiner, of the greatest care and circumspection both in his examination and his decision.

Habitual drinkers,—men who are so unfortunate as to be afflicted with *Dipsomania*, and those who are occasionally addicted to a debauch, are undesirable risks: indeed they are *hazardous* risks in the extreme; as much so in the judgement of some, as cardiac disease or incipient phthisis. Aside from the injury inflicted upon the stomach, brain and nervous system generally of him who indulges in what is usually designated as a “ spree ”, no little risk is run from his inability to protect himself, during his debauch, against accidents or injuries so consequent upon his rashness and fool-hardiness in heedless exposure.

The Medical Examiner should never lose sight of the fact that the habit of using stimulants, surely, though it may be but slowly, grows upon the subject, is difficult to break up, requiring for its discontinuance a greater effort of the will than many persons are capable of: that sooner or later its results are abundantly manifest in an impaired system: that it may be a disease

which shall terminate only with life, and that it may be hereditary, transmitting itself from father to son. Upon an examination of a drinking man through whose family history this trait runs, common prudence would lead the Examiner to reject.

Some writers recommend that Insurance Companies should grade their risks on the habits of the man, in the classification marking the perfectly abstemious man a first class, the extent of the indulgence graduating the degree of the risks in cases not abstemious.

Another recent writer remarks "that if it be an established fact that the use of intoxicating beverages shortens human life, why should Life Insurance Companies fail to take emphatic notice of such an important element of calculation as regards the chances of life? Do they doubt that they could afford to insure the lives of one thousand total abstinent men at a much lower rate than should be charged for the lives of one thousand wine, brandy and whiskey drinkers? If they can, why not give the former the benefit of their good habits by insuring them at a less premium than the others? There is no justice in compelling temperance men to pay for the health destroying indulgences of those who despise and oppose the reform. Every man who tastes liquors as a beverage, should be marked extra hazardous, and charged a corresponding premium. Thus only can equal and exact justice be rendered to all." In connection with this, it may be mentioned that one Company has reduced total abstinence rates.

It thus becomes a matter of moment to ascertain if this habit of drinking exists, or has existed, and to

what extent. But it is not always easy to elicit the truth from the applicant himself, as the confession would possibly be regarded by him as somewhat humiliating, as a charge against his moral force. Unaided by any voluntary evidence on the part of the applicant to whom such a suspicion attaches, the marks of immoderate stimulation are to be carefully sought and noted, the state of the nervous system inquired into, and reference made to the certificate of the family physician or friend.

The great central thought of the Examiner, in all cases of moderate drinkers even, should be, "will this case probably live long enough to pay into the funds of the Company money enough to reimburse it for its loss by his death?" It would be a very difficult thing for an Examiner to say that an intemperate man insured, would survive the ordinary period of expectation.

PARENTS LIVING OR DECEASED? AND NUMBER OF BROTHERS AND SISTERS? Many applications are received at the Home Office, in which the person asking for insurance, states that a father, mother, brother or sister has died from consumption: sometimes that a father and one or two brothers have died from this disease. This acknowledgement should at once place the Examiner on his guard, and stimulate him to make a thorough inquiry into the case, not only as to the present state of the pulmonary organs and his present habits and condition in life, with the impression he makes upon the Examiner, but as to whether there were any agencies that possibly operated injuriously upon the consumptive members of the family that he is free from: both his own personality and family record should be closely

scrutinized. Great caution is enjoined in these cases, and it is advised that when such risks are accepted, a full statement under the head of "Remarks" may be made to the Company, as to the reasons prompting the approval.

Sometimes Phthisis removes several brothers and sisters, and leaves one perfectly sound, and with no tendency whatever to lung disease; nature has favored him, and the destroyer has passed him by. If one who has had such an unfavorable family record, should have attained to the age, say, of forty or forty-five without ever having shown any disposition to glide into the hereditary groove, the chances are that he will escape altogether the phthisical inflictions.

The family record assists to grade the risk. If father and mother are still living at a ripe old age, and are in fair health, and if the brothers and sisters or the majority of them are living and healthy, it shows that the stock is good, and greater confidence is felt in accepting. But on the other hand, if father and mother died at an early age, and death has borne off several of the offspring, doubt as to the physical soundness of the ancestral line suggests itself.

Further, the question as to the *Cause of death* has no little significance, but is often not satisfactorily answered. Many applications are received at the Home Office where this question relating to the cause of death of father or mother is answered thus—"Unknown." Now such an answer as this, is not, generally speaking, at all acceptable to the Company. There are doubtless some instances where the person being insured, is un-

acquainted with the cause of death of parents, but such instances, it is believed are not as frequent as the applications would denote. The Examiner should not at once be satisfied with such an answer, as it is possible that it might disguise the fact that one or both parents have died of consumption, apoplexy, scrofula or cancer, but should press the question home and tax the memory of the applicant.

NAME OF YOUR USUAL MEDICAL ATTENDANT?—  
The name is given for reference if any is required, as the family physician is assumed to be well acquainted with his patient's idiosyncracies and health. Frequently the applicant's answer to this question is "never had occasion for a Doctor." This declaration may be true with the additional one that he has never been sick a day: yet he may not be a safe risk: every organ may be apparently in good working order, and most of the functions duly administered, still there may be wanting the elements of strength and permanence in the machinery. This may be the case with men of little muscular fibre, who do not look very strong, but yet can endure no little labor without great fatigue; their weight is small, their stature moderate, and their limbs all but attenuated: still no fixed disease can be discerned.

