

The medical examination for life assurance : with remarks on the selection of an office / by F. de Havilland Hall.

Contributors

Hall, F. de Havilland 1847-1929.

Publication/Creation

Bristol : John Wright, 1901.

Persistent URL

<https://wellcomecollection.org/works/aqm9za3r>

License and attribution

The copyright of this item has not been evaluated. Please refer to the original publisher/creator of this item for more information. You are free to use this item in any way that is permitted by the copyright and related rights legislation that applies to your use.

See rightsstatements.org for more information.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

THE
MEDICAL EXAMINATION
FOR
LIFE ASSURANCE

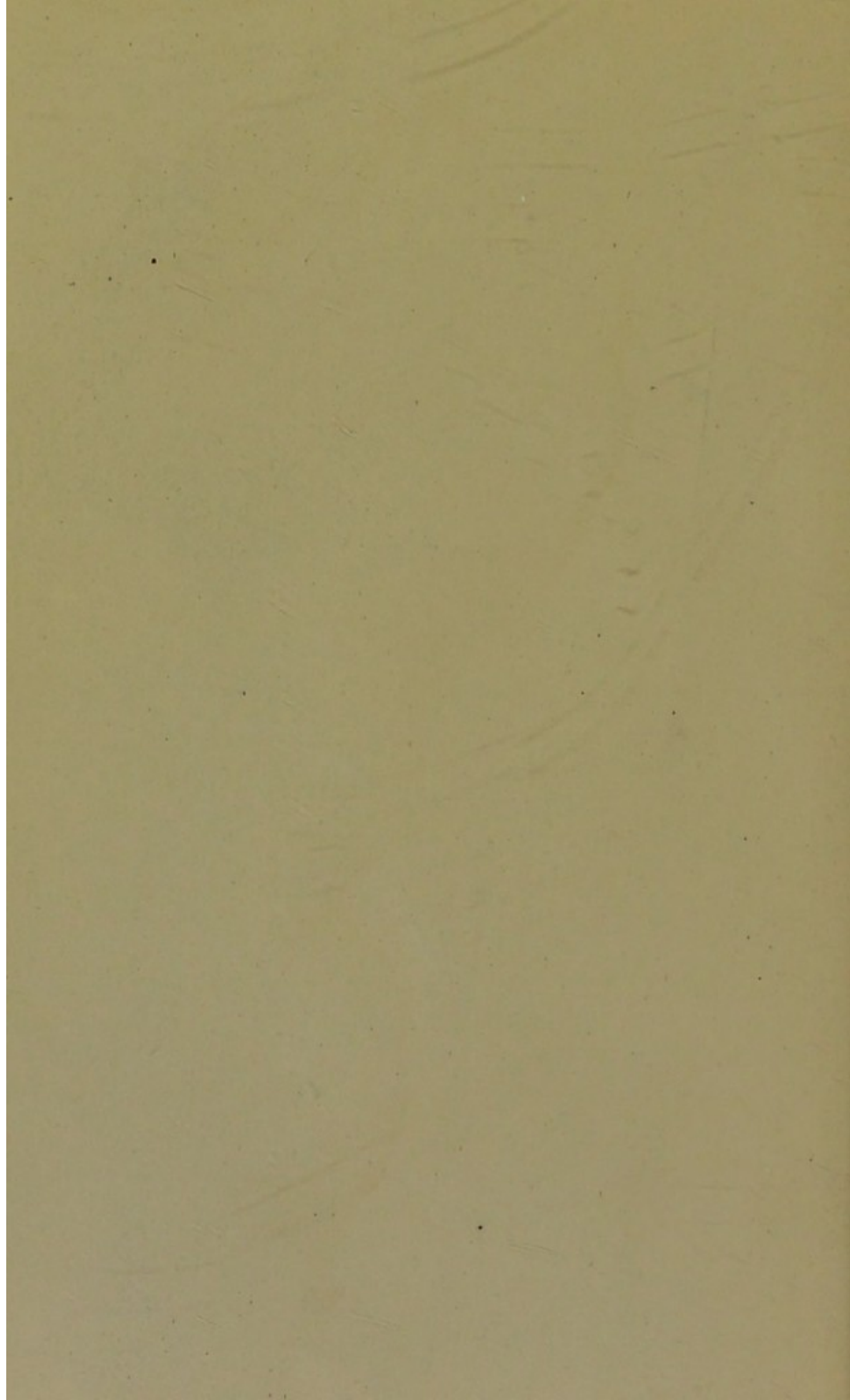
F. DE HAVILLAND HALL, M.D., F.R.C.P.

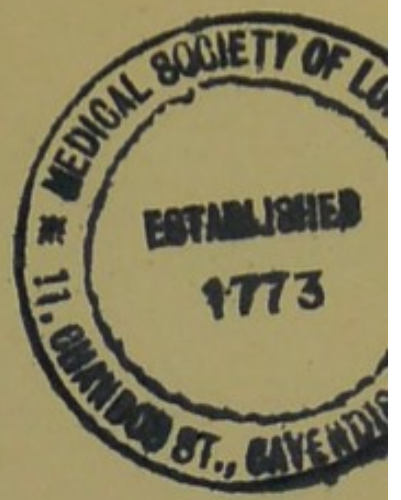


22102147814

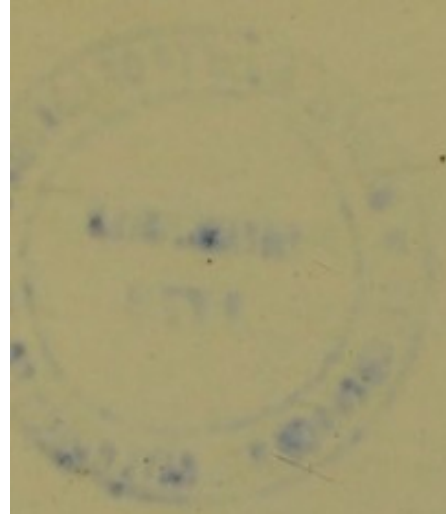
Med

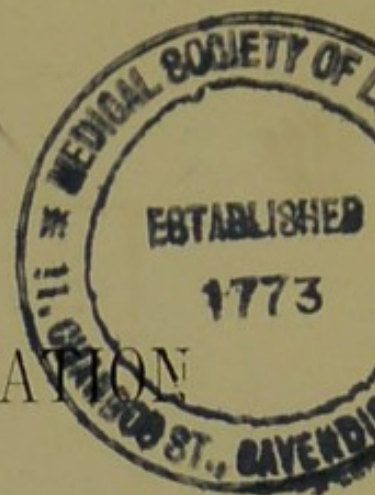
K20033





THE MEDICAL EXAMINATION
FOR LIFE ASSURANCE.





THE MEDICAL EXAMINATION
FOR
LIFE ASSURANCE:

WITH

Remarks on the Selection of an Office.

BY

F. DE HAVILLAND HALL, M.D., F.R.C.P.,

Physician to, and joint Lecturer on Medicine at, the Westminster Hospital.

Physician to the Rock Life Assurance Company.

SECOND EDITION. REPRINT

BRISTOL: JOHN WRIGHT & CO.
LONDON: SIMPKIN, MARSHALL, HAMILTON, KENT & CO., LTD.

1901.

JOHN WRIGHT AND CO.,
PRINTERS AND PUBLISHERS, BRISTOL.

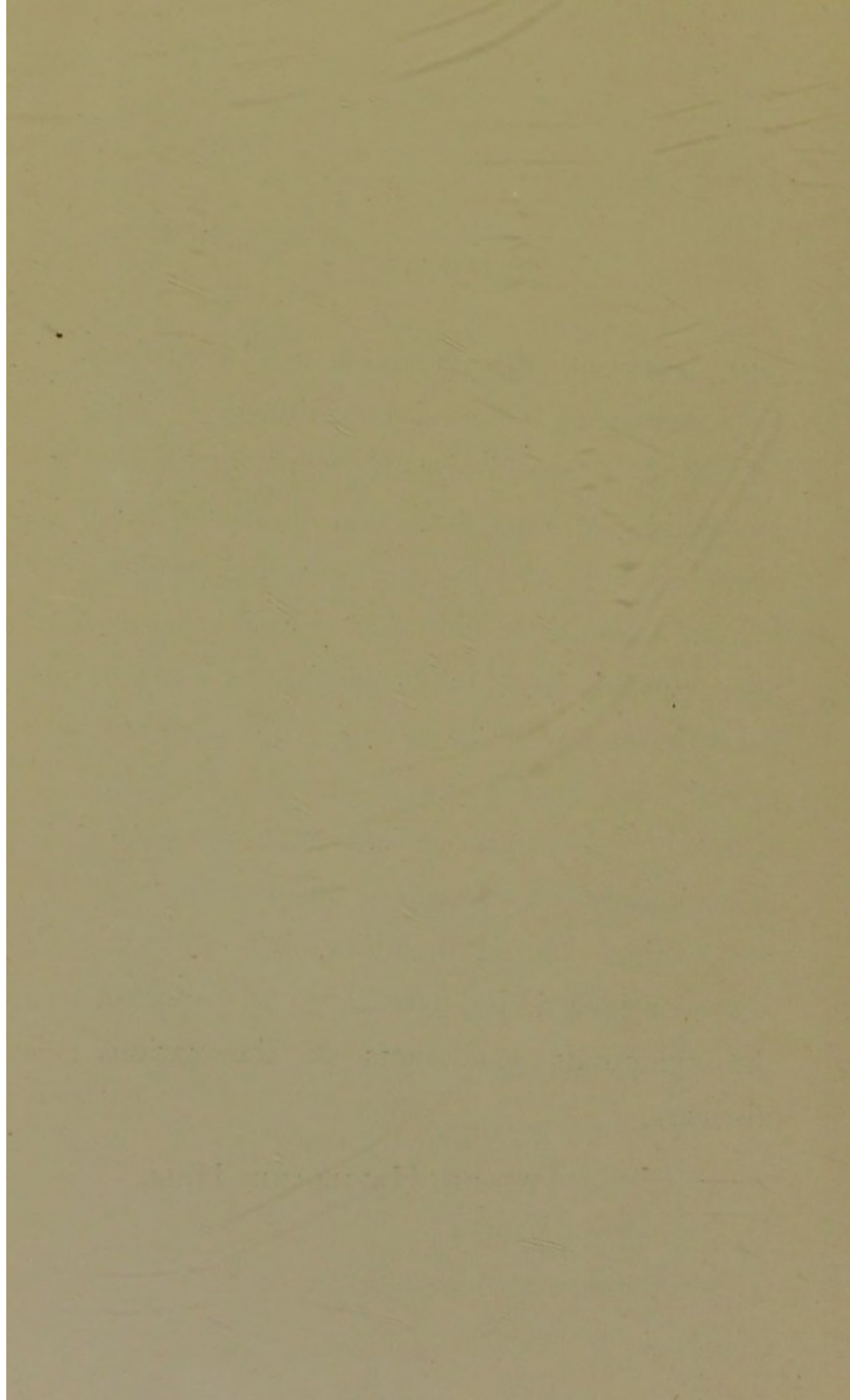
WELLCOME INSTITUTE LIBRARY	
Coll.	welMOmec
Call	
No.	W

73.

PREFACE.

