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THE PROTEAN ASPECT OF INSANITY
IN RELATION TO BODILY DISEASE.

EVERY newly-qualified medical practitioner finds himself very soon in trying situations. I think in none is he more helpless and despairing than when faced by a sick infant or by a lunatic of some type or other. But even in the darkest moment there comes in the case of the precious infant some gleam of hope from the experience of the womankind about, but in the case of the excited lunatic there is no such help forthcoming. The nearest relations stand aloof,and the young medico is left alone to wrestle with the crux as to what action he should take and even perhaps to wrestle with a hostile lunatic. Such was my experience when, without a single reference to mental disorder and its treatment during my student days, I plunged into a very varied and general practice which, like Sam Weller's knowledge of London, was "extensive and peculiar." Besides holding appointments as physician to the general hospital, to the lyingin hospital, and to an industrial school, I was, in those days of one of "England's little wars," civil surgeon to the garrison, and certifying factory surgeon to the district. I was, moreover, acting medical attendant to the post office staff, as well as to the local Royal Irish Constabulary. Last, but not least, I was acting resident medical superintendent of the district lunatic asylum. Over and above all this official work, I took over some "devilling" for senior practitioners, and thereby got an insight into the civil prison, the union workhouse hospital, dispensary work, and even peeps into private practice. All this was in a city of some 40,000 inhabitants. My object in this recital of the opportunities in my early days is that you may feel that I have been in touch with most of your fields of activity, and I hope to show that after I took up psychiatry I still remained in fact, if not in name, a general practitioner. In those early days, when absolutely ignorant of mental disorders, lunacy hydra-headed showed itself in my practice on every side. In the general hospital a young woman suffering from "nerves" presented a puzzle; in the light of later experience she proved to be a case of "dementia praecox in the katatonic phase." In the lyingin hospital a woman passed into an apparently semi-comatose condition which was stupor of melancholic origin. At the industrial school some boys were congenitally defective in intellect, and presented the physical conditions of arrested development and stigmata of degeneration associated therewith. In the military hospital, an old soldier, returned in official reports as "N.Y.D." complaining of "rheumatic" pains and wandering in mind, was a case of alcoholic neuritis presenting the "Korsakov's syndrome." At one of the large factories an efficient elderly clerk suddenly stripped himself and lay down calling out "Crucify me, I am Christ." This was the first obvious symptom of "general paralysis of the insane," then practically unknown in this country. One of the officials in the general post office, a telegraph operator, became worried as he muddled his work. He spoke coherently, but in a depressed, stilted, dull manner. At my suggestion he was taken to Dublin for a consultation, but his friends placed him in one railway carriage while they travelled in another. He was missed at the Kingsbridge station and later was found floating in the Liffey. The post-mortem examination at the inquest showed that he was suffering from syringomyelia. This depression was evidently associated with acute suicidal impulse. A man of the R.I.C. who gave trouble to the authorities and was constantly making complaints which could not be substantiated, was found to be suffering from "paranoia." In the civil prison I was asked to see a young woman, the first hunger-striker in my experience. She refused food as a protest against her confinement in the prison and was regarded as a maniac. She was, however, possessed of considerable intelligence and was perfectly coherent. Nowadays she would be classed as a moral delinquent. Then there was in private practice that "dear old lady" who still survives in the pages of *Punch.* In her happy senile dementia she took me for her beloved nephew "Bob,"gave me a warm hug, and pressed into my hand the guinea which had been given her for my fee, "to spend at the tuck shop when I returned to school!" Needless to say, in the workhouse wards and among the dispensary patients, I found not a few other cases of mental disorder. Were it not for the fact, as is already stated, that I was acting at the same period as medical superintendent of the asylum, my inability to

recognise and deal with such cases would have been even greater than it was.

Because of the fact that for some years prior to taking up the special branch of psychiatry, I had these opportunities of experience in general medical practice, it at once forced itself on my notice that in the mental hospital, with very few exceptions, my mental patients were not in normal health. I was so impressed, indeed, with this rather unexpected aspect of insanity that it took some little time before I could regard the patients as having come under care primarily for mental treatment. Experience brought about what I may call a stereoscopic view of insanity. A physical astigmatism which heretofore existed as to the relations of bodily and mental disturbances was corrected. These relations, drawn closer together, gave me a clearer and more defined view of the correlated physical and mental aspects of the various forms of insanity. As a result of this more enlightened view I was led to form the opinion which every succeeding year has strengthened, that the best chance for the betterment of mental patients lies in the closest attention to their physical condition. In my first report to the then Board of Governors of the Down District Asylum, I wrote as follows:—

"Of 159 admissions nearly every case required special medical treatment, and there were, moreover, many cases of intercurrent physical disease among those affected with chronic mental disorder. The annexed abstract of the *Medical Journal* shows that some 391 cases were treated during the year for bodily ailments. *Mens sana in corpore sano* is a hackneyed quotation, nevertheless, even yet few popular fallacies are more common than the belief that the insane are sent to asylums 'only to be locked up—not to be treated.' Experience daily proves that in the vast majority of cases the physical is the only channel through which the mental disorder can be reached, particularly if recent or acute. Comfortable surroundings, liberal diet, kindly nursing and attention to the bodily ills, are oftentimes almost immediate in their beneficial results, tiding the wandering mind into a harbour of rest, safe from the wreckage of prolonged disturbance. It is then to a development of the best hospital system that we look for an advance in the successful treatment of the insane."