In these cases let the reflection ever be present to the mind, could this man successfully resist an acute attack? Would he not promptly succumb to a Typhoid or Pneumonia? Could sufficient forces be collected from such an organization to oppose successfully such attacks from these or other diseases? So long as he was

unexposed to any agency of disorganization other than those inherent in the system, he might escape well, but let him contract a severe cold from exposure, and the results might be serious: he has not enough reserve forces of vitality in such a constitution to bear the waste which inflammatory processes would produce.

HAVE YOU EVER HAD ANY OF THE FOLLOWING DISEASES? IF SO, STATE PARTICULARS OF THEIR CHARACTER AND DURATION:

Aneurism,	Inflammation of the Lungs,
Apoplexy,	Hæmorrhoids,
Asthma,	Habitual Cough,
Bronchitis,	Liver Complaint,
Colic,	Neuralgia,
Consumption,	Palpitation,
Disease of the Heart, or any vital part,	Paralysis,
	Rheumatism,
Disease of Urinary organs,	Rupture,
Disease of Digestive organs,	Scrofula,
Dropsy,	Small Pox,
Epilepsy,	Spitting of Blood,
Fistula,	Syphilis,
Fits,	Vertigo,
Gout,	Yellow Fever.

**ANEURISM.** It is comparatively rare that this disease is noted, but for very obvious reasons, it should reject.

**APOPLEXY.** A decided attack should disqualify: a person who has once had a seizure however slight, or is predisposed that way, is an unsafe risk.

**ASTHMA.** When but rare in its recurrence and un-

complicated with organic changes of the heart, lungs or other important viscus, it need not be occasion for rejection. Its cause should be carefully sought for and its nature well considered.

**BRONCHITIS.** When of frequent recurrence, and productive of much constitutional disturbance, leaving behind it a protracted cough, hectic or emaciation, this might properly be regarded as a disqualifying disease.

**COLIC.** An occasional attack of colic is of little consequence: the list embraces the disease or rather the symptom, to suggest the possible existence of such an affection among painters, type setters and operatives in lead works. When of frequent occurrence with one of this class, the case should demand deliberation.

**CONSUMPTION.** All companies have a "holy horror" of consumptive cases, and do not want them on any terms. It is here that the Examiner is called upon more to study premonitions than the disease already well established and apparent in the system, and in all instances where there is the slightest suspicion of a phthisical taint or direction in the system, it is incumbent upon him to examine closely for any signs or symptoms, that might gradually but surely develop into fatal disease.

**DISEASE OF THE HEART.** This is another class of diseases which always reject when organic: expert in diagnosis, the Examiner can distinguish between functional disorders and those of an organic character, and determine the probable significance of the former symptoms.

**DISEASE OF URINARY ORGANS.** It is not sufficient to

say that the person has disease of the urinary organs, but the exact nature of the disease must be stated, and whether it involves the kidneys, bladder, prostate or urethra. Bright's disease, calculus and diabetes reject, as also chronic inflammation of kidneys. One or more uncomplicated attacks of Gonorrhœa would not impair the risk, but stricture would have to be attentively considered in its bearings upon the risk. It might be serious as being impermeable and permanent, or but slight and sympathetic.

**DISEASE OF DIGESTIVE ORGANS.** This inquiry is intended to point to the existence of Dysentery, Diarrhœa, and Dyspepsia, not that the former existence of any of them should exclude, but that the character and duration should be investigated. If the former disease is present, the risk should not be accepted: Diarrhœa if present would have a more serious aspect if the subject contracted it in the army, and had not been exempt from it except for a few days or weeks at a time.

**DROPSY.** A symptom of morbid action, it demands attention, not so much because of the condition itself, as indicative of pathological changes in some organ, as heart, liver, lungs or kidneys. In these cases tests should be applied with the view to detect the presence of albumen and to determine the sp. gr. The same means should be employed in diseases of urinary organs.

**EPILEPSY.** This disease—and the term includes FITS—should disqualify: oft-recurring seizures impair the mind and expose the subject to accidents.

**FISTULA.** According to Prof. Allen—the author of an excellent treatise on *LifesEaoiaimxntns*, Fistula

in ano should disqualify, if it is among the signs of tuberculosis, if it has proved obstinate under correct treatment, or if it is large, burrowing and exhausting.

**GOUT.** From the well-known habit of acute Gout to recur from time to time, the Examiner would be reluctant to accept, especially if the disease were hereditary. The mode of living that excited it, would also have some weight in the forming his decision.

**INFLAMMATION OF LUNGS.** A person subject to frequent attacks as some are known to be, would not be a favorable case for insurance. A former attack need not disqualify, especially if it occurred between the ages of six and twenty, as we have the authority of Prof. Wood that such attacks appear to be remarkably mild.

**HEMORRHOIDS.** When slight, of little moment, but when very severe and exhaustive, would direct investigation to neighboring organs and parts.

**HABITUAL COUGH.** A cough acknowledged should prompt to an examination not only of the lungs, but of the throat passages in order to determine if there is any thickening of the fauces or other change there. A previous "very bad cold" confessed, might also originate a suspicion as to the soundness of the pulmonary parts. With such a case before him, the Examiner would seek to find if there were loss of voice, laryngeal irritation, great debility, a sense of tightness across the chest, or pain.