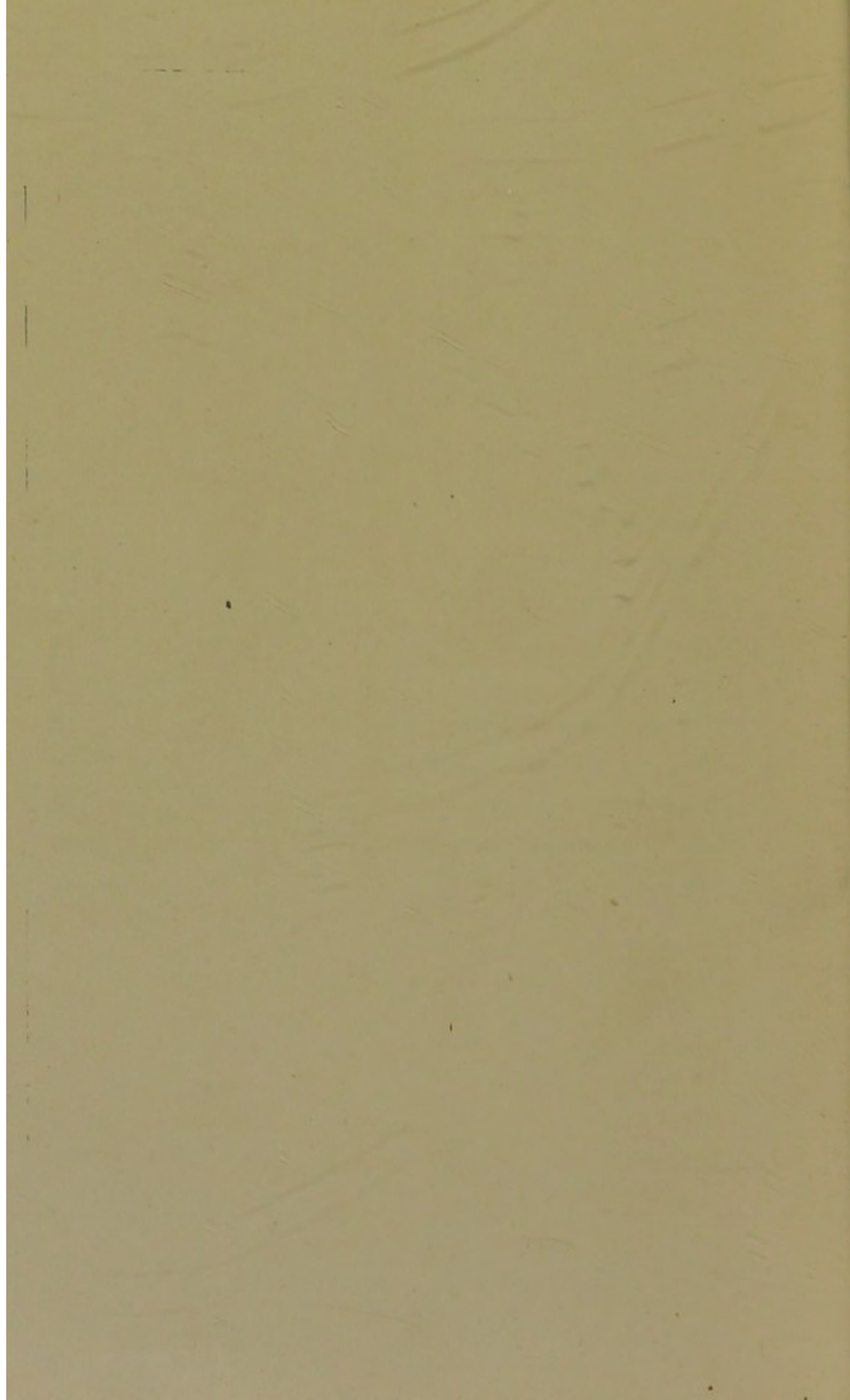
THE article on the Selection of Lives for Life Assurance which I contributed to the "Medical Annual," for 1896, met with so favourable a reception that I thought a small book containing the essential points in the medical examination for life assurance would be found useful by those practitioners who have not the time to consult the larger works on the subject. I have accordingly endeavoured to give, as concisely as possible, an account of the method of examination, but I have not considered it necessary to discuss the symptoms and signs of the various diseases.

F. DE HAVILLAND HALL.



CONTENTS.

	PAGE
INTRODUCTION -	9
FAMILY HISTORY -	10
PERSONAL HISTORY -	19
PRESENT CONDITION -	28
ENVIRONMENT -	44
FEMALE LIVES -	49
SELECTION OF AN OFFICE -	52
FORM FOR MEDICAL EXAMINATION -	60
CLASSIFICATION OF LIVES -	64
LIST OF ASSURANCE OFFICES -	66
INDEX -	70



The Medical Examination for Life Assurance.

INTRODUCTION.

IN the selection of lives for Life Assurance, the individual must be regarded from four principal points of view :

- I.—FAMILY HISTORY.
- II.—PERSONAL HISTORY.
- III.—PRESENT CONDITION.
- IV.—ENVIRONMENT ; *i.e.*, *Social State, Place of Residence, Habits and Mode of Life.*

The various questions bearing on life assurance will therefore be discussed in the above-mentioned order.

On pages 60-63 will be found the Form for Medical Examination as drawn up and recommended for use by the Council of the Life Assurance Medical Officers' Association. By the kindness of Dr. Leslie Ogilvie, I am able to add a table he has devised for rapidly recording the salient features of assurance cases, so as to give due weight to each in the recommendation. *See pp.* 64, 65.

I.—FAMILY HISTORY.

It has been stated, "that it is the man himself who comes before us for examination—his habits, his health record and his circumstances, very much more than his ancestors, and on whom our attention must be concentrated." This is all very true, but at the same time much valuable information can be derived from the family history, provided it is properly handled. The tendency now-a-days in assurance practice is to restrict inquiry as regards hereditary diseases to *Consumption, Cancer, Gout, Rheumatism* and *Insanity*. In addition to these affections—their relation to life assurance we shall discuss later on—there are some other conditions of family history which are of service in estimating the value of any given life. The most important is an early "*breaking-down age*," *i.e.*, the history that the father, mother, brothers, sisters or other near relations of the applicant have died at a comparatively early age, say fifty-five to sixty-five, from diseases indicating degenerative changes. This is just the class of case in which the extra risk is best met by an Endowment Policy, payable at an earlier period than the average "*breaking-down age*" in the family of the individual under consideration. Another point worthy of mention is the proclivity in certain families to catch infectious diseases. In the case of a medical student or nurse applying for assurance, the existence of such a tendency might justify an addition to the premium.

Then there is a history of a general *want of robustness* in the family, as shown by the early deaths of many members of it from various diseases and independent of a tendency to any special disease. This variety of family history is chiefly of importance in the case of applicants under thirty. In the event of an applicant over thirty coming with such a history, if he is in good condition, the probability would be that he is an example of the survival of the fittest, and that he is therefore a life to be accepted at the ordinary rate.

Caution must be exercised in recommending for assurance the child of alcoholic parents, if from his surroundings or his occupation he is exposed to temptation, or if there is any want of equilibrium in his nervous system.

When enquiring into the causes of death of parents or relatives of the applicant, it is of the utmost importance in doubtful cases to obtain full particulars as to the nature of the last illness. For instance, "death after child-birth" or from "asthma" may really be death from consumption.

Phthisis.—The examination of recent assurance statistics has shown that the additions made on account of a *phthisical family history* have been somewhat excessive. Inasmuch, however, as phthisis is particularly the disease which is the cause of loss to assurance companies in the first seven years of assurance, it behoves the examiner to give due

weight to the history of a consumptive taint in the family. In this respect it is most important to bear in mind that the terms "death after child-birth," "asthma," and "pleurisy," often cover, or conceal, death from phthisis. It is now so well recognized in assurance circles that death after child-birth is frequently the result of phthisis, that unless there is distinct evidence to the contrary, it is well to assume that such was the case. Death from asthma in persons under middle age is so uncommon, that some other explanation must be sought for the fatal termination, and in many instances phthisis will be found to be the cause. Pleurisy, again, is very commonly of tubercular origin, and carefully collected statistics have shown that within five years after the occurrence of what was apparently a simple attack of pleurisy, nearly half the patients were dead of phthisis. This point is also of importance in regard to the history of the previous health of the applicant, inasmuch as the history of an attack of pleurisy in an individual, especially if coupled with a family predisposition to phthisis, should raise the gravest suspicion in respect to the assurability of the applicant.

In considering the bearing of heredity and phthisis the classification suggested by Dr. Reginald Thompson is a convenient one from a life assurance point of view, and it is given in a somewhat modified form on page 13. It must be remembered, however, that it is quite impossible to reduce

to mathematical precision the exact influence that the varying degrees of family history of phthisis have on the expectation of life of the individual.

The different degrees of the heredity of phthisis may be divided into four classes :—

A.—Implication of one brother or sister, or one collateral relation.

B.—Implication of brother and sister ; many collaterals with sexual limitation ; the father's heredity alone.

C.—Implication of grandparents ; the father with one other of the children ; the implication of many brothers and sisters ; the mother's heredity alone.

D.—Father with many members of the family ; mother with other members of the family ; grandparents and parents ; double heredity.

In view of the great importance of *age* as a factor in the development of phthisis, it is necessary to divide the periods of life into four : First period before twenty-five years of age ; Second period between twenty-five and thirty-five ; Third period between thirty-five and forty-five ; Fourth period after forty-five.

First period.—Reject all applicants under twenty-five with a distinct family history.

Second period.—Class A may be taken at the ordinary rate, if the applicant is robust, of good weight and in comfortable circumstances. If there is any doubt, the application should be deferred until the age of thirty is attained.

Classes B and C should be taken with an addition of five and seven years respectively, with the stipulations mentioned under A.

Third Period.—Class A may be taken at the ordinary rate. Class B with three years' addition, and Class C with five years' addition.

Fourth Period.—Classes A, B and C may be taken at the ordinary rate. Class D still requires much caution in the selection of cases, and some offices refuse all cases of double heredity. In view of the great risk during the period of child-bearing, it is not advisable to accept female lives under the age of forty-eight.

Of more importance than the exact class of heredity to which the applicant is to be referred, is the personal examination. A weight above the average, a well-formed chest, and the appearance of robust health, are of more importance than pedantic adherence to any rules. If these points are favourable, as well as the personal history and mode of life of the applicant, it would probably be quite safe to accept all lives above forty years of age at the ordinary rate; below this period some addition would be necessary.

Cancer—Comes next to consumption in regard to frequency of hereditary transmission, but, unlike the latter, it is an increasing risk, *i.e.*, the liability to cancer increases for the most part with the age of the individual. Up till quite recently cancer had received much less attention as a factor in the

mortality of assured persons than it merited. A consideration of the following facts will show how important cancer is from a life assurance point of view.* In the last fifty years, though the total death-rate of the community has diminished, that from cancer has increased nearly fourfold. The increase has been most marked in males, and as cancer is a disease of advanced life it occurs at a period of life after that at which assurance is usually effected. And, lastly, it has been shown that this increase has largely taken place in those of a good social position, *i.e.*, the persons who are most likely to assure. It has been suggested that the increased mortality from cancer is fictitious, and is simply due to an increased skill in diagnosis; though this may account for some of the increase, it will not account for the whole of it. The real explanation is probably this, that owing to the diminished death-rate of the earlier periods of life more survive to arrive at the period at which cancer usually occurs. That cancer is not becoming more virulent is shown by the fact that in the course of twenty-five years the average at death of males dying from cancer has increased by five years, while that of females has increased by two years. This increase in the age at death will compensate, from a life

*"The Relation of Cancer to Life Insurance," by WILLIAM THORBURN, F.R.C.S.

assurance point of view, to a certain extent, for the increased number of deaths from cancer. Females are more liable to cancer than males, but the increase in the cancer death-rate to which I have already referred has affected the male sex to a much greater extent than the female, so that the tendency is for the death-rate of the two sexes to approximate. For the present, however, females must be considered to run greater risk of dying from cancer than males, hence great care must be exercised in accepting female lives over the age of forty, if there be a cancerous family history. Attempts have been made to impugn the heredity of cancer, but for the present the assurance medical officer will do well to accept it as proved. In the case of male lives one death from cancer in the family need not be regarded, two deaths require an addition to the premium; if both parents have died of cancer the application should possibly be rejected. In the case of female lives one death from cancer is suspicious, and if of a parent, especially the mother, an addition should be made. The death of mother and one other near relation would suggest a large addition or even rejection.

In view of the fact that cancer is for the most part a disease of middle and advanced life, the older the applicant who has a cancerous history, the greater the need for an addition or rejection as the case may be, *i.e.*, an applicant under forty might be taken at the ordinary rate or with an

addition, whereas an applicant over fifty with a similar history would require a large addition or possible rejection.

Applicants with a cancerous family history are especially suitable for an endowment assurance or for an investment policy with a limited number of payments.

One point comes out very forcibly in examining the family history of cancerous patients, *viz.*, the marked associations of cancer with a family history of phthisis. Great care should therefore be taken in reporting an application in which there is a history both of cancer and phthisis. As regards the occurrence of what are called pre-cancerous conditions, it is not at present possible to assign any definite value to them; still, the presence of chronic inflammation in the tongue or larynx, or chronic dyspepsia in males of advancing life, chronic eczema of the nipple in females, and long-standing ulcers due to any cause, should lead to great caution in recommending the life for acceptance, especially if there be any cancerous family history.

Gout.—That gout is hereditary hardly anyone will deny, and its transmission may sometimes be traced through several generations; or it may skip one generation and appear in the next. The gouty inheritance, instead of giving rise to any acute symptoms, may manifest itself in a more or less latent form, as dyspepsia, skin affections, and

a tendency to degenerative changes in the heart, vessels, and kidneys. The signs of inherited gout are commonly detected before the age of thirty-five; whereas in acquired gout the first attack is usually later. If one parent or grandparent has had gout, the applicant may be taken at the ordinary rate, if he himself has not suffered and is otherwise eligible. If two members of the family have suffered from gout, an addition of from three to five years should be made. Where there is a gouty inheritance, especial care must be taken if there is any suspicion of defective action of the liver or kidneys, if the vessels are rigid or if the applicant is excessively heavy.

Rheumatism.—The term rheumatism is used in such a loose manner that it is difficult to obtain any precise information as to the part heredity plays in the development of the disease. There is, however, ample evidence to prove that rheumatism is hereditary, and the importance of heredity as a predisposing cause of rheumatism is well illustrated by examples of extremely rheumatic families given by Drs. Goodhart and Archibald Garrod. Though the question is usually asked of applicants for assurance whether there is a rheumatic family history, it is very rarely indeed that an addition to the premium is made on this score, unless there is also the history of an attack of acute rheumatism in the applicant.

Insanity.—With insanity it will be convenient to

consider the hereditary influence of nervous diseases generally. The influence of the mother's insanity is more serious than that of the father, because her disease is more frequently hereditary, and because she transmits it to a greater number of children. With one insane parent and an absence of nervous affection among his brothers and sisters, an applicant of thirty-five and upwards can be taken at the ordinary rate. As all nervous maladies appear to have a common neuropathic origin, the presence of neuralgia, chorea, epilepsy in collaterals would increase the risk if one or both parents be insane. There seems also to be a distinct heredity in cerebral hæmorrhage, so that if there be the history of apoplexy in one or both parents, it would be safer to reject the life in the event of there being the least suspicion as to the heart or blood-vessels of the applicant, or if he has suffered from acute rheumatism, gout, or syphilis.