The Board of Governors, with characteristic generosity and good sense, gave practical effect to this view of the problem, so that with a well-equipped hospital, competent colleagues, and an adequate staff, I am able to report thirty-two years later:—

"Again it is a source of the greatest gratification to find that the recovery rate is still rising, the average number on the admissions for the year under review being 53.6 per cent. This high rate may be attributed to a very limited extent to the speedy return to equilibrium of storm-stressed minds, which, unbalanced by purely physical burdens, find themselves quickly stabilised when harboured in sheltered surroundings. But the vast majority of the patients admitted were those whose mental affection was the outstanding accompaniment of some abnormal organic or functional condition in structures other than the brain. 'Search the body to find the disordered mind' is the slogan in the clinical investigation of insanity. The appended abstract from the *Medical Journal* shows that no less than 594 cases were under treatment during the year for various bodily ailments."

These extracts, I trust, shall secure for me your sympathetic interest as a fellow general practitioner, even though my patients are for the most part unwittingly forced on me, and my field of practice is so isolated that my meetings with you are relatively infrequent. Having established this bond between us, I now invite your attention to some of the protean aspects of insanity, and its incidence to bodily disease.

If bodily disease plays such a leading role in the causation of insanity, why then the necessity for mental hospitals and alienists? The answer is because the mental side is of such a nature that for the safety of the patient and the public, segregation is imperative. The mental disturbance is of a more or less protracted nature, and requires constant medical observation for its care and treatment. Care is inclusive of everything that affects the patient's well-being—health, general hygiene, food, clothing, exercise, occupation, recreation, and amusement. Treatment embraces the medical and moral sides. The mental disorder of the patients falls into the various types of insanity. These types, which may be regarded as symptoms, are very distinctly differentiated, so that an experienced observer recognises them, as he does the accompanying physical disease, say, neuritis, or cardiac lesion, or indeed any common ailment. But inasmuch as it is recognised that there are at least eight normal psychological types, the mental syndromes are of necessity of almost infinite variety, each case presenting itself as a compound entity of basic, bodily and mental constitution. Hence it is that a very special knowledge comes into play in the care and treatment of the insane.

The normal mind is the most perfect example of what we call "team work," so numerous are its factors

to carry out intricate and complex functions efficiently. It is the most powerful and the most delicately organised group of component factors working in harmony. It is a team of countless numbers and works unceasingly; but, as in the proverbial chain, its strength lies in its weakest link, which is the association factor. Its power of normal co-operation is often extremely weak and breaks under strain. The essential weakness in regard to mind is called "insane heredity." This inherited tendency to mental disorder may range from disordered function to organic defect in the physical structures of the nervous system. There may be, perhaps, but the merest emotional hyperaesthesia, capable of rapid re-adjustment; or there may be a material flaw in the most highly-organised elements in the central organ of mind. The cerebral areas and inter-communications may be faulty structures, so that normal function is impossible from the first moment of existence; in a word, the mind may be weak or strong, its strength or weakness lie in the degree of perfection of its construction to insure the smooth working of all its parts.