**LIVER COMPLAINT.** The character of the complaint should be specified in the answer. A slight hepatic disorder is of little moment, but where there has been an abscess, or where, after trouble with this organ, an

icterode appearance of the skin is left, and the eyes are habitually tinged with yellow, we should reject, and especially if the subject were living in a malarial section. In such localities on this Peninsula, though the ordinary Bilious Remittent Fever is commonly very tractable and little likely to affect the general health permanently, some residents become surcharged with the malarial poison and give constant evidence of impaired physique. The decision in all of these complaints would be influenced by their character.

**NEURALGIA.** This symptom is not embraced in the list to disqualify of itself, but to point the Medical Examiner to possible organic lesions or to some special condition of system.

**PALPITATION.** This, like the preceding, is a symptom, and designed to direct investigation as to the cause.

**PARALYSIS.** General Palsy, Hemiplegia and Paraplegia would disqualify at once. There are many cases of local paralysis from severing of nerve by bullet, among those who were wounded in the late war, that need not necessarily be rejected: but when such paralysis is associated with disease of brain or spinal cord, or with an apoplectic tendency, it would be sufficient ground for rejection.

**RHEUMATISM.** The character of former attacks must always be distinctly stated: whether acute, chronic or metastatic: how many attacks, and if there appears to be a rheumatic diathesis: the fate of the application would depend upon these points: simple muscular rheumatism would be of little significance, as it is an in-

fliction from which few are exempt, while occasionally recurring attacks of the acute would reject, and a chronic rheumatic condition would prompt the Examiner to direct his attention to the heart.

**RUPTURE.** The rules adopted by the best authorities are, always reject when the descent of the intestine is not prevented by a truss of suitable construction, and when there is a double hernia: there are other circumstances under which hernia may reject, for these the Examiners discretion should be his guide. When a person confesses to the existence of rupture, make the necessary examination and report the kind. In accepting a case of the simplest kind, the proviso that a truss shall be habitually worn is always added.

**SCROFULA.** The external kind is meant here; that which displays itself in the lymphatic glands: most of such cases point to a strumous diathesis, and are accordingly unsafe. Old ulcers upon the limbs and abscesses the product of the condition, would reject.

**SMALL POX.** A former attack of this disease would not disqualify unless it had left its mark upon the lungs, or other important parts.

**SPITTING OF BLOOD.** True Hæmoptosis is to be distinguished from hemorrhage from mouth, fauces or posterior nares. The expectoration of a teaspoonful of blood, except from a severe temporary congestion or concussion of lungs from injury, or from Pneumonia, would promptly exclude. Even the plea of temporary congestion would not satisfy; as to produce this symptom, some defect in the pulmonary organization must

exist. In females, a slight hæmoptosis is not so significant, as it may be due to vicarious causes.

**SYPHILIS.** Our custom has been to decline these cases not only when present, but when the former existence of them was admitted, unless a long time has intervened since there were any manifestations of such a *vice* in the system.

**VERTIGO.** From the disposition of these vertiginous spells to merge into epilepsy ultimately, it behooves the Examiner to be cautious in accepting.

**YELLOW FEVER.** If the applicant has ever had this disease, the system should be well scrutinized for evidences of the mischief it may have caused.

If, on the face of the application the applicant admits that he has had some one disease, which is generally regarded as of moment in influencing the future condition of the organization, the Examiner should never fail to make reference to this circumstance in his report, concisely explaining it by the aid which he receives from his own discernment and the applicants representations. The omission to allude to or comment upon any such confessed disease, would argue a want of attention to and appreciation of points of first importance.

#### IV.

### THE PERSONAL EXAMINATION.

The Examiner has carefully read, it is assumed, the application, and noted all the points of Life Insurance import, and is now prepared to proceed with his examination in the regular order laid down in the form.

1. NAME. Never omit to give the name here! as plain as is the design of the blank, many Examiners fail to fill it.

2. WEIGHT, HEIGHT, FIGURE, GENERAL APPEARANCE AND MEASUREMENT OF CHEST.

WEIGHT AND HEIGHT. Due attention is to be paid to the relation of the age to the height, and the ratio of the height to the weight. Certain rules are laid down in the books, governing the relative normal proportions, though the departures from these rules may be wide, and still the physique be good. Dr. Brinton, is authority for the following: "as a rule, it may be laid down that an adult male, in good health, 66 inches in stature, ought to weigh rather more than ten stones or 140 pounds avoirdupois, and for every inch above and below this height, we may respectively add and subtract about five pounds."

The subjoined table is generally used for reference :

HEIGHT.	WEIGHT.	MEDIUM CHEST.
5 feet 1 inch.	Should weigh 120 lbs.	34.06 inch.
5 " 2 "	" " 125 "	35.13 "
5 " 3 "	" " 130 "	35.70 "
5 " 4 "	" " 135 "	36.26 "
5 " 5 "	" " 140 "	36.83 "
5 " 6 "	" " 143 "	37.50 "
5 " 7 "	" " 145 "	38.16 "
5 " 8 "	" " 148 "	38.53 "
5 " 9 "	" " 155 "	39.10 "
5 " 10 "	" " 160 "	39.96 "
5 " 11 "	" " 165 "	40.23 "
6 "	" " 170 "	40.80 "

On this point, Prof. Allen states that five feet and eight inches may be taken as the medium in this country for adult males, and that as a rule, the medium height is endowed with the greatest endurance.