II.—PERSONAL HISTORY.

Next in importance to the examination of the applicant comes a careful inquiry into his past history. In order to assist his memory most assurance offices have a list of diseases as to which the applicant is questioned. Before entering into these, attention must be directed to the importance of not recommending for assurance an applicant who is still suffering from some slight ailment, or who has only recently convalesced from

an acute illness. The slight ailment may be the starting point of some severe, possibly fatal disorder, and after an attack of measles, typhoid fever, or other depressing malady, consumption not unfrequently follows.

Fever.—The history of fever in the past, provided the attack occurred some months previously, would not affect the proposal. A recent attack of scarlet fever would suggest great care in examining the urine, and at least three or four months should have elapsed. As regards malarial fever, everything depends upon the time that has elapsed since the last attack, the absence of signs of malarial cachexia, such as an enlarged spleen, in the applicant, and whether he has any intention of returning to the locality where he contracted the fever.

Acute Rheumatism.—An attack of acute rheumatism sufficiently severe to keep the patient in bed two or three weeks, and to incapacitate him from his occupation for six or seven weeks, would require the addition of an equivalent to seven years at the age of thirty, and three years must have elapsed since the attack. If there has been more than one attack, the life would not be assurable until at least ten years after the attack. An applicant with a rheumatic history had better not be accepted under the age of twenty-five years. The question of cardiac complications will be considered later on.

Gout.—It seems that in the past, applicants with

a gouty history have not been rated up sufficiently. An attack of gout, however slight, requires the addition of at least three years. But as Dr. Symes Thompson has pointed out, "the altered style of living and inherited susceptibility favour the development of latent constitutional changes, which have taken the place of the familiar seizures of former years." These latent and ill-defined cases entail more risk than a *bonâ fide* attack of acute gout, and it is more difficult to appraise their value. The earlier the age at which gout is acquired, the greater the risk to life from disease of the heart and kidneys. Gouty subjects who have suffered from glycosuria, or who have had symptoms suggestive of an anginal attack, however slight, should not be taken. The death rate of gouty subjects is especially heavy between fifty-five and sixty-five; hence this class of case is particularly suitable for an Endowment assurance, though of course there must be an addition made to the premium. An addition of 10 per cent. is not sufficient for a Whole Life policy, at least 20 per cent. is necessary; an Endowment policy might be taken with less.

Syphilis—Demands more attention from the medical officers of assurance companies than it has received in the past. It is hardly ever fatal at an early period of its course, though a few deaths from sloughing phagedæna, and acute yellow atrophy, apparently due to the poison,

have been recorded. In the later stages of the disease, however, there is indirectly a great mortality from diseases of the brain, larynx, lungs, circulatory system, liver and kidneys. Very contradictory statements have been made as to the curability of syphilis. Gowers takes a very gloomy view, and says that "there is no real evidence that the disease ever is, or ever has been cured," whereas Fagge and Pye Smith say, "In the immense majority of cases a person who has had syphilis is, after a few years, free from it, in every sense in which it can be said that one who has had scarlet fever or smallpox is free from those disorders." My own experience is decidedly in favour of the latter view. The essential point is prompt and prolonged treatment. Ricord has said that "syphilis recognised is half cured." This emphasizes the importance of early treatment; most of the cases which give trouble in after life are those in which, owing to the mildness or the absence of secondary symptoms, the disease was not properly treated at the commencement. Hence in applicants for life assurance who have suffered from syphilis, careful enquiry must be made into the nature and duration of the treatment to which they were subjected. In reporting upon an applicant who has suffered from syphilis, particular attention must be paid to his family and personal history, and to his environment. The history of inherited

or acquired disease, such as tuberculosis, gout, malaria, etc., and depressing conditions such as alcoholism, sexual excess, poverty, mental strain and anxiety, would greatly increase the risk and would probably lead to the application being declined.

Almost all authorities are agreed that as long as there are any signs of active disease the proposal should be postponed. If the symptoms of the secondary stage were mild and the applicant was carefully treated, he might be accepted at the ordinary rate, provided there had been an interval of two years from the appearance of any symptoms. It has been shown by Dr. George Ogilvie and others that the greatest liability to tertiary symptoms is during the first three years after infection, so that if a period of two years has elapsed since any symptoms have appeared the chance of the development of tertiary phenomena is very small. Dr. Moxon has stated that the average age of those dying of visceral syphilis is thirty-seven years, the risk of the occurrence of tertiary disease in a man over forty may therefore be almost disregarded, unless the disease was contracted late in life.

As syphilis contracted after fifty is a much more severe disease than that seen in early adult life, a longer period of probation must be required and an addition will usually be necessary. If there has been any evidence of tertiary mischief without

permanent structural, or organic injury, the life might be accepted with the addition of five years and upwards according to the age of the proposer, provided the disease was apparently arrested or cured. If there is any resulting structural, or organic lesion, the application should, as a matter of course, be declined.

Phthisis and Hæmoptysis.—The history that the applicant has suffered from symptoms of phthisis in the past, or that he has had an attack of hæmoptysis, would require that he be rejected, should there be a family tendency to consumption, or should he be of light weight and feeble physique. Under any circumstances, at least ten years should have elapsed since the occurrence of hæmoptysis, or other symptoms of phthisis, and the applicant should be at least thirty-five years of age, and his personal condition and environment should be excellent to allow of his being accepted, even with an addition.

Pneumonia and Pleurisy.—After an attack of inflammation of the lungs, sufficient time must be allowed to elapse in order that the examiner may be able to judge whether any permanent damage to the lungs has resulted. This caution is particularly necessary if there is a family history of consumption. If the recovery has been complete, no addition is required after an attack of pneumonia.

As already mentioned, the history of a previous

attack of pleurisy is suggestive of a tubercular tendency.

Emphysema.—An applicant with a slight amount of emphysema may be accepted with an addition, provided he is in comfortable circumstances and therefore able to take care of himself. As emphysema, when it has once developed, has a tendency to advance, the policy offered to the applicant should be of the Endowment class, payable not later than sixty or sixty-five. Emphysema complicated with frequent bronchitic attacks renders the life unassurable.

Asthma.—The history of recent asthma should lead to the rejection of a proposal. If, however, some years have passed since the last attack, and the applicant is not emphysematous, he may be accepted, though it would probably be wise to make an addition.

Strumous Glands.—At one time great stress was laid on the history of enlarged glands, but thanks in large measure to improved methods of treatment, enlarged glands are not met with in the classes coming for assurance so frequently as formerly. If the applicant is in good health, and many years have elapsed since the glands were affected, he might certainly be taken at the ordinary rate, provided his family history is good.

Insanity.—The mean duration of life is undoubtedly impaired by insanity; it is, however,

only in the acute forms and in general paralysis of the insane that there is any immediate danger to life. Assurance offices do not usually accept lives of those who have suffered from insanity in the past, except under very favourable circumstances.

Epilepsy,—If of hereditary origin, is a bar to assurance. Where, however, the disease is not inherited, the applicant is in comfortable circumstances, and at least ten years have elapsed since the last attack, then the proposal may be accepted with an addition. Fournier states "True epilepsy never begins at adult age,—at mature age. If an adult man above thirty, thirty-five or forty years of age is seized for the first time by an epileptic attack, and while in apparent good health, there are, I repeat it, eight or nine chances out of ten that this epilepsy is of syphilitic origin." An applicant suffering from syphilitic epilepsy is of course uninsurable.

Paralysis.—Facial palsy, if due to cold or some other cause acting on the nerve outside the skull, need not exercise any adverse influence. Both hemiplegia and paraplegia are obstacles to assurance, and so are bulbar paralysis, locomotor ataxy, and other diseases arising from sclerosis of nerve centres.

Liver Affections.—An attack of jaundice in early life is probably of a catarrhal nature, and may

therefore be disregarded. In middle life it is more likely to be due to gall-stone colic; if this is the case, and the attacks have been frequent and severe, the proposal had better be declined; but if some years have elapsed since the attack, the life may be taken with an addition. Any trace of jaundice at the time of the examination should lead to the postponement of the application. The history of slight piles would not affect a proposal, but severe piles accompanied with much bleeding should lead to a careful enquiry into the habits of the applicant, so as to exclude cases of commencing cirrhosis of the liver. In severe cases the application should be postponed until some time after the individual has been successfully operated on.

Fistula.—In cases of fistula very careful enquiry should be made as to the history of a cough, and the examination of the chest should be more than usually rigorous; this should especially be the case if there be a family history of consumption.

Dropsy.—The history of an attack of dropsy in the past necessitates the rejection of the applicant, with the single exception of the dropsy which occasionally occurs as a complication of acute desquamative nephritis, as, for instance, after scarlet fever. If four or five years have elapsed since the illness, and there have been no signs of

renal trouble in the interval, the life may be accepted.

Stone.—If there is any suspicion of stone in the kidney or bladder, the application must be postponed until the doubt has been cleared up, or the stone removed by surgical treatment. Applicants who have been successfully operated on for stone may be taken with an addition, provided some years have elapsed since the operation, and the state of the general health is quite satisfactory. Hæmaturia may point to the presence of a stone in the bladder or kidney, or it may arise from malignant or other disease of these organs. In any case, much caution is required before recommending an applicant who has suffered from hæmaturia in the past.

Stricture.—In the past too little importance has been attached to the history of gonorrhœa followed by stricture; yet it cannot be doubted that much of the mortality in the later years of life, due to bladder and kidney trouble, is the result of this disease. A slight degree of stricture requires an addition; the more severe forms should be declined.

III.—PRESENT CONDITION.

Before proceeding to describe the method of examination to be carried out in the case of applicants for assurance, it may be well to give *in extenso* Hufeland's portrait of a man destined

to long life, so as to serve as a type of the ideal applicant:—

HUFELAND'S PORTRAIT OF A MAN DESTINED
TO LONG LIFE.*

“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 for 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

*“Walford's Insurance Guide,” p. 143.

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 a useful glow of warmth, an artificial and gentle fever, without an overflowing of the bile. He is fond also of employment, particularly calm meditation and agreeable speculation, is an optimist, a friend to nature and domestic felicity. Has no thirst after honours or riches, and banishes all thoughts of to-morrow."

* * * * *

The most important point in life assurance is the present condition of the applicant as tested by a careful physical examination. The first step is to take the height and weight of the individual, and in addition to the mere weight, it is most important to note whether the weight is increasing or decreasing.

Height, Weight, and Figure.—It has been shown by experience that men of from five feet six inches to five feet nine inches in height are the most

capable of prolonged physical exertion, and there can be no doubt that in persons of unusual height there is extra strain on the heart. From a life assurance point of view, men of moderate stature are therefore to be preferred to those of six feet and upwards. Of even more importance than the mere height of the individual is a due proportion between height and weight. The appended table gives the standard at the age of thirty with sufficient accuracy.

Height		Standard Weight		15 per cent. under Weight	15 per cent. above Weight	Circumference of Chest, medium
ft.	in.	stone	lbs.	lbs.	lbs.	inches.
5	0	8	0 = 112	95	128	33½
5	1	8	4 = 116	98	133	34
5	2	9	0 = 126	107	145	35
5	3	9	7 = 133	113	153	35½
5	4	9	13 = 139	118	160	36
5	5	10	2 = 142	120	163	37
5	6	10	5 = 145	123	166	37½
5	7	10	8 = 148	125	170	38
5	8	11	1 = 155	131	178	38½
5	9	11	8 = 162	138	186	39
5	10	12	1 = 169	144	194	39½
5	11	12	6 = 174	148	200	40
6	0	12	10 = 178	151	205	40½
6	1	13	0 = 182	154	210	41

A margin of 15 per cent. in either direction is admissible under ordinary circumstances. Some authorities allow of 20 per cent., but the mortality of the light weights from tuberculosis and other wasting diseases is so great that applicants for

assurance who are more than 15 per cent. under weight should only be accepted after a most careful and rigorous examination. Where there is a marked family history of consumption the case had better be declined, if the applicant is under thirty years of age. It must be remembered that loss of weight is one of the earliest symptoms of incipient phthisis. As regards over-weight there does not seem to be the same risk, and it is not until the excess becomes from 20 to 25 per cent. that there need be any apprehension. The extra mortality among the over-weights is due chiefly to diseases of the brain, heart, and liver, and there is a tendency to sudden death. In cases, therefore, of over-weight, early deaths of parents or other relations from diseases of a degenerative nature should suggest great caution in accepting the life, as should also a gouty personal history.

The table given on page 31 has been calculated for men of the age of thirty : about three-quarters of a pound a year may be deducted, or added, according as the applicant is younger or older than thirty.