The examination of a very tall person would very naturally remind the Examiner to inquire as to the existence of varicose veins or ulcers upon the lower extremities, while the examination of one much below the ordinary standard as to height and size, would lead him to study what has caused this arrest of development, and whether the family generally were small. The presentation of an obese man would reasonably suggest the query : is his increase so constant as to be likely to lead to diseased action? When there is such an approach to obesity, the measurement of the abdomen should be taken, and the results recorded on the margin under the head of "Remarks."

When the standard weight is exceeded greatly, the Examiner should give the character of the figure, stating whether there is obesity or development of muscle : whether the figure is well rounded and such as to give a sense of symmetry, or whether the adipose tissue pre-

dominates over the muscular and interferes with the freedom of the man's movements. Is there elasticity, activity, or is he a *bon vivant*, and likely to increase his weight by indulgence at the table?

FIGURE. There are certain persons who impress the Examiner at once as having all the elements of vitality and longevity in an eminent degree; they have muscularity, erectness, symmetry, large, rounded, well developed chest, and have an apparent consciousness of health and strength—all of which conspire to give confidence to the Examiner in acceptance, whilst there are others who are tall and narrow shouldered and whose figure is drooping and bent, giving an impression of defect from spinal irritation, habit or muscular weakness.

GENERAL APPEARANCE. Medical physiogomy as Dunglison terms it, is a material aid often-times in serving the Examiner to form his judgment. Its province is to glean information from countenance, complexion and eyes. The face may be a valuable index as denoting vascular derangements, plethoric habits, indulgence at table, a free use of stimulants or a tendency to apoplexy; or it may arouse suspicion of existence of cancerous diathesis or tuberculous disease, or may point to disease of heart or liver.

MEASUREMENT OF CHEST. The measurement is taken with a graduated tape line under the inferior angles of the scapulæ and over the nipples: the measurement should be taken under the vest, and noted on expiration, and then the person examined should be instructed to make a decided inspiratory effort, during which the tape is kept in its place to mark the difference.

The extent of a healthy expansion of chest is said to be three inches, but our observation would lead us to believe that it is below this, though some persons far exceed this: one instance we have noted on an application for insurance (and the chest was measured carefully, and in the presence of witnesses) where the man, a worker in wood and 46 years of age, expanded six inches.

Though the spirometer is not regarded by any means as a safe guide in detecting any abnormal condition of lungs, it may be looked upon as an auxiliary to other methods, though in noting the capacity of the lungs by this instrument, weight and age, it must be remembered, influence the quantity of air that is inspired and expired. We are accustomed to use in our office, one of Brown's spirometers, and though it does not serve us materially in our examinations, it acts as a supplementary means in enabling us sometimes to solidify our decision.

The following table of the quantity of air given out by forced expiration after the deepest inspiration, is given by Dr. Hutchison—the result of many examinations by his spirometer.

RESPIROMETER TABLE—"HUTCHINSON'S."			
HEIGHT.		From obser- vation.	Regular pro- gression.
		Cubic inches.	Cubic inches.
5 ft.	— 5 ft. 1 in.	174	174
5 "	1 in. — 5 " 2 "	177	182
5 "	2 " — 5 " 3 "	189	190
5 "	3 " — 5 " 4 "	193	198
5 "	4 " — 5 " 5 "	201	206
5 "	5 " — 5 " 6 "	214	214
5 "	6 " — 5 " 7 "	229	222
5 "	7 " — 5 " 8 "	228	230
5 "	8 " — 5 " 7 "	237	238
5 "	9 " — 5 " 11 "	246	246
5 "	10 " — 5 " 11 "	248	254
5 "	11 " — 6 "	259	262

In the general effort to determine the condition of the lungs, inspection and palpation should always be resorted to, in order to detect any irregularities in its conformation, any hollowing under the clavicle, any great difference in the two sides, any approach to "pigeon breast" as indicative of abnormal state of lungs with deficient capacity, or any other gibbositities. An inspection might bring to light marks of former pustulation, the signs of a blister, the scarifications in cupping: here would be a point gained at once, for such evidences would denote the former existence of some disease of lung or pleura.

3. RESPIRATION. This embraces the clearness and distinctness of the respiratory murmur over both lungs, the fullness, ease and regularity of the respiration, and the indications of disease of the respiratory organs. The respiratory acts should be studied in their relations to the circulation—the ratio of the inspirations to the beat of the pulse, which has been fixed by some authorities as 1 to  $4\frac{1}{2}$  in healthy subjects.

The following figures of frequency of inspiration in those of an insurable age, are taken from Quetelet's Table.

AGE.	Average.	INSPIRATION.	
		Max.	Min.
15 to 20	20	24	16
20 to 24	18.7	24	14
25 to 30	16	21	15
30 to 50	18.1	23	11

As the examiner is expected to detect any indications of disease in the lungs, it is incumbent on him to study carefully the sounds given out by auscultation and percussion, and to record the nature of those sounds when he has observed any unnatural ones.

For convenience of reference we have taken from Dr. Glominger's Manual, the following table :

SOUNDS.	RELATIVE TO <i>Inspiration and expiration.</i>	DISEASE. <i>Associated with.</i>
Mucous rattle.	Co-existing with both.	Bronchitis, after secretion has been established.
Sub. Mucous.	Predominating in inspiration.	Capillary Bronchitis.
Cavernous.	Co-existing with both acts.	Vomicæ in Phthisis, Dilatation of Bronchitis
Humid Crackling.	More distinct in inspiration.	Softening in tubercles.
Dry Crackling.	Exclusively in inspiration.	Softening.
Crepitation or Ronchus.	Co-existing in inspiration.	Pneumonia.
Secondary Crepitation.	Co-existing in both.	Pneumonia.
Sonorous rattles.	Inspiration and expiration.	Bronchitis.
Friction sounds.	In both acts.	Pleurisy.

As to the indications of disease of the respiratory organs, all the usual means for discovering a departure from a healthy condition, or a tendency to a deviation from the normal standard are to be availed of. The entire field is to be traversed in quest of any proof in a suspected case. The Examiner is not dealing with an established affection, patent to the most obtuse observer, for such cases rarely come before him, but he is seeking to discover the signs that may be lurking; and he should examine carefully the throat for any thickening of the fauces: should inquire if the common colds are frequent and protracted: as to the character of the sputa and the quantity: as to laryngeal ulceration: as to any former sense of tightness or constriction across the chest: any asthmatic symptoms, and how frequently they appear.

As deaths from diseases of the respiratory system bear such a great ratio to the deaths from all other diseases, in the mortuary records of Insurance companies, the Medical Examiner cannot be too careful and circumspect in his investigations in this field of inquiry: all of his acumen and skill is required in the effort to uncover the smallest hidden seeds of disease: even the voice is to be brought in evidence as to condition of lungs, for when sharp, clear and capable of prolongation, normal respiration is denoted: when husky, weak, hoarse, harsh, it may mark disease of throat or lungs.

4. HEART AND BLOOD VESSELS. The inquiries to be made in this direction are to elicit the facts as to the uniformity of the heart's action; whether it is free and steady, whether its sounds and rhythm are regular and normal, and whether there are any indications of disease of this organ or of the circulatory system—discoveries which are of the utmost importance, since, like the preceding diseases, these disorders may be present in the system without plainly manifesting themselves by external marks; unlike many diseases, they do not hang out their signs for every one to read, and their physiognomy is not so unmistakable, being enveloped, as it were, in an aspect of most vigorous health, which apparent health is likely to terminate abruptly in death.

The aids to a diagnosis—auscultation, inspection and palpation are to be employed. The sounds are to be remarked and their significance studied; sometimes very useful knowledge may be obtained by an inspection of the chest, with measurement from the spinous process of the vertebræ to the ensiform cartilage of each side.

In enlargement the pulsations will be plainly seen, appearing to move painfully the thoracic wall of the left side, and a tape line will show a sensible increase of the same side, while the hand applied to the cardiac region will have communicated to it a peculiar thrill.

When there is a question as to the character of any disorder; whether it is organic or functional, the Examiner should make one or more examinations with a sufficient interval of time to give opportunity for comparisons.

In this connection, he should inquire as to the existence of aneurism, varicose veins, varicocele, palpitations, the effect upon the heart of active exercise, of ascent of stairs, of heights, of long walks, of fright and of excitement, and also make careful inquiries as to the former existence of acute Rheumatism.

5. THE PULSE. As indicative of the heart's action and to some extent of the condition of the nervous system, this question has its significance. The pulse should be noted when the person is sitting: it is not well to note it at the first stage of the examination, as the subject is apt to be excited somewhat then, as it is well known it is much influenced by excitant causes: the association of an examination in the minds of some is sufficient to quicken the circulation: hence it is well to place the finger upon the radial artery more than once during the progress of the examination, timing the beats.

It should be remembered also that the pulse may be affected by indigestion, by violent exercise, stimulating drinks, tea or coffee, and the emotions; hence the

care to discriminate between arterial excitement from any one of these causes, and that having its origin in organic disease.

Remembering that the natural pulse in the adult male has a range from 65 to 80 or 85 during the insurable age, the Examiner should endeavor to discover the cause when its departure from that standard, either below or above, is very wide.

6. The points in this question have been adverted to elsewhere.

7. DISEASE OF THE BRAIN, MUSCULAR, OR NERVOUS SYSTEMS. Inquire as to the former existence of any symptoms of insanity, spasms, convulsions, paralysis, epilepsy, apoplexy, muscular rigidity, and spinal inflammation or irritation.

8. DISEASE OF THE ABDOMINAL, OR URINARY ORGANS. When there has been any disease of significance in a life insurance point of view, affecting these organs, specify what it was: there is a wide range of diversity in the character of these complaints, and it is not sufficient to generalize and say that the applicant has had urinary disorder, or a slight affection of the bowels; but a careful mental survey of the whole field should be made, and the specific complaint recorded: former dysenteries, army diarrhoea of long standing, dyspepsia, disease of the Liver, hemorrhoids, hæmatemesis, disease involving kidneys, bladder, the presence of albumen in the urine, diabetes—all of these possibilities are to be considered. The question as to the regularity of the alvine discharges should be asked, and if there is any difficulty in the passage of water.

In revealing the abdominal functions, good teeth have their part in making up an estimate of the health, as they point to a regard of hygienic rules. Good appetite, good digestion and good temperament are classed as essential requisites for long life.

9. HAVE THE PERSON'S ANCESTORS, PARENTS, BROTHERS, OR SISTERS BEEN AFFLICTED WITH PULMONARY OR OTHER HEREDITARY DISEASES? The propounding of this question on the face of the application, and then on the Medical examination, shows its great importance, and the primary necessity of hunting up these "heir looms of infirmity" transmitted by kindred.