Complexion, Eyes, and Ears.—After noting down the height and weight of the applicant, attention should be directed to his complexion. Injected capillaries of the cheek should suggest enquiry as to habits of chronic alcoholism, or the existence of valvular disease of the heart ; sallowness or jaundice points to liver disease ; pallor to anæmia and wasting

diseases; puffiness of the eyelids to Bright's disease. Extreme contraction of the pupil may be a symptom of tabes; inequality should excite suspicion of general paralysis, aneurysm, etc. Complete blindness necessitates an addition on account of the extra risk of accidents. If there be a *discharge from the ears*, or deafness, the ears should be carefully examined. In the event of there being polypi or granulations within the tympanic cavity, any evidence of disease of the temporal bone, abundant offensive discharge of long standing, pain or tenderness in the neighbourhood of the ear, giddiness, or affection of the facial nerve, the application should be rejected.

If there be a moderate amount of discharge, not of an offensive nature, and an absence of all the symptoms mentioned above, the case should be referred for treatment, and might be accepted, though possibly with an addition, when there has been no discharge for a year or more.

Attention should be paid to the applicant's voice. In cases of hoarseness a laryngoscopic examination should be insisted on, but a routine examination of the larynx is unnecessary. Any existing laryngeal ulceration or paralysis would be a bar to assurance; cases of laryngitis had better be deferred.

Apparent Age.—The apparent age of the applicant should be compared with his real age, and signs of premature old age, such as baldness, grey or

white hair, arcus senilis, etc., should be noted. If with the existence of any of these conditions there be a family history of early death from apoplexy, aneurysm, and other diseases arising from degenerative changes, the examination of the applicant should be conducted with more than usual care, and the life rated up or rejected should there be any suspicion of the commencement of senile degeneration not justified by the age of the individual.

Chest.—The applicant should now be stripped to the waist, and the chest carefully examined. The chest should expand freely in all directions; respiration should be quiet and easy, and should not exceed twenty in the minute.

In doubtful cases the measure of the *circumference of the chest* will assist in arriving at a decision. In the table given on page 31, it will be seen that a man five feet high ought to measure thirty-three and a half inches round the chest above the nipples, and for every additional inch in stature, the circumference of the chest should be increased by about half an inch. A full inspiration should increase the circumference of the chest from one and a half to two inches. The shape of the chest is another point to which attention should be directed; a flat chest suggests phthisis, and a barrel-shaped chest, emphysema. The thoracic deformity left by pleurisy or spinal curvature may greatly increase the risk of an attack of bronchitis or pneumonia.

As long as the circumference round the abdomen does not exceed that round the chest above the nipples, exception need not be taken to the figure of the applicant, but a protuberant belly is not desirable from a life assurance point of view. The slightest evidence of existing *phthisis* should lead to the rejection of the application. The same rule holds good for candidates with a doubtful family history, in whom there is evidence of old mischief. Cases are occasionally met with in which there are merely some impairment of resonance and deficient expansion with bronchial breathing at one apex ; if under these circumstances the applicant has a good family history, if his general condition, especially as regards weight, is good, if the attack dates back at least eight or ten years, and the applicant is thirty years or upwards, the life may be recommended with an addition.

Heart.—In the examination of *the heart* it is most important to note the area of cardiac dulness, and the exact position of the apex beat ; hence no examination is satisfactory unless the applicant's chest is bare. Displacement of the apex beat, increased or diffused impulse, and increased area of cardiac dulness, should lead to a careful examination in order to discover the cause. At one time the mere existence of a cardiac murmur of organic origin was sufficient to exclude an application for assurance, but increasing experience has shown that under favourable circumstances, even

well-marked examples of valvular disease may be accepted at an increased premium.

The origin of the valvular lesion is a very important element in prognosis. Valvular disease starting from an attack of acute endocarditis is much less likely to be progressive than cases in which the disease originated in some degenerative process. This is one of the reasons why mitral disease, which so frequently starts from the endocarditis of acute rheumatism, is usually less dangerous than aortic disease, which, as a rule, is the result of a degenerative change. Hence an applicant for assurance who is found to have valvular disease of the heart with the history of an attack of acute rheumatism dating back twenty years is in a very different position to one in whom cardiac disease has come on insidiously in middle life.

As regards cases of aortic regurgitation, there is a consensus of opinion that they are not assurable on any terms. A systolic aortic murmur may indicate merely some roughening of the valve, so that there may be but little extra risk to life. In considering cases of heart disease, the condition of the heart as regards the existence of hypertrophy or dilatation, and the frequency, irregularity, or intermittency of its action, are the most important elements in arriving at a decision; the exact murmur (aortic regurgitation excepted) is of less moment. The effect of exertion and

posture on the heart's action must always be borne in mind. Some murmurs are only audible after exertion ; even walking sharply up and down a room will suffice to cause a murmur to be recognized which was previously inaudible, and, on the other hand, the murmur of mitral stenosis is sometimes only heard when the individual is in the recumbent position.

Given an applicant with mitral disease, which has existed for at least three years, whose pulse is regular, of normal frequency and volume, who is not rendered short of breath by moderate exertion, and who is in favourable circumstances as regards his environment, then the life may be taken with an addition of from seven to fifteen years ; for an Endowment assurance payable at fifty or fifty-five a much smaller addition would suffice. On the contrary, the application should be rejected if the pulse is too frequent, irregular or intermittent, if there is breathlessness or any tendency to cyanosis after exertion, and especially if the heart affection is due to recent attack of acute rheumatism in a young subject, or is the result of a degenerative lesion coming on in middle life.

Pulse.—In the case of adults, sitting, the pulse should be between sixty-four and eighty-six, and change of position should not make a greater difference than about ten beats per minute. A *too frequent pulse* may be due to the excitement of the examination, or may be merely the result of

nervousness. There are usually other signs to indicate its nervous origin, and, as the proposer becomes calmer the pulse lessens in frequency. Be the explanation what it may, over-frequency of the pulse is not a favourable sign from a life assurance point of view. It is met with in most forms of cardiac disease, and it is an early indication of phthisis and of intemperance. Extreme infrequency of the pulse, as, for instance, a pulse below fifty-six, should excite suspicion. An irregular pulse should lead to the postponement of the proposal and re-examination of the applicant. An intermittent pulse may be due to dyspepsia: it is not infrequently met with in persons who drink too much tea or indulge immoderately in smoking. In rare cases it is of congenital origin. Under these circumstances the life may be accepted at the ordinary rate. On the other hand, an intermittent pulse is sometimes an element of importance in relative old age, occurring in people with degenerate vessels, and it may be a precursor of angina pectoris. Attention should also be directed to abnormal rigidity or increased tension of the pulse.

Digestion.—After examining the condition of the heart and pulse, careful enquiry must be made as to the manner in which the *digestive functions* are performed. Goodhart suggests that the capability of making a good breakfast should influence the acceptance of a proposal for assurance. A furred,

tremulous tongue and foul breath point to the possibility of chronic alcoholism. If there be any suspicion of this the applicant should be placed on a couch, and the abdomen examined in order to detect any alteration in the size of the liver. The existence of piles should also lead to a careful enquiry as to habits. The occurrence of epistaxis in a middle-aged person may indicate disease of the liver or kidneys. Should the applicant be jaundiced he must be referred until he is quite free from bile staining.

If the applicant has resided in a malarious district, the condition of the spleen should be noted.

Nervous System.—As a rule, persons suffering from nervous affections do not present themselves for examination; still, the medical examiner should be on the look out for tremor of the lips, difficulty in protruding the tongue, and alteration in the voice as pointing to bulbar paralysis. A glance at the applicant whilst undressing or walking should be sufficient to detect the existence of hemiplegia, paraplegia, or other motor affection. If necessary, the knee jerks may be tested. Tremor of the hand, or want of steadiness in writing should suggest the suspicion of alcoholism.

Hernia.—The extra risk due to the existence of a rupture is usually met by an addition of one to two years, provided a well-fitting truss is worn. It has yet to be proved that any addition is needed on account of a rupture.

Urinary Organs.—Lastly, the state of the genito-urinary organs must be enquired into. The effect of stricture has already been discussed.

Of late years all offices have very rightly insisted upon the routine examination of the *urine*. The examiner should require the urine to be passed in his presence; this ensures a fresh specimen, and prevents fraud. The specific gravity is usually taken; in health this varies between 1015 and 1025, but a single specimen is often lower than 1015, and occasionally above 1025, without having any pathological significance. It is more important to test the re-action, as unless the urine is already distinctly acid, or has been acidulated by the addition of acetic acid, albumen will oftentimes not be precipitated on boiling.

For life assurance purposes the plan of boiling the upper stratum of urine in a test tube is of sufficient delicacy to detect albumen. If opalescence is produced by boiling, nitric acid must be added to exclude phosphates; if there is no change on boiling, the absence of albumen may be confirmed by the cold nitric acid test. The reaction comes out more distinctly if the urine be poured on the acid, rather than allowing the acid to trickle down the side of the test tube, the urine having been poured in first. To detect sugar, Fehling's test is the most convenient. It is desirable that the sulphate of copper and alkaline solutions should be kept in separate bottles, and only mixed at the

time of examination. Equal quantities of the two solutions should be boiled, and if after boiling the solution is of a deep blue colour and quite translucent, some of the urine to be tested should be boiled and added to the boiling Fehling solution. If sugar is present it will usually be at once recognized, owing to the precipitation of the yellow sub-oxide of copper. If there is no precipitation or decolorisation of the solution, heat may be applied to the mixture of urine and Fehling's solution; but anything like prolonged boiling must be avoided, as there are other reducing agents, occasionally present in urine, which will throw down the sub-oxide of copper after prolonged boiling.

The detection of a considerable amount of albumen, especially in urine of a low specific gravity, and the presence of casts should lead to the rejection of the application. There is, however, a series of cases to which the terms "functional," "cyclic," or "intermittent" albuminuria have been applied. This is a class of cases which causes more trouble to the medical examiner for life assurance than almost any other. At the present time, sufficient data have not been collected upon which to found any definite conclusions. The discovery of the so-called functional albuminuria is of comparatively recent date, and we do not yet know what the after history of those subject to this condition will be. The time may come when it may be possible to differentiate between cases of

albuminuria due to temporary causes and those due to commencing organic disease of the kidneys ; at the present time, however, the only safe course is not to recommend for assurance any applicant whose urine contains albumen. Supposing the applicant is otherwise healthy, under forty years of age, free from cardiac hypertrophy and rigid vessels, and from all signs of gout, and without a family history of Bright's disease, it would be advisable to defer the case for three to six months, and if the urine were found to be free from albumen, the life could then be accepted. If the urine still remained albuminous, a further period of probation might be suggested or the applicant might be granted an Endowment policy payable at fifty or fifty-five, an addition of about ten years being made. A fairer arrangement for the applicant, however, is to charge the extra premium as a debt on the policy ; this debt is diminished each year until, at the expiration of the term for which the life may be expected to live, the debt is cancelled and the sum assured is payable in full on subsequent death. The only conditions under which it would be possible to entertain the proposal of an applicant whose urine was albuminous at the time of examination are that he should fulfil the requirements mentioned above, and that in addition the albuminuria is not accompanied by the presence of casts, that the amount of albumen is less than one tenth of the bulk of urine examined,

and that the specific gravity of the urine taken on several occasions—still better that of a sample of the total urine for twenty-four hours—is not under 1015. Much the same course should be taken as regards glycosuria. There are cases of temporary glycosuria, probably connected with dyspepsia, which may be taken with an addition, if the urine at the time of examination is free from sugar, and there is no family history of diabetes. Otherwise, the presence of sugar in the urine, like that of albumen, is a bar to life assurance.

Miscellaneous Questions.—The effect of the loss of a limb is somewhat difficult to estimate. If this has occurred as the result of an accident there need be no additional risk, though it sometimes leads to plethora and corpulence. If the limb has been removed for tubercular disease of the joint, the possibility of recurrence in some other organ must be borne in mind and the application can only be accepted after the lapse of several years, and then with an addition, if the applicant's health is in other respects unexceptional. Cases are, however, not unfrequently seen in which, as soon as the local cause of irritation has been removed by amputation, the general health becomes completely and permanently established. Unfortunately for life assurance purposes we cannot regard these as the rule.

It need hardly be stated that any operation undertaken for the removal of malignant disease

in any part of the body, and however successfully carried out, completely disqualifies for assurance.

Any existing ulcer should lead to the proposal being deferred until the part has become completely and firmly healed.

Varicose veins need not be regarded unless they are very large; in this case the risk of rupture and fatal hæmorrhage, or of embolism, must be considered, and the proposal accepted with an addition, or declined.

Chronic skin affections, such as psoriasis and eczema, as a rule have little or no adverse influence on the expectation of life, nevertheless the possibility of a chronic eczematous condition of the nipple giving rise to Paget's disease must be remembered. The existence of chronic eczema in a person with a gouty family history would suggest an addition.

IV.—ENVIRONMENT.

The remaining point to be considered in regard to life assurance is the Environment of the applicant. Under this head are included the social state, occupation, habits and mode of life, and residence.

Social State.—The *social state* of the individual, *i.e.*, whether he is married or single, has a certain amount of influence on the duration of life, and must therefore be taken into consideration in the case of applicants for assurance. Statistics show that married people live, as a rule, longer than

single people. That this should be so is no more than was to be expected. In the first place, selection is in favour of the married, as the robust are more likely to marry than the delicate ; secondly, if a man marries, the presumption is that he has some means ; thirdly, the regularity of life, both as regards meals and sleep, has a beneficial effect ; and lastly, matrimony is salutary from a physiological point of view. The only exception to the rule that married people have a better expectation of life than the single, is that in women the risk of the married is somewhat higher than that of the single during the child-bearing period.

Occupation.—The *occupation* of the applicant is oftentimes a decisive factor in the case. Take, as an illustration, a man of bad family history as regards consumption, who is somewhat below weight, and not very robust looking, but otherwise healthy. If the applicant is a man whose occupation takes him constantly into the open air, as, for example, farming, the life might be taken, though possibly with an addition ; whereas, if he is engaged indoors, as a clerk, or linen draper, the application is not so likely to be entertained, consumption being a disease *par excellence* of indoor occupations. On the other hand, a man of sedentary habits whose heart is not quite sound stands a better chance of being accepted for assurance than one who has to lead an out-door, active life.

Again, there are certain occupations which

exercise a very prejudicial effect on the lives of those engaged in them. Among these may be mentioned the liquor trade. Most assurance offices make a considerable addition, averaging about £1 per cent., for all those who have anything to do personally with the manufacture or distribution of intoxicating liquids. Some offices absolutely decline to assure publicans. Butchers, bakers, and plumbers also experience a high rate of mortality. According to Mr. Neison "the rate of mortality among the highest ranks of society exceeds that of the population at large, and the best average value—life value—and the greatest immunity from sickness are enjoyed by the industrious, provident workmen of the population, who are members of benefit societies." The whole subject of the effect of occupation on life has been exhaustively treated in Dr. Arlidge's work, "The Hygiene, Diseases and Mortality of Occupations."

Habits.—The question of *habits* is an exceedingly difficult one to get correctly answered. The experienced examiner will obtain more accurate information by attention to the state of the tongue and breath, the condition of the conjunctivæ, and the presence of tremor of the hands, and dilated capillaries of the cheeks, than by questioning the applicant. Should there be any suspicion of excess in drink, the application should be rejected. It must be borne in mind that reformed drunkards, even though they adopt and continue to

practice total abstinence, are not good lives. The excess of past years has probably left its mark in degeneration of vessels, liver, and kidneys. In cases, therefore, of people who describe themselves as total abstainers, it is most important to know how long they have been so, and what their habits previously were.

It is well also to make some enquiry as regards the amount of exercise taken. The typical man about town, who takes but little exercise, and who eats and drinks more than is good for him, is not a satisfactory candidate for assurance.

Residence.—Owing to the wandering life led by so many people now-a-days, the residence of the applicant for assurance is not of much importance, except as regards residence in tropical or very unhealthy climates. If the applicant has lived in a hot climate particular attention should be paid to the condition of the liver and spleen, and enquiry made as to the history of dysentery in the past. The result of Mr. P. Tait's elaborate investigation of all the available facts is that the value of life amongst Europeans in India has improved, is improving, and that this amelioration is likely to continue.

* * * * *

After a careful examination of the applicant, and a consideration of his condition from the various points of view which have been described above, the medical examiner will have to sum

up the evidence for and against the assurance of the life in question. In making the recommendation it is well to bear in mind the applicant's expectation of life. A rough and ready, but at the same time tolerably accurate rule for arriving at this is that given by Walford. Between the ages of twenty and forty-five use the *fixed* number 96; deduct the present age of the person whose expectancy you desire to know from this number, and half of the remainder will give the expectancy. Between twenty and thirty the result will hardly come up to the average, and over forty it is slightly in excess. For ages above forty-five take 90 as the fixed number, and proceed as before.

The following table will shew the years and decimal parts of a year that persons at each age may be expected to live, according to the healthy male table, deduced from the mortality experience of Life Assurance Companies.

Age	Expectation of Life	Age	Expectation of Life	Age	Expectation of Life
15	46.161	25	38.405	35	31.016
16	45.292	26	37.658	36	30.286
17	44.438	27	36.908	37	29.560
18	43.609	28	36.162	38	28.838
19	42.817	29	35.419	39	28.118
20	42.061	30	34.681	40	27.399
21	41.326	31	33.946	41	26.679
22	40.603	32	33.213	42	25.956
23	39.879	33	32.481	43	25.233
24	39.147	34	31.748	44	24.511

Age	Expectation of Life	Age	Expectation of Life.
45	23'792	55	16'962
46	23'079	56	16'316
47	22'375	57	15'679
48	21'679	58	15'052
49	20'989	59	14'435
50	20'306	60	13'830
51	19'627	61	13'237
52	18'951	62	12'659
53	18'281	63	12'095
54	17'618	64	11'547

FEMALE LIVES.

The increasing numbers of women who are earning their livelihood by their own exertions must of necessity tend to increase the number of women who apply for assurance, and therefore some remarks upon female lives may be useful. The expectation of life is about three years more in females than in males, taking the population generally. Up to the present time, however, the records of assurance offices do not place female lives in as favourable a position as their prospects of life would seem to entitle them to. No satisfactory explanation of this anomaly is forthcoming, possibly the medical examination is not carried out with the same thoroughness in women as in men. In this connection it must be borne in mind that about 6 per cent. of the deaths of

women arises from diseases of the breast or uterus, *i.e.*, organs which are very likely to be passed over in examination for assurance as ordinarily carried out. During the child-bearing period women are at a disadvantage as compared with men, but about the fiftieth year they enjoy an assured vital superiority over men. Whether this superiority will continue if women are subjected to the strain of business life yet remains to be seen.

Child-bearing.—As regards the risk of child-bearing, Dr. Matthews Duncan's statistics show that it is much greater in primiparæ than in multiparæ, the death rate being 1 in 74 in the former against 1 in 123 in the latter. It is therefore not advisable to recommend for assurance a woman who is pregnant for the first time, until after her safe confinement. The rate of mortality rises again after repeated confinements, *i.e.*, eight or nine. Many authorities advise that an addition should be made to the premium in female lives during the period of child-bearing, to be remitted afterwards. The history of repeated miscarriages, of puerperal hæmorrhage, and of eclampsia, requires rejection, as does also any pelvic deformity which has necessitated obstetrical operations in the past.

Rickets—A disease which is of comparatively little importance in the case of male applicants for assurance, is a very serious matter in women during the child-bearing age. Hence the signs of

marked rickets should suggest the existence of pelvic deformity, and consequent rejection of the applicant, if she is still within the child-bearing period.

Tuberculosis.—A family history of tuberculosis is more dangerous in the case of female lives than in males, on account of the additional risk of consumption attacking them after parturition.

Diseases of Pelvic Viscera.—Women who have suffered from pelvic inflammation, metritis, or disease of the ovaries, are not eligible for assurance, at all events until after the menopause. Applicants upon whom ovariectomy has been successfully performed may be accepted after some years.

Insanity.—The history of puerperal insanity has not the adverse effect of other forms of insanity, as recovery takes place in upwards of 70 per cent. of the cases, and a fatal termination does not occur in more than about 8 per cent. In the absence of a family history of insanity, a woman might be taken for assurance who had suffered from puerperal insanity, with a considerable addition, if she were still within the child-bearing period, but at the ordinary rate after the menopause.

Height and Weight.—The table of heights and weights given on page 31 is approximately near enough for women. As a rule, however, women weigh rather less than men up to 5 feet 7 inches. If they attain a greater height than this, their weight may even exceed that of men. It

must be remembered that after the cessation of the catamenia women tend to put on flesh much more commonly than men of the same age.

Albuminuria.—In testing the urine of women, the possibility of traces of albumen being due to a leucorrhoeal discharge must be remembered.

SELECTION OF AN OFFICE.

Form of Policy.—To no class of the community is Life Assurance more important than to the general practitioner; as a rule, he has nothing but his own exertions on which to depend, and not infrequently he has had to contract a loan in order to make a start. Moreover, the feeling of the community at large is so much in favour of employing a married doctor, that interest and inclination will probably induce him to marry early. All these are reasons why he should assure his life. But he can hardly expect to be taken on more favourable terms than the general bulk of the population, as statistics show that the medical profession compares unfavourably, as regards the expectation of life, with other professions; in fact, it takes quite a high place in the table of comparative mortality. Having agreed, then, that there are special reasons for medical men to assure, it remains to determine the most suitable *form of policy* for their varying needs, and the office to which they should apply. At the commencement of a medical man's career he is likely to be

considerably hampered as regards means; it is therefore advisable that the premium paid should be the lowest compatible with the choice of a safe office. One way of meeting the difficulty adopted by some offices is the *Half Premium system*. By this plan half the premium is paid during the first five years; at the end of this the full premium, plus a sum sufficient to cover the deficiency on the first five years. The following figures, taken from the prospectus of one of the leading companies, will explain the matter better than any verbal description. Supposing a man of twenty-five wishes to assure £100 at death with profits, the premium for the first five years would be £1 2s. 6d.; and after that time, for the remainder of life, £2 12s. 3d., as against £2 8s. 1d. for an ordinary whole life policy with profits.

The plan adopted by another office is that of the *Reduced Annual Premium*, under which the assured is called upon to pay only four-fifths of the ordinary annual premium. The remaining one-fifth is allowed to remain as a debt on the policy at 5 per cent. interest, to be discharged in whole or in part, as circumstances will admit, by allotments of bonus, such allotments being precisely the same as if the full premium had throughout been paid.

A third plan is the *Deferred Profit tables*, under which the benefit of a low premium is secured with ultimate good profits after the average duration of life.

By taking out policies of the above described character, a medical man may make provision for the £500 or £1000 which he requires in starting practice, or when he marries; but there comes a time for most men when they are in a position to make a more ample provision for the future.

Three classes of assurance are becoming increasingly popular, viz., *Policies in which the premiums are distributed* over a limited number of years; *Endowment Assurances*; and *Investment Policies*.

In the first class it can be arranged to pay the premium for a limited number of years, and then to cease, the policy being payable at death. This is an excellent plan for a man in good practice who wishes to assure to the best advantage, and who realizes that as his children grow up his expenses will increase, and that it will be a great relief if he can pay off the premium in a fixed number of years. Naturally, the payments are heavy. At the age of thirty the premium for £100 in eleven payments amounts to £4 12s. 10d.; in twenty-two payments, £2 19s. 1d.; in twenty-eight payments, £2 9s. 3d. (in all three cases the profits are deferred) as against £2 13s. 5d. for a whole life policy; but then the assurer will have the satisfaction of knowing that at the end of eleven, twenty-two, or twenty-eight years his payments cease.

If the medical man has no family, or has already provided for them, the *Endowment Plan*

of assurance offers a ready method of making provision for old age, or for a time when there is a probability of a diminution in professional receipts. For a man of thirty, who wishes to secure £100 with profits at the age of sixty-five, or previous death, the premium is £3 2s. 2d. This method of assurance is being largely adopted. It has two great advantages: one is, that the number of payments is limited; the second is that the assured, if he lives to the stated age, will have the disposal of the money, so that if he should by chance be in necessitous circumstances, he would have something to fall back on.

Lastly, the *Investment Policy* deserves attention. This is a system under which a limited number of premiums is paid, and every premium secures a fixed and definite benefit (according to table), so that the payments may be discontinued at any time without forfeiture.

Choice of Office.—To give advice as to the choice of an office is a matter of some delicacy. It may at once be frankly stated that all the offices enumerated on pages 66-69 have their warm adherents, and it would consequently be impossible to recommend any particular office without doing grave injustice to the others. The accounts which, under the provisions of the Life Assurance Companies' Acts, all life assurance institutions in the United Kingdom are compelled to issue, furnish a ready means of forming a fairly accurate

estimate of the financial status of each office. But these accounts, although very simple to those accustomed to them, are of little use to men who have no experience in examining and comparing statements of this description. In the annual "Revenue Account," however, will be found a statement of the amount expended for "Management," "Commission," etc. The total of these items, when compared with the *premium income* of the year, will shew the actual cost of carrying on the business, or the *expense ratio*, and this is one of the most important points to be considered in estimating the relative merits of life assurance offices. Two great divisions of assurance offices may be made, *viz.*, the Mutual and the Proprietary. The tendency at the present day is certainly in favour of the former; nevertheless, the latter possess an element of stability in the shareholders' capital, which is wanting in the former. On the other hand, in the Mutual offices, as there is no shareholders' capital requiring interest, the assured receive the whole of the profits; so that in regard to these two classes there is something to be said in favour of each. Most men will solve the difficulty, as to choosing the best office, by not putting all their eggs into one basket, but will distribute their assurances over two or more offices.

One assurance society, which occupies an unique position in relation to the medical profession, may

be mentioned by name; this is the Medical, Sickness, Annuity and Life Assurance Society, which is an assurance company against sickness and accidents, and provision can also be made for life assurance and annuity. Membership of the society is limited to registered members of the medical profession and licentiates of dental surgery residing in the United Kingdom. For an annual payment of £6 7s. a man of twenty-five can secure £4 4s. per week during incapacity, whether caused by sickness or accident. The full amount of sick pay is payable for the first six months of protracted illness, and one-half the full sick pay for the remainder of the same attack. All sick pay and premiums cease at age sixty-five. This is a mutual society started by medical men for medical men; it is most economically and efficiently managed, the expense of management amounting to somewhat less than 5 per cent. of the premium income; it therefore deserves the warmest support of the medical profession. It has already proved of the greatest benefit to a large number of members, and much anxiety and distress would be prevented if all men engaged in general practice joined the Society.