10. A. TO WHAT EXTENT DOES THE PERSON USE ALCOHOLIC STIMULANTS? Much, in the view of a prudent Insurance Company, depends upon the answer to this question. The greater the experience in this class of cases, the more is the apprehension in dealing with them, as intemperance is recognized as a disease, and reform considered almost as difficult as the cure of the most inveterate diseases, and it is not surprising that Insurance Companies regard these cases with peculiar disfavor. The sanguine temperament of the philanthropist and reformer sees little to give encouragement, in view of the relatively few reformations of persons who have for some considerable time been addicted, to any marked extent, to the use of stimulants.

A former attack of Delirium Tremens makes the risk a very unsafe one, and the case should not be accepted unless a sufficient number of years have elapsed to give positive proof that there is no longer any danger that the man will lapse into his old habits.

When the Examiner has reason to suspect that the "applicant has led or leads other than a sober and temperate life," he should direct his search towards the brain, nervous system and stomach, studying the man with all the penetration possible.

B. TO WHAT EXTENT DOES THE PERSON USE TOBACCO? That the use of tobacco is of some moment in a Life Insurance point of view, is shown by the position of this question: but we do not rank it with alcohol in its general effect upon the system. That it can be and is harmful in some instances, we believe; and especially when used by a person with weak lungs or suffering from debility, when the habit is accompanied with inordinate salivary secretion: and it can effect the nervous system. But it is not well to take the position that it is in all cases prejudicial to the health when used in moderation, depriving the man of his strength as alleged by some, diminishing his power of endurance, reducing the tone of his system, inducing habitual narcotism and acting in hostility to the vital principle.

C. TO WHAT EXTENT DOES THE PERSON USE OPIUM? If this pernicious habit is indulged in to the extent claimed by many, it is needful for the Examiner to be wary, more especially since the person examined will not assist him in getting at the facts. The signs are to be sought in the face, complexion, eyes, in restlessness and tremulousness. Of all the applications received at the Home Office, no other answer than a negative one has been returned to the question as to the use of this drug. Its habitual use for any cause or under any plea, would unhesitatingly exclude, since this habit

is more hopelessly fixed, more remorseless in the punishment of its victims than ardent spirits, and just as sure in its fatal results.

11. HAS THE PERSON NOW, OR HAS HE EVER HAD, ANY SERIOUS DISEASE, PERSONAL INJURY, THE LOSS OF ANY LIMB, OR RUPTURE? Since the termination of the late war, this question is often answered affirmatively, and the Medical Examiner is as often required to specify the injury.

In mechanical or surgical injuries, note what drain was made upon the forces of the system at the time of the reception of the injury, and what charge there is at present, from this source, upon the vital powers. If there has been an amputation or other operation, state what necessitated it, and the condition and appearance of the stump or cicatrix. In a case of gun-shot wound, record what organ or member was involved.

If, on inspection, any deformity is found, or any abnormal development, state the character and extent, adding a description of any ulcers, sinus or glandular enlargements.

As before remarked, since the war, there are many persons with wounds presenting themselves, and though it is impossible to classify such wounds, giving the disqualifying ones, they being of all grades and character, and involving nearly all parts of the physical structure, yet it is fitting that some general suggestions upon this point be given.

In making an analysis of the results of the injury, determine if the nerve-force of the limb or part has been destroyed or impaired materially: if mobility of joint

has been diminished: if cicatrices are extensive and involve the muscular fibre, and have contracted the integument seriously: if the former wounds ever break out and suppurate, and how long since they have discharged: if the wound was accompanied with fracture: is there deformity or atrophy of the limb?

Continuing the examination, ascertain if there is severe neuralgia at times in the limb: if the member is likely to prove a source of irritation to the system, acting as a foreign body, and reducing the vital powers by profuse discharges or constant pains: is the circulation impaired in the part? is there any likelihood that necrosis of bone, continuous nerve irritation, weakening discharges from the old wounds, increasing atrophy or entire disuse of limb with positive embarrassment from retention, would necessitate, at any future time, amputation or resection?

As to *amputations*, those above the knee and at the shoulder joint are disqualifying ones. In this physical loss, there is more liability to local disease: there has been an interruption of circulation, and the forces of the neighboring parts have been impaired, and nature has been taxed to repair the injury; there has been too great a dismemberment, too material a loss of structure to admit of the harmony of action previously maintained; even in amputations of the leg below the knee and of the arm, it is reasonable to suppose that the system has received a shock in the sudden necessity which was forced upon it, of making fresh circulatory arrangements, and adapting itself to the new and unnatural order of things: there is no longer integrity of parts,

and there is ever wanting that symmetry which Bichat styles the essential character of the organs of the animal life of man.

In the case of a cripple or one who from surgical injury has impaired mobility of lower limbs, his inability to protect himself is to be considered as a disqualifying cause: if his power of locomotion has been sensibly impaired he has not the same facility for escaping from a burning building or from passing vehicles in the streets; he may be otherwise in perfect health, and all his functions be regularly carried on, but the chance is, such will not be the case: he still remains imperfect, and the disability that debars him from active exercise would be apt to leave the digestive functions to be improperly carried on.

12. FEMALES. Delicacy forbids that the examination of a female should ever be conducted in the presence of the agent. And though a female of delicacy may shrink from the examination, the object of which is to pry into her physical condition, the interests of the Company require that such an examination shall be thorough and such as to bring to light all the main facts necessary to the proper comprehension of the case.

Those who have passed the climacteric period, other things being equal, are the most acceptable, though younger ones are accepted, if first class of the kind. Inquiry should be made as to the condition of the uterine function, the necessity of instrumental aid in former labors, the occurrence of puerperal fever and miscarriages. The number of children she has borne may influence the risk, if they have been numerous and

with little interval between births: miscarriages would also affect the health. Organic disease of the uterus and scirrhus of the breast would decline, whilst the latter affection existing or having existed in mother or sister would be sufficient to occasion more than a doubt as to the propriety of acceptance.