And here it may not be out of place to direct attention to the Society for Relief of Widows and Orphans of Medical Men. This society occupies a position intermediate between that of an assurance company and a charitable institution. Any

person duly registered under the Medical Act, and resident within a radius of twenty miles from Charing Cross, is qualified to be proposed for election as a member of the society. The widow of a member who has no certain income or provision exceeding the yearly value of £80, is eligible to receive such relief from the Society as the Court of Directors shall determine. The maximum allowance is £50 a year for the widow, and £12 a year for each child under sixteen years of age. The annual subscription is £2 2s.

FORM FOR MEDICAL EXAMINATION.

CONFIDENTIAL.

You are particularly requested not to give the Applicant any information whatever
as to the result of your examination.

MEDICAL EXAMINER'S REPORT FOR LIFE ASSURANCE.

INFORMATION TO BE OBTAINED FROM APPLICANT.

I. Name	Age next Birthday ..		
Occupation ..	Single or Married ..		
		DEAD.	
		Ages.	Cause of Death.
FATHER.. ..	State of Health.		
MOTHER ..			
BROTHERS ..			
SISTERS.. ..			

The Medical Examiner is particularly requested to obtain precise information as to the Cause of each death. Such terms as "Child-birth," "Dropsy," "Natural Causes," "Change of Life," etc., should be avoided.

- II. Have any of your near relations *suffered from cancer, consumption, gout, or insanity*? If so, give particulars.
- III. What is the present and general state of your Health?
- IV. From what Diseases, and from whom have you required professional assistance? When were you last ill?
- V. Have you suffered, and if so, how often and when, from
- (a) Giddiness, fits, paralysis, insanity?
- (b) Blood-spitting, asthma, or any affection of the lungs?
- (c) Faintness, palpitation, dropsy?
- (d) Jaundice, rupture, piles, or fistula?
- (e) Any affection of the kidneys or bladder, or from stricture?
- (f) Gout, rheumatism, fever or ague?
- (g) Deafness, or discharge from the ear?
- (h) Varicose veins, tumour or accident?
- VI. Have you resided in a hot climate? If so, state where.
- VII. Are your Habits active or sedentary?
- VIII. What quantity and kind of Stimulants do you usually take daily?
- IX. Are there any Special Circumstances known to yourself which might affect the risk of an Assurance on your life?

X. In the case of a Female:—

Past and present state of uterine functions.

Nature and number of confinements.

Date

189

(Signature of Applicant)

in presence of

(Signature of Examiner)

CONFIDENTIAL REPORT BY MEDICAL EXAMINER

on the life of

1. What personal and professional knowledge have you of the Applicant?
2. General Appearance and Development.
3. Does his appearance correspond with the stated Age?
Is there any evidence of strumous disease?
4. From the appearance of the Applicant do you suspect past or present Intemperance?

5. MEASUREMENTS.

Naked Chest at nipple line (in males).
Abdomen at umbilicus (in males).

6. CIRCULATION.

Are the sounds of the heart normal?
Is the heart natural in size, position and impulse?
What is the condition of the Blood Vessels?
Pulse.

7. RESPIRATION.

Is the chest well formed, and does it expand fully and equally on inspiration?
Do you, as a result of physical examination, detect any signs of consumption or other diseases of the organs of respiration?

Height	Weight	{ Stationary Increasing Decreasing
In Inspiration	In expiration	
Rate		Quality

8.

DIGESTION.

What is the result of your examination of the abdomen and its viscera?

State of tongue and of digestive functions.

If a Hernia be present, state its nature and whether a properly adjusted truss is worn.

9.

GENITO-URINARY SYSTEM.

Is there any evidence of disease of the bladder, or kidney, or of stricture or syphilis (past or present)?

What is the result of your examination of the Urine?

Sp. grav.

Sugar

Reaction

Albumen

10.

NERVOUS SYSTEM.

Is there any evidence of disease of the brain, spinal cord, or nerves.

11. Is there any additional statement you think it desirable to make concerning the Proposal?

Do you consider this Life as First Class, Average, Doubtful, or Bad?

Date

*Signature of Examiner**Where Examined*

DR. LESLIE OGILVIE'S TABLE OF THE CLASSIFICATION OF
ASSURANCE LIVES, WITH ILLUSTRATIVE TYPES.

		Ai	A	A	B	B	B	C	C	C	D	D	D	D	D	D
PERSONAL HISTORY	20%	+	+	-	-	+	++	-	+	+	=	+	+	+	++	++
FAMILY HISTORY	20%	+	-	++	-	+	-	-	+	++	++	+	+	+	++	++
PHYSICAL EXAMINATION	30%	+	+	+	+	=	+	+	-	-	=	+	+	+	+	+
PERSONAL APPEARANCE	20%	+	++	+	++	+	-	+	-	=	+	+	+	+	+	+
ENVIRONMENT	10%	+	+	+	+	++	+	+	+	+	+	+	+	+	+	+
		(ORDINARY RATES)			(SMALL EXTRA PREMIUM)			SUBSTANTIAL EXTRA PREMIUM)			(NOT ELIGIBLE)					

EXPLANATORY NOTE OF TABLE

The *plus* and *minus* signs indicate the value attached to the information recorded under each head in any individual case.

The *plus* sign indicates that this information is averagely favourable.

The *double plus* that it is above the average.

The *minus* that it is below the average.

The *double minus* that it is considerably below the average.

The *treble minus* that the record is extremely bad.

In *Class A* nothing less than a plus is recorded under each head.

In *Class A* a minus under one head is counterbalanced by a double plus under another head

In *Class B* there is one minus not counterbalanced.

In *Class C* there are two minus records not counterbalanced.

5 In *Class D* there are three minus signs not counterbalanced, or there is a treble minus under one head.

INDEX TO LIFE ASSURANCE OFFICES.

A, when Established; B, C, D, Annual Premiums to Insure £100 on death with Profits, at the age of 30, 40, and 50; E, Assurance and Annuity Funds, exclusive of Paid-up Capital. M, Mutual Offices; P, Proprietary Offices.

Those marked with an asterisk (*) in the E column have not sent revised figures for 1900.

TITLE, &C., OF OFFICE.	A	B	C	D	E
Abstainers and General, Life and Accident, Carrs Lane, Birmingham. <i>Sec.</i> , R. A. Craig, A.I.A. P	1883	40/11	55/10	82/3	£ 160,000
Alliance, Fire and Life, Bartholomew Lane, E.C. <i>Gen. Man.</i> , Robert Lewis P	1824	48/9	64/5	90/9	3,361,114
Atlas, Fire & Life, 92, Cheapside, E.C. <i>Act.</i> , Robert Cross. <i>Sub. Man.</i> , A.W. Yeo. <i>Gen. Man.</i> , Saml. J. Pipkin. P	1808	49/3	63/7	88/8	1,646,211
British Empire, Mutual Life, 4 & 5, King William Street, E.C. <i>Gen. Man.</i> , G. H. Ryan M	1847	47/2	63/9	92/3	2,850,000
British Equitable, Life, Queen Street Place, E.C. <i>Man.</i> , J. W. Fairey P	1854	49/-	66/-	94/3	1,749,971
British Workman's and General, Life and Endowments, Broad Street Corner, Birmingham. <i>Chairman</i> , F.T. Jefferson, J.P. <i>Sec.</i> , S. J. Port, F.I.S. P	1866	46/2	62/1	89/6	467,018
Caledonian, Fire and Life, 19, George Street, Edinburgh. <i>Man.</i> , D. Deuchar. London Office, 82, King William Street, E.C. P	1805	48/9	64/6	88/6	1,764,838
City of Glasgow, Life, 30, Renfield Street, Glasgow. <i>Gen. Man.</i> , William S. Nicol. London Office, 12, King William Street, E.C. <i>Lon. Man.</i> , James D. Milne P	1838	49/6	64/6	89/10	2,523,348
Clergy Mutual, Life, 2 & 3, Sanctuary, Westminster. <i>Act.</i> , F. B. Wyatt. <i>Sec.</i> , G. H. Hodgson M	1829	46/4	62/2	87/4	4,179,013
Clerical, Medical and General, Life, 15, St. James' Square, and Mansion House Buildings. <i>Act.</i> , W. J. H. Whittall P	1824	48/7	66/9	96/3	3,675,357
Colonial Mutual, Life and Annuity, 33, Poultry. <i>Man.</i> , Edward W. Browne M	1873	47/4	63/2	89/9	2,385,266
Commercial Union, Fire, Life and Marine, 24, 25, and 26, Cornhill, E.C. <i>Act.</i> , T. E. Young, B.A. <i>Assist. Actuary</i> , A. D. L. Turnbull P	1861	49/5	64/2	87/8	2,190,064
Co-operative, Life, Personal Accident, Fire & Fidelity, Long Millgate, Manchester. <i>Sec.</i> , James Odgers P	1867	45/8	61/5	88/4	23,888
Eagle, Life, 79, Pall Mall, S.W. <i>Gen. Man.</i> and <i>Sec.</i> , Geo. R. Jellicoe P	1807	50/8	65/5	91/4	2,458,212
Economic, Life, 6, New Bridge Street, Blackfriars. <i>Act.</i> and <i>Sec.</i> , G. Todd, M.A., F.I.A. M	1823	44/4	59/6	85/5	4,090,159
Edinburgh, Life and Annuities, 22, George Street, Edinburgh. <i>Man.</i> , G.M. Low, F.F.A., F.I.A. <i>Sec.</i> , A. Hewat, F.F.A., F.I.A. London Office, 11, King William Street, E.C. <i>Sec.</i> , Frank Griffith P	1823	47/7	63/2	89/-	3,403,761
English and Scottish Law, Life, Annuity, Endowment, and Loan, 12, Waterloo Place, S.W. <i>Gen. Man.</i> , Albert G. Scott P	1839	49/6	65/2	90/11	2,344,906
Equitable Life Assurance Society, Mansion House Street, E.C. <i>Act.</i> , H. W. Manly, F.I.A. M	1762	53/5	67/11	90/7	4,681,088
Equity and Law, Life, 18, Lincoln's Inn Fields, W.C. <i>Act.</i> , A. F. Burridge, F.I.A. P	1844	48/10	64/6	90/9	3,546,993
Friends' Provident, Life, Annuities, &c., Bradford, Yorkshire. <i>Act.</i> and <i>Sec.</i> , John Bell Tennant. M	1832	45/9	58/1	79/3	2,770,000
General Life, 103, Cannon Street, E.C. <i>Man.</i> and <i>Sec.</i> , John Robert Freeman. P	1837	49/10	65/4	92/8	1,727,923

A, when Established; B, C, D, Annual Premiums to Insure £100 on death, with Profits, at the age of 30, 40 and 50; E, Assurance and Annuity Funds, exclusive of Paid-up Capital. M, Mutual Offices; P, Proprietary Offices.