For very obvious reasons, risks of young girls whose catamenial functions are not established, are not desired: the stage of transition from girlhood to womanhood is too often characterized by danger to make the risks good ones. The change is too radical to be affected without some constitutional disturbance; hence it is always best to defer the risk until nature has asserted herself in the perfect establishment of that function.

In case of pregnancy never accept, but postpone until after *accouchement*, and until time has shown if any bad result ensues.

It is assumed by some Insurance Companies that female risks in this country have not proved profitable ones, but the qualification is added that this fact is due to the impracticability of making thorough and far searching examinations generally, and as to the relative longevity of the male and female, there has prevailed the impression with many Life Insurance Companies that there is a greater risk with the female than the male, and there has been an indisposition on the part of these companies to take female risks except under the most favorable circumstances: but this impression is becoming less general, and more favor is shown woman. In Holland it has been shown from statistics that the fe-

males who were insured, lived longer than the males, and as confirmatory of this advantage of the female risk, it has been declared that the perils of maternity and the risks of the child bearing period, are offsetted in the male by the risks he encounters in his avocations in dangerous places, as mines, on ships, steamers, and in factories, and during his service as soldier or sailor : again she has the advantage over the male in that but comparatively few die from intemperance.

A French writer has demonstrated that "the expectation of female life was greater at all ages than the expectation of male life:" and others have declared that the premiums should be less than for males of the same ages. With such testimony as this, the "Delaware Mutual" does not hesitate to take good female risks.

13. A. IS THE APPLICANT IN ALL RESPECTS A FIRST-CLASS, HEALTHY RISK? AND B. DO YOU RECOMMEND THAT A POLICY BE GRANTED FOR THE FULL AMOUNT APPLIED FOR?

The Medical Examiner, by patient investigation, and the exercise of his highest diagnostic skill, having, to his own satisfaction, determined the physical *status* of the person, is now prepared to sum up the results of his inquiries, and record them in his answers to these questions. It is assumed that by his penetration he has had conveyed to his mind, the significance of any previous disease or symptom of disease which by its recurrence or continuance, would, according to known pathological principles, be likely, permanently, to affect the system; that he has pushed his investigations by all the means at his command and has studied all the accessor-

ies that might have a bearing upon the life prospects of the party, and is now ready not only to form an intelligent opinion, but to assist the Chief Medical Examiner in forming one also.

The great central reflection should be, will this person survive the period of expectation? all success hinges upon the correctness of the Examiners judgment, acumen and professional discretion in this direction. To show what the term of this expectation is, the following rule has been given by competent authorities: "at ages ranging from 20 or 25 up to 45, use the fixed number 96: deduct the present age of the person whose expectancy you desire to know from this number, and the half of the remainder will give the expectancy within a few months." "For ages above 45, take 90 for the fixed number and proceed as before." In another table the fixed number is 86, and for females, a year is added to the fixed number. This rule may be very useful in some instances.

In the examination or summing up, when any point has been discovered or suggested to the mind which influences the fate of the risk, or which would be likely to originate a doubt in the mind of a prudent Examiner, as to the advisability of its acceptance, this point should be distinctly stated, with the concomitant circumstances which would tend to throw any light upon it or have any bearing upon it in any wise, thus rendering the justness of his decision as obvious to the Chief Medical Examiner as to himself.

He should be precise in statements, giving facts, withholding no material circumstance having reference

to the case, and so attentive to all the points designed to be brought out, that the sum of his observations on the case before him and recorded, shall serve the officials at the Home office as a portraiture of the man whose application they are to pronounce upon; they need as faithful a picture as skilful medical observation can depict in the compass of the responses to the inquiries as to physical condition and appearance.

It would be well for the Medical Examiner to classify the risks, designating them in the concluding answer as a "splendid risk," "very good" and "fair." The answers should be precise and without any ambiguity. No evasive answer is admissible to the questions, "is the applicant in all respects a first-class healthy risk?" and "do you recommend that a policy be granted for the full amount applied for?" Such terms as "I believe so," "in my opinion," should not be used: "yes" or "no" is required and should be unqualifiedly given.

It will not do to say, that if certain contingencies do not happen, certain exciting causes do not intervene, the person may live to an advanced age: the consideration of the chances is referred to the Examiner for an expression of his judgment, and it is expected that he should pronounce definitely upon these chances, and accept the responsibility. He is the medium through which the Company receives its knowledge of the man and his chances of life-extension, and if he fails to impart, in a positive manner, the requisite knowledge, he has failed in the discharge of duties for which he was especially commissioned.

The Examiner may at times be much perplexed as

to his concluding response, or be totally unable to form an opinion which would be entirely satisfactory to himself: he may apprehend an error of judgment on his part, and feel that he cannot conscientiously record a decision: under these circumstances it might be well to refer the whole matter to the Company, giving both the favorable and unfavorable points of the case, with the impressions he derives from its review: but such reference it is believed, is not often necessary. If he cannot conscientiously approve the case as a first-class risk, as such a risk is generally understood by Insurance Companies, he should unhesitatingly say "no:" but at the same time he can express his opinion as to the *grade* of the risk, characterizing it as a hazardous or extra hazardous one.