TITLE, &C., OF OFFICE.	A	B	C	D	E
Gresham, Life, St. Mildred's House, E.C. <i>Man.</i> and <i>Sec.</i> , James H. Scott .. P	1848	49/-	65/8	94/3	£ 7,223,205
Guardian, Fire and Life, 11, Lombard St., E.C., and 21, Fleet Street. <i>Sec.</i> , T. G. C. Browne .. P	1821	48/10	64/6	89/3	3,024,000
Hand-in-Hand, Fire, Life and Annuities, 26, New Bridge St., E.C. <i>Sec.</i> , H. H. Ray .. M	1696	53/7	69/10	96/2	2,908,995
Imperial, Life, 1, Old Broad Street, and 22, Pall Mall. <i>Gen. Man. and Act.</i> , J. Chisholm, F.I.A. <i>Sub. Man. and Joint Act.</i> , Fredk. Bell, F.I.A. .. P	1820	46/11	62/1	87/5	2,394,379
Lancashire, Life, Fire & Employers' Liability, Exchange St., Manchester. <i>Gen. Man.</i> Digby Johnson, London Office, 14, King William St., E.C. <i>Sec.</i> , John P. Read .. P	1852	48/6	63/6	90/6	1,030,168
Law Life, 187, Fleet Street. <i>Man.</i> , E. H. Holt. <i>Act.</i> , A. B. Adlard .. P	1823	49/4	64/10	91/-	4,050,296
Law Union & Crown, Life, Fire, Accident & Annuities, 126 Chancery Lane. <i>Gen. Man.</i> , A. Mackay .. P	1825	48/4	64/-	89/10	4,158,519
Legal and General Life, 10, Fleet Street, E.C. <i>Act.</i> and <i>Man.</i> , E. Colquhoun .. P	1836	50/9	65/11	90/9	3,350,000
Life Association of Scotland, 82, Prince's Street, Edinburgh. <i>Man.</i> , John Turnbull Smith. <i>Sec.</i> , J. Sharp. London Office, 5, Lombard Street. <i>Sec.</i> , J. C. Wardrop .. P	1838	50/-	65/4	93/4	4,96,676
Liverpool and London and Globe, Fire, Life and Annuities, 1 Dale St., Liverpool. <i>Gen. Man. & Sec.</i> , John M. Dove. London Office, 7, Cornhill, E.C. <i>Act. & Rest. Sec.</i> , A. Hendriks, F.I.A. .. P	1836	49/3	65/6	91/3	5,354,351
London and Lancashire, Life, 66 & 67, Cornhill, E.C. <i>Genl. Man. & Act.</i> , W. P. Clirehugh. <i>Sec.</i> , G. W. Mantering .. P	1862	46/10	62/4	86/10	1,411,108
London Assurance Corporation, Fire, Life and Marine, 7, Royal Exchange. <i>Man. of Life Dept.</i> , James Clunes. <i>Act.</i> , Geo. King .. P	1720	49/6	64/11	91/5	2,150,472
London, Edinburgh and Glasgow, Life, Industrial, and Accidents, Farringdon Street, E.C. <i>Sec.</i> , T. V. Cowling. <i>Gen. Man.</i> , Thos. Neill .. P	1881	48/11	64/7	92/-	272,118
London Life Association, Lim., 81, King William St., E.C. <i>Act. and Sec.</i> , C. D. Higham, F.I.A. .. M	1806	60/4	78/10	108/4	4,560,570
Marine and General Mutual, Life and Marine, 14, Leadenhall St., E.C. <i>Act. and Sec.</i> , S. Day, F.I.A. .. M	1852	48/10	65/11	91/11	995,538
Metropolitan Life, 13, Moorgate St., E.C. <i>Act. and Sec.</i> , L. M. Simon. .. M	1835	49/9	66/4	92/-	2,024,049
National Assurance of Ireland, Fire, Life, and Annuities, 3, College Green, Dublin. London Office, 47, Cornhill, E.C. .. P	1822	48/7	64/3	91/7	360,762
National Guardian, Life, 21, New Oxford St. W.C. <i>Man. Dir.</i> , Jas. Turnbull. <i>Sec.</i> , Chas. Hugonin .. P	1865	48/6	64/8	86/8	16,363
National Mutual Life, 39, King Street, Cheapside, <i>Act. and Man.</i> , Geoffrey Marks, F.I.A. <i>Joint Secs.</i> , H. G. Rowsell and H. J. Lockwood. <i>Asst. Act.</i> , A. Levine, M.A., F.I.A. .. M	1830	48/4	63/7	89/6	2,600,428
National Provident, 48, Gracechurch Street, E.C. <i>Act. and Sec.</i> , Arthur Smither .. M	1835	50/2	66/3	91/1	5,400,000
New York Life, Trafalgar Buildings, Trafalgar Square, London, W.C. <i>Gen. Man.</i> , C. Seton Lindsay. <i>Sec.</i> , Wm. R. Collinson .. P	1845	48/9	66/-	96/11	48,652,335
North British & Mercantile, Fire, Life & Annuities, 61, Threadneedle Street, E.C., and 64, Princes Street, Edinburgh. <i>Life Man. and Act.</i> , London H. Cockburn, <i>Sec.</i> , F. W. Lance. .. P	1809	49/10	66/1	91/11	10,990,405

A, when Established; B, C, D, Annual Premiums to Insure £100 on death, with Profits, at the age of 30, 40 and 50; E, Assurance and Annuity Funds, exclusive of Paid-up Capital. M, Mutual Offices; P, Proprietary Offices.

TITLE, &C., OF OFFICE.	A	B	C	D	E
Northern Assurance, 1, Moorgate St., E.C. <i>Gen. Man.</i> , H. E. Wilson P	1836	49/-	64/8	90/10	£ 3,687,482
Norwich Union, Life, Norwich. <i>Sec.</i> , J. J. W. Deuchar. London Office, 50, Fleet Street, E.C.	1808	45/8	59/6	85/3	3,893,357
Patriotic Life, Fire, Employers' Liability & Fidelity Guarantee, 9, College Green, Dublin. <i>Man.</i> , B. H. O'Reilly. <i>Act.</i> , Saml. Hunter. London Office, 69, King William Street, E.C. <i>Man.</i> , Charles E. Strong P	1824	48/8	64/5	90/4	193,612
Pearl, Life, London Bridge, City, E.C. <i>Man.</i> , P. J. Foley P	1864	40/-	65/-	92 -	971,278
Pelican, Life, 70, Lombard Street, 57, Charing Cross, <i>Gen. Man.</i> , James Sorley, F.I.A., F.R.S.E. P	1797	48/11	64/9	91/7	1,374,357
Provident Clerks, Life and Benevolent Fund, 27 and 29, Moorgate Street, E.C. <i>Sec.</i> , John E. Gwyer.. .. . M	1840	46/4	62/8	92/2	2,400,000
Provident, Life, 50, Regent St. <i>Sec.</i> , H. W. Andras P	1806	50/2	66/4	92/10	3,220,747
Prudential (Ordinary), Life, Holborn Bars. <i>Sec.</i> , D. W. Stable. P	1848	49/6	65/11	91/11	19,150,021
Refuge, Life, Oxford Street, Manchester. <i>Joint Mans.</i> , Jas. Proctor & R. Wm. Green. London Office, 29, New Bridge Street P	1864	49/3	65/9	91/9	1,525,956
Rock, Life Annuity, Capital in Redemption, Workmen's Compensation & Accident, 15, New Bridge Street, E.C. <i>Act.</i> , G. S. Crisford, F.I.A. P	1806	42/5	55/11	81/2	2,237,175
Royal, Fire, Life and Annuities, Royal Insurance Buildings, Liverpool. <i>Man.</i> , Chas. Alcock. London Offices, Lombard St. <i>Sec.</i> , Jno. H. Croft P	1845	49/9	64/1	88/3	5,956,470
Royal Exchange Assurance, Fire, Life, Annuities, &c., Royal Exchange, and 29, Pall Mall. <i>Act.</i> , H. E. Nightingale, F.I.A. P	1720	48/11	65/-	92/7	2,609,238
Sceptre, Life and Endowments, 40, Finsbury Pavement. E.C. <i>Sec.</i> , J. G. Phillips.. .. . P	1864	48/8	64/8	90/6	807,409
Scottish Amicable, Life, St. Vincent Place, Glasgow. <i>Man.</i> , N. B. Gunn. <i>Sec.</i> , W. G. Spens M	1826	51/9	66/3	90/1	4,145,788
Scottish Equitable, Life, 28, St. Andrew Square, Edinburgh. <i>Man.</i> , T. B. Sprague, M.A., LL.D. <i>Sec.</i> , J. J. McLauchlan. London Office, 19, King William Street, E.C. <i>Sec.</i> , F. R. Leftwich M	1831	50/3	65/5	90/9	4,268,035
Scottish Imperial, Life, 183, West George Street, Glasgow. <i>Man. and Act.</i> , James Stirling, F.F.A. London Office, 15, King William Street, E.C. P	1865	46/7	63/5	91/7	5,908,7
Scottish, Life, Accident and Annuities, 19, St. Andrew Square, Edinburgh. <i>Man.</i> , David Paulin, F.R.S.E. London Office, 13, Clements Lane, King William Street, E.C. <i>Sec.</i> , George Struthers P	1881	49/5	64/6	90/5	522,001
Scottish Metropolitan, Life, 25, St. Andrew Square, Edinburgh. <i>Man.</i> , Wm. G. Bloxson. London Office, 8, King Street. E.C. <i>Man.</i> , H. E. Marriott P	1876	40/8	54/7	79/7	42,674
Scottish Provident, Life and Annuities, 6, St. Andrew Square, Edinburgh. <i>Man.</i> , J. G. Watson. <i>Secs.</i> , J. Lamb and H. R. Cockburn. London Office, 17, King William Street, E.C. <i>Sec.</i> , W. M. Monilaws M	1837	41/6	54/9	81/7	11,500,000
Scottish Temperance, Life and Accident, 105, St. Vincent St, Glasgow. <i>Man.</i> , Adam K. Rodger. London Office, 96, Queen Street, Cheapside. <i>Man.</i> , W. A. Bowie P	1883	48/6	63/9	89/10	511,052
Scottish Union and National, Fire, Life, and Annuities, 35, St. Andrew Square, Edinburgh. <i>Sec.</i> , J. K. Macdonald. London Office, 3, King William Street, E.C. <i>Sec.</i> , William Porteous.. .. . P	1824	50/-	65 -	90/-	4,785,46

A, When Established; B, C, D, Annual Premiums to Insure £100 on death with Profits, at the age of 30, 40 and 50; E, Assurance and Annuity Funds, exclusive of Paid-up Capital. M, Mutual Offices; P, Proprietary Offices.

TITLE, &C., OF OFFICE.	A	B	C	D	E
Scottish Widows' Fund, Life and Survivorship, 9, St. Andrew Square, Edinburgh. <i>Man. & Act.</i> , A. H. Turnbull. <i>Sec.</i> , J. J. P. Anderson. London Office, 28, Cornhill, E.C. <i>Sec.</i> , J. W. Miller M	1815	51/9	66/3	90/7	15,500,000
Standard Life, 3, George Street, Edinburgh. <i>Man. and Act.</i> , S. C. Thomson. London Offices, 83, King William Street, and 3 Pall Mall East. <i>Sec.</i> , J. H. W. Rolland P	1825	48/11	64/5	89/-	9,115,310
Star, Life, Annuities, Endowments, 32, Moorgate Street, City. <i>Act. and Sec.</i> , H. G. Hobson P	1843	48/9	64/11	90/6	4,823,287
Sun, Life, 63, Threadneedle Street, E.C. <i>Act.</i> , R. Sewell. <i>Sec. & Gen. Man.</i> , E. Linnell. P	1810	49/2	66/6	94/2	4,570,000
Union, Fire and Life, Cornhill, and Baker Street. <i>Sec.</i> , C. Darrell P	1714	48/9	64/6	90/10	2,443,580
United Kent, Life and Annuities, High Street, Maidstone. <i>Gen. Man.</i> , Walter L. Seyfang. London Office, 124, Cannon St., E.C. <i>Man.</i> , A. Wallis P	1824	49/8	64/3	90/5	579,107
United Kingdom Temp., &c., Life, 1, Adelaide Place, London Bridge. <i>Sec.</i> , Johnson Brooks M	1840	48/10	64/11	10/6	7,000,000
Universal, Life, 1, King William Street, E.C. <i>Act. and Sec.</i> , G. F. Hardy, F.I.A. P	1834	49/-	65/-	92/3	*772,139
University, Life, 25, Pall Mall, S. W. <i>Act. & Sec.</i> , R. Todhunter, M.A. P	1825	49/11	65/4	91/5	1,002,073
Victoria, Life and Endowment, Memorial Hall Buildings, Farringdon Street, E.C. <i>Sec.</i> , Arthur J. Cook, A.I.A. M	1860	49/3	65/7	93/-	99,254
Wesleyan and General, Life, Annuities, Sickness, Corporation St., Birmingham. <i>Gen. Man.</i> , R. A. Hunt, F.S.S., A.I.A. London Office, 18, New Bridge Street, E.C. M	1841	48/9	66/6	96/3	495,787
Westminster and General, Life, 28, King St., Covent Garden, W.C. <i>Act.</i> , Ernest Woods, F.I.A. P	1836	48/10	65/-	90/6	613,538
Yorkshire, Fire and Life, St. Helen's Square, York. <i>Sec.</i> , J. A. Cunninghame. London Office, 2, Bank Buildings, Princes Street. <i>Sec.</i> , James Hamilton. <i>Further particulars as to a new Endowment Scheme, combining a large amount of assurance with a low premium, supplied on application</i> P	1824	49/1	64/9	91/7	897,386

Medical Sickness and Accident, 33, Chancery Lane, W.C. *Sec.*, F. Addiscott, F.I.A., secure to registered members of the Med. Prof., and Licentiates or Dental Surgery in United Kingdom, a weekly allowance during incapacity from sickness or accident. Mutual. Established 1884. Assurance and Annuity Funds £140,000.



INDEX.

	PAGE		PAGE
ABSTAINERS, total -	47	DEAFNESS -	33
Age, apparent -	33	Death, sudden, in over-	
— in relation to phthisis -	13	weights -	32
Albumen, test for -	40	Deferred profit tables -	53
Albuminuria -	41	Degenerative changes -	34
— in females -	52	Digestion -	38
Alcoholic parents, child of -	11	Dropsy -	27
Alcoholism -	39	Drunkards, reformed -	46
Angina, gouty -	21	Dysentery, history of -	47
— pectoris, pulse in -	38		
Aortic disease -	36	EARS, discharge from -	33
Asthma -	25	Eclampsia -	50
— death from -	11, 12	Eczema -	44
BAKERS -	46	Embolism -	44
Blindness -	33	Emphysema -	25, 34
Breaking-down age -	10	Endocarditis, acute -	36
Breast, diseases of -	50	Environment -	44
Bulbar paralysis -	26, 39	Epilepsy -	25
Butchers -	46	Epistaxis -	39
		Exercise -	47
CANCER, association with		Expectation of life -	48
phthisis -	17		
— family history of -	14	FACIAL palsy -	26
— female liability to -	16	Female liability to cancer -	16
— heredity of -	16	— lives -	49
— increased mortality of -	15	— — and phthisis -	14
Cerebral hæmorrhage -	19	Females, tuberculosis in -	51
Chest, circumference of -	31, 34	Fever, malarial -	20
— examination of -	34	— personal history of -	20
Child-bearing -	14	— scarlet -	20
— risk of -	45, 50	Fistula -	27
Child-bed, death after -	11, 12		
Circumference of chest -	31, 34	GALL-STONE colic -	27
Cirrhosis of liver -	27	Glands, strumous -	25
Classification of assurance		Glycosuria -	43
lives -	64	— gouty -	21
Colic, gall-stone -	27	Gonorrhœa -	28
Complexion -	32	Gout, family history of -	17
Cyclic albuminuria -	41	— personal " " -	20

	PAGE		PAGE
HABITS - - - -	46	Medical Sicknes Assurance Society - - -	57
Hæmaturia - - -	28	Metritis - - - -	51
Hæmoptysis, history of -	24	Miscarriage - - -	50
Hæmorrhage, cerebral -	19	Mitral disease - - -	37
Heart, examination of -	35	Murmurs, cardiac - -	35
Height and weight, table of -	31	Mutual Offices - - -	56
— in females - - - -	51		
Hemiplegia - - - -	26, 39	NEPHRITIS, scarlatinal -	27
Hernia - - - - -	39	Nervous affections, family history of - - -	19
History, family - - -	10	— system - - - - -	39
— personal - - - - -	19		
Hoarseness - - - -	33	OCCUPATION - - - -	45
Hot climates - - - -	47	Office, Mutual - - - -	56
Hufeland's portrait of a man destined to long life	29	— Proprietary - - -	56
		— selection of - - -	52, 55
INDIA, life in - - - -	47	Offices, life assurance, list of	66
Infectious diseases, proclivity to - - - -	10	Ogilvie's table of classification of lives - - -	64
Insanity, family history of -	18	Ovariectomy - - - -	51
— personal - - - - -	25		
— puerperal - - - - -	51	PAGET's disease - - -	44
		Paralysis - - - - -	26
JAUNDICE - - - - -	26, 39	Paraplegia - - - -	26, 39
		Pelvic viscera, diseases of	51
LARYNGEAL affections -	33	Phthisis - - - - -	34, 35
Laryngoscopic examination	33	— age in relation to - -	13
Life assurance offices, list of	66	— association with cancer	17
— expectation of - - -	48	— family history of - -	11
Limb, loss of - - - -	43	— and female lives - -	14
Liquor trade - - - -	46	— heredity of - - - -	13
Liver affections - - -	26	— personal history of -	24
— cirrhosis of - - - -	27	Piles, history of - - -	27, 39
Locomotor ataxy - - -	26, 33	Pleurisy, deformity caused by - - - - -	34
Long life, portrait of -	29	— history of - - - -	12, 24
		Plumbers - - - - -	46
MALARIA, exposure to -	39	Pneumonia, history of -	24
Malarial fever - - - -	20	Policy, endowment - -	10, 54
Malignant disease - - -	43	— form of - - - - -	52
Married <i>v.</i> single lives -	44	— Investment - - - -	54, 55
Medical Examiner's report	60	Pre-cancerous condition -	17
— men, assurance of - -	52	Pregnancy - - - - -	50
— — widows and orphans of - - - - -	57		

	PAGE		PAGE
Premium, half, system -	53	Sugar, test for -	40
— reduced annual -	53	Syphilis, curability of -	22
Present condition -	28	— early treatment of -	22
Proprietary Offices -	56	— history of -	21
Psoriasis -	44	— secondary symptoms -	23
Puerperal hæmorrhage -	50	— tertiary symptoms -	23
— insanity -	51	— visceral -	23
Pulse -	37	Syphilitic epilepsy -	25
Pupils -	33		
REPORT, Medical Examiner's	60	TREMOR of hand -	39
Residence -	47	Tubercular joint disease -	43
Rheumatism, acute	36, 37	Tuberculosis in females -	51
— family history of -	18		
— personal -	20	ULCERS -	44
Rickets -	50	Urinary organs -	40
Robustness, want of -	11	Urine, examination of -	40
Rupture -	39	Uterus, diseases of -	50
SCARLET fever -	20		
Sclerosis of nerve centres -	26	VALVULAR disease, origin	
Selection of an office -	52	of, as affecting prognosis	36
Skin affections -	44	Veins, varicose -	44
Social state of individual -	44		
Spleen -	39	WEIGHT, excessive -	32
Stone in kidney or bladder	28	— in females -	51
Stricture -	28	— light -	31
Strumous glands -	25	— standard -	31
		Widows and Orphans of	
		medical men -	57



MEDICAL WORKS

PUBLISHED BY JOHN WRIGHT & CO., BRISTOL.

8vo, Cloth; Richly Illustrated and with many Coloured Plates. 7/6 net.

THE MEDICAL ANNUAL: A Complete Work of Reference for Medical Practitioners. Combines the features of an Annual Retrospect with those of a Medical Encyclopædia. Each volume contains *entirely new matter.*

Second Edition. Small 8vo. With 200 Original Drawings, 2/6.

"FIRST-AID" TO THE INJURED AND SICK.

By F. J. WARWICK B.A., M.B., & A. C. TUNSTALL, M.D., F.R.C.S.

"The authors are both Volunteer Med. Staff Officers and know their subject. The book is simply written."—*Lancet*. "An excellent handbook . . . treats the subject more seriously and fully than the majority . . . To all teachers most useful, and to students may well serve as an advanced text-book."—*Brit. Med. Journ.*

2/- each, or 27/6 the Set of 16, with Nicked Head for Suspension.

LARGE SHEET ILLUSTRATIONS OF "FIRST-AID," Enlarged from the above, for use of Lecturers and Classes.

Ninth Edition. Pocket Size. 80 Illustrations. Cloth, 2/-.

ADOPTED BY THE ST. JOHN AMBULANCE ASSOCIATION.

ELEMENTARY BANDAGING AND SURGICAL DRESSING: With Directions for Treatment of Cases of Emergency. Mostly Condensed from "*Pye's Surgical Handicraft*." By WALTER PYE, F.R.C.S. Ninth Edition Revised and in part Re-written by THOS. CARWARDINE, M.S., F.R.C.S., Assist. Surg. Bristol. Roy. Infirm.

Reprint. Pocket size, limp covers. With numerous Illustrations. 2/-.

PRIMER OF THE ART OF MASSAGE (For Learners). By THOS. STRETCH DOWSE, M.D., F.R.C.P. ED.

Fourth Edition. Revised, and Greatly Enriched and Enlarged.

Complete with 93 Coloured and Stereoscopic Illustrations, and 222 Black and White Drawings, including Stereoscope } *net 17 6*
Or, Text alone, with over 200 Illustrations } *net 10 6*
Atlas alone, containing Stereoscope and 37 Plates (with 93 Coloured and Stereoscopic). and 13 Black and White Illustrations } *net 10 6*

DISEASES OF THE UPPER RESPIRATORY

TRACT: The Nose, Pharynx and Larynx, including the examination of the Ear. By P. WATSON WILLIAMS, M.D. Lond., Physician for Diseases of the Throat at the Bristol Royal Infirmary.

Crown 8vo. Boards. 2/- net.

DOCTOR AND PATIENT: HINTS TO BOTH. By

DR. ROBERT GERSUNY, Director and Principal Visiting Surgeon to the Rudolfinerhaus, Vienna. Translated, with the permission of the Author, by A. S. LEVETUS; with Preface by D. J. LEECH, M.D., F.R.C.S., Prof. of Pharmacology in the Owens College and Victoria University.

Large 8vo, about 400 pages. 6/-.

DISEASE OF INEBRIETY: From Alcohol, Opium, and other Narcotic Drugs. Its Etiology, Pathology, Treatment and Medico-Legal Relations. By the American Association for the Study and Cure of Inebriety.

MEDICAL WORKS

PUBLISHED BY JOHN WRIGHT & CO., BRISTOL.

*Second Edition. Pocket size, flexible Leather, gilt edges, round corners.
Price 5/- net, or interleaved for notes, 6/6 net.*

THE POCKET THERAPIST: AN AID TO MEMORY. Being a Concise Manual of Modern Treatment, for Students and Junior Practitioners: arranged Alphabetically for Ready Reference. By THOS. STRETCH DOWSE, M.D., F.R.C.P. Edin.

New and Fourth Edition. Illustrated with 264 Engravings. 10/6.

PYE'S SURGICAL HANDICRAFT: A Manual of Surgical Manipulations, Minor Surgery, etc. For the use of General Practitioners, House Surgeons, Students and General Dressers. By WALTER PYE, F.R.C.S. Revised, Edited, and partly Re-written by BERTRAM M. H. ROGERS, B.A., M.D., B.Ch. Oxon. With special chapters on AURAL AND DENTAL SURGERY, by Messrs. G. P. FIELD and SIDNEY SPOKES.

About 700 pages. Large 8vo. With over 500 Original Drawings by the Author. 10/6 net.

OPERATIVE AND PRACTICAL SURGERY: for Students and Practitioners. By THOMAS CARWARDINE, M.S. (Lond.), F.R.C.S.; Assistant Surgeon Bristol Royal Infirmary. With Special Chapters on the EYE, EAR AND TEETH, by Messrs. F. R. CROSS, W. H. HARSANT, and W. R. ACKLAND; on the NOSE AND LARYNX, by Dr. P. WATSON WILLIAMS; and SURGICAL BACTERIOLOGY, by Dr. J. O. SYMES.

8vo. Illustrated. 10/6 net.

THE SURGERY OF THE CHEST: For Students and Practitioners. By STEPHEN PAGET, M.A. Oxon, F.R.C.S., Surgeon to the West London Hospital and to the Metropolitan Hospital.

Second Edition. 8vo. Cloth. Illustrated. 4/- net.

URINARY SURGERY: For Students and Practitioners. By E. HURRY FENWICK, F.R.C.S., Surgeon to the London Hospital; Surgeon and Pathologist to St. Peter's Hospital for Urinary Diseases.

Copiously Illustrated with Original Drawings and Diagrams, some of which are Coloured. 10/6 net.

TESTS AND STUDIES OF THE OCULAR MUSCLES: By ERNEST E. MADDOX, M.D., F.R.C.S.E., Ophthalmic Surgeon to the Royal Victoria Hospital, Bournemouth; late Assistant Ophthalmic Surgeon to the Royal Infirmary, Edinburgh. Author of "Ophthalmological Prisms and the Decentering of Lenses."

Second Edition. 69 Illustrations. Cloth. 8vo. 4/6.

OPHTHALMOLOGICAL PRISMS and the Decentering of Lenses. A Practical Guide to the Uses, Numeration, and Construction of Prisms and Prismatic Combinations, and the Centering of Spectacle Lenses. By ERNEST E. MADDOX, M.D.

MEDICAL WORKS

PUBLISHED BY JOHN WRIGHT & CO., BRISTOL.

"GOLDEN RULES" SERIES IN MEDICINE AND SURGERY.

Waistcoat Pocket Size, Cloth. Price 1s. each.

I.—*Sixth Edition. Revised and Enlarged.*

GOLDEN RULES OF SURGICAL PRACTICE. By E. HURRY FENWICK, F.R.C.S., Surg. to London Hosp. and St Peter's Hosp. for Stone.

II.—*Third Edition. Reprint.*

GOLDEN RULES OF GYNÆCOLOGY. By S. JERVOIS AARONS, M.D., Registrar to Hosp. for Women, Soho.

III.—*Third Edition. Reprint.*

GOLDEN RULES OF OBSTETRIC PRACTICE. By W. E. FOTHERGILL, M.A., B.Sc., M.D.; Author of "*A Manual of Midwifery*," etc., etc.

IV.—*Third Edition. Reprint.*

GOLDEN RULES OF MEDICAL PRACTICE. By A. H. EVANS, M.D., B.S., F.R.C.S., formerly House Surg. Westminster Hosp.

V.—*Second Edition. Reprint.*

GOLDEN RULES OF PSYCHIATRY. By JAMES SHAW, M.D., Qu. Univ., Ireland; Author of "*Epitome of Mental Diseases*."

VI.—*Second Edition. Reprint.*

GOLDEN RULES OF PHYSIOLOGY. By I. WALKER HALL, M.B., Ch.B. (Vict.) and Senr. Demonstr. of Phys. in Owens Coll., and J. ACWORTH MENZIES, M.D., C.M. (Ed.), late Senr. Demonstr. of Phys. in the Owens Coll.

VII.—*Second Edition. Reprint.*

GOLDEN RULES OF OPHTHALMIC PRACTICE. By GUSTAVUS HARTRIDGE, F.R.C.S., Senr. Surg. Royal Westm. Ophth. Hosp.; Ophth. Surg. and Lect. Westm. Hosp.

VIII.

GOLDEN RULES OF SKIN PRACTICE. By DAVID WALSH, M.D. Edin., Hon. Physician Western Skin Hospital, London, W.

IX.

GOLDEN RULES OF AURAL AND NASAL PRACTICE. By PHILIP R. W. DE SANTI, F.R.C.S., Senr. Surg. to Out-Patients Westm. Hosp., Aural Surg. Westm. Hosp., Lect. Minor Surg. and Aural Surg. Westm. Hosp.

X.

GOLDEN RULES OF HYGIENE. By F. J. WALDO M.A., M.D. Cantab., D.P.H., Barrister-at-Law; Med. Officer of Health, Inner and Middle Temples; late Med. Officer of Health, St. George the Martyr, Southwark.

XI.

GOLDEN RULES FOR DISEASES OF CHILDREN. By GEO CARPENTER, M.D. (Lond.), M.R.C.P.; Phys. to the Evelina Hosp. for Sick Children.