Lacking the endowment of that preescience which only could guide one as to the course and termination of any certain diseased action which he is considering in its possible relations to the risk now and in the time to come, he is forced to a reliance upon his own judgment, and upon his knowledge of pathological laws influencing the usual progress and results of such morbid conditions under like circumstances.

Sometimes the Examiner in his survey of the case, having detected some one defective point in personality or family history, which might reasonably, in the opinion of some, weaken the entireness of the case as a risk, may offset this depreciating circumstance with other facts which are likely to favor the case, such as good habits, regular mode of living, active life, favorable occupation, and easy, comfortable circumstances, and

determine that the risk may be safely accepted, and accordingly recommend it. Having thus, in his analysis, given both the favoring and adverse features, with his ultimate opinion, the Company becomes accountable for the results of a difference of judgments, having reserved to itself the prerogative of dissenting from or endorsing the opinion of the Examiner.

In the mental survey of the varied elements that go to constitute a risk, and then of the risk itself as a totality, there may be cases in which the circumstance of business embarrassments and financial difficulties, would be equivalent to an impairing principle, and as such would have to be considered as possibly affecting the whole: for it is well known that the continued harassments and cares of a business entailing frequent losses, with pecuniary troubles of an embarrassing nature, act as depressing causes: the nervous system may be in a state of extreme tension all the time, the sleep fitful and unrefreshing, the appetite impaired, the energies of the body weakened and the man become a prey to the first disease that assails him. Within our own life insurance experience, we have had occasion to observe the wisdom of recognizing these considerations of moment in the estimation of some risks.

If any support of the proposition that the mind influences the duration of human life were required, it could be found in the observation of the lives of annuitants, whose comparative exemption from business cares and anxieties is assured by the certain provision made for their support, and whose tenacity of life has become proverbial: and authorities in this connection declare that

these mental influences on longevity, are more potent and marked than the occupation of the body, which is universally accepted as a modifying circumstance.

When there is any great doubt as to the desirability of a risk, the Insurance Company is to have the benefit of the doubt; for it is more important that the interests of the many be protected, than that a few disqualified persons be uninsured.

Sometimes between Examiner and agent, it is deemed a matter of policy to accept a risk which is manifestly more than ordinarily unsafe: there may be circumstances which at first sight, would appear to render it judicious to accept such a risk; the Company may desire to introduce itself in a certain locality: it may be solicitous to gain the influence of some certain person and to add strength to its organization by receiving him though his risk is questionable; or it may want to secure his services as an agent, who will work the harder for his acceptance. The Medical Examiner, under such a pressure, might possibly be disposed to strain a point and show a liberality of proceeding by accepting him, thinking that it would eventually be for the interests of the Company, by securing a greater amount of influence in its favor in that locality. Just such reasoning has been employed in instances within our own sphere of observation. If there is any policy at all in such unwarranted generosity, it is essentially a bad policy, for aside from the ultimate pecuniary loss entailed by such inevitably hazardous risks, such a procedure, instead of

acting as a favorable introduction of the Company into that locality, would serve at once to beget distrust in the minds of the community, as to the conduct of the Company's affairs. Sensible men would at once determine, and justly too, that the Company which accepted such risks, could not long be perpetuated; confidence would at once be destroyed, and the ends had in view would be promptly defeated.

Another point to be observed is, that all examinations, as far as is practicable, should be confidential as between the Examiner and Company. The Agent should not be present, and the person asking for insurance ought never to be allowed to know the record of the Examiner, or to see the application after it has reached the Examiner's hands. The result as conveyed to him from the Home Office should content him. Many persons have a curiosity to see the summing up of their case, and the opinion of the Medical man as to their condition; this curiosity should be repressed as far as is proper.

There may be instances where explanation to the party as to the cause of rejection is needed, and it can generally be given in a manner that will be satisfactory to a reasonable man. It is allowable to save him all the humiliation possible. Most men are proud of vigorous health, and are commensurately humbled by any physical imperfection; but motives of delicacy for the feelings of the rejected should never be suffered to warp the judgment of the Medical Examiner, or the fear of offending the party deter him from the conscientious discharge of his duty:

This liability to offend the examined, is accepted by the Examiner when he becomes an officer of the Company, and he should not seek to avoid such risk. The relation of patient or friend should not be a bar to the faithful discharge of his office, or outweigh the interests of the Company which have been committed and accepted as a sacred trust.

In the language of Dr. Gloninger in his Medical Examiner's Manual, "The physician should know neither friend nor foe: his duty is bound up as an honorable man in the Company he represents: he obtains his remuneration, and for the time being he surrenders the special amenities of his profession and becomes as stoical as a judge."

The last point to be urged is that the Examiner separate himself, as it were, from the Agent. He has at times to combat the solicitude of agents to have cases accepted: this desire on the part of agents is natural and reasonable, as their fees are usually consequent upon the acceptance of the risks. An agent will sometimes endeavor to sway the judgment of the Medical man in the consideration of the matter, and cause him to pervert his office for his own benefit. (These instances are occasionally brought to the notice of the Company.)

The Examiner should never, in the least degree, be influenced by regard for the interests of agents or solicitors, but should ever have in view the interests of the Institution, ignoring all other claims. Let him never hesitate to reject when his judgment informs him that it is for the well-being of the Company that the ap-

plicant shall not be received. He should carefully form his opinion on the merits of the case, and maintain it conscientiously.

Very Respectfully,

D. W. MAULL,

Chief Medical Examiner.

WILMINGTON, DEL., July, 1869.