Though insanity cannot be defined in a satisfactory phraseology, nevertheless it becomes incumbment on practically every member of this society at one time or another to determine the sanity or insanity of some individual. For instance, when his mental state is such that the question of certification arises,or of his testamentary capacity, or of some one or other of the medico-legal important problems in relation to criminal offences, or divorce proceedings and the like. The recent report of the Royal Commission on Lunacy states: "We do not regard it as desirable to frame a scientific definition of lunacy. With the progress of mental science such a definition would have no finality." Nor would it necessarily be of practical value, for as the British Medical Association point out in their *precis*: "What has to be considered from the point of view of law and administration, is rather the practical measures and arrangements that are called for by any individual case, and not the precise nosological classification of the patient's disorder." This statement is no doubt strictly true. The law, however, demands a precise nosological classification and, moreover, it insists on specific statements to support the justification for such a classification as is made in any one particular instance. "Legal decisions," writes Leonard Darwin, "as to who are sane or insane are purely arbitrary, and where the line is drawn doubtless varies from time to time and place to place." Still one is faced with the query–"What is insanity?" In face of the statement of the Royal Commissioners that "the difficulties of the medical practitioner and of the magistrates are accentuated by the fact that the Lunacy Act does not define Lunacy with precision. Indeed, it is probably impossible to frame an exact and comprehensive definition. In different parts of the Lunacy Act different criteria are applied." Hundreds of exact and comprehensive definitions have been attempted, found wanting, and the long list still grows. I shall not venture to recite it, but content myself with quoting Mercier's definition. "Insanity is a disorder of the process of the adaptation of self to its circumstances." This he formulated about 1890, at a time I was seeking guidance on the all-important point. I accepted it and found it satisfactory in actual practice. Writing of his definition later, Mercier says : "It seems to me as true now as it did when I first put it forward ten years ago; and every phase and factor of insanity, whether disorder of thought, feeling, perception, emotion, volition, or conduct is expressible in terms of this formula, but the formula is a descriptive definition, not an explanation; and while it correctly indicates of what process insanity is a disorder, it does not help us to a knowledge of the nature of the process, or of the way in which it is affected." Not even the most recent psycho-pathological findings can help to improve the simple truth embraced in the definition : "A disorder of the process of the adaptation of self to circumstances." If the definition is lacking in explanation of the disordered process, it is because that explanation is not forthcoming fully enough to be briefly formulated. Psycho-pathology should be the source of any such explanation, but that, as Bernard Hart states, is to be understood "not as a mere description of mental symptoms, but as an endeavour to *explain* disorder or certain disorders in terms of psychological processes. Its difference from a mere description of mental symptoms is of the same order as that which exists between clinical medicine on the one hand, and on the other that explanation of the phenomena of clinical medicine in terms of causal processes which constitutes pathology. Psycho-pathology is then briefly, an attempt to explain, so far as can be explained, the psychological basis of mental disorder." In the endeavour to explain any result we are always driven back in the first place to discover the cause, hence we must briefly consider what are the factors, primary or secondary, which bring about mental breakdown. The known factors are, as you are aware, divided into two great classes–physiogenic and psychogenic –one or other of which precipitates mental disorder. More

frequently the two classes combine and, once in union, constitute a vicious circle which sets going and establishes the catastrophe.

This all-important relationship of physiogenic and psychogenic factors in the production of insanity is shown on Chart VI, kindly prepared by my colleagues Drs. Deane and Honan.

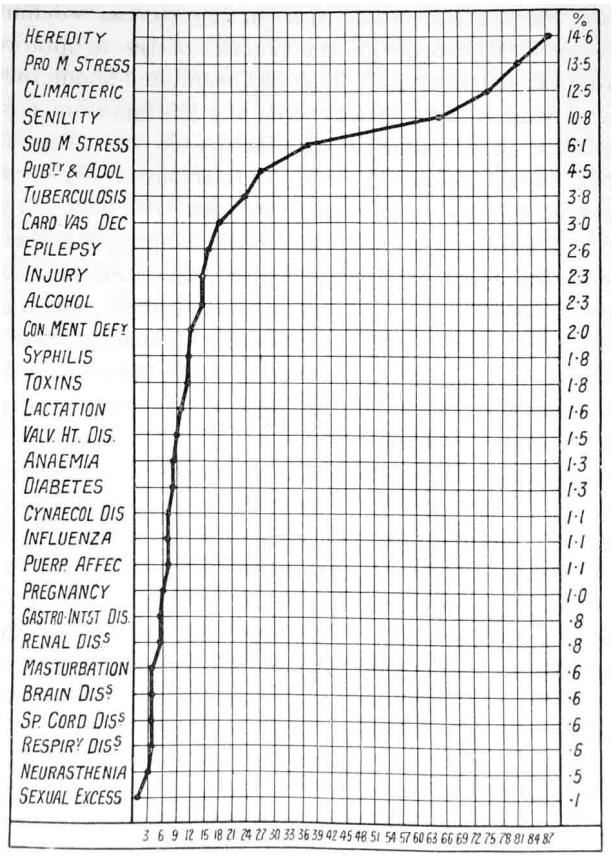


CHART I. *Showing the assigned chief factors in 600 cases from 1921 to 1925.*

Chart I.—Shows the incidence of the assigned *chief* factors in the aetiology of 600 cases admitted over a period of five years, and they are placed in order of frequency, beginning with heredity. In each, the chief factors are repeated in varying degrees of frequency as associated factors, when any other chief factor is held responsible. The chart deals with only the last six hundred cases, but that number may be multiplied by at least twelve, or, say, 7,200, to embrace my full experience. I do not propose to travel slowly over this long list, but may remark that the chief landmarks are those associated with heredity, the critical epochs of life—infancy, puberty, adolescence, climacteric, and senility—and with bodily disease. At this stage I would cry a halt for some few remarks.

"Heredity," to quote Thomson, "is, as we have repeatedly said, the relation of genetic continuity between successive generations, and it is such that while many characteristics seen in parents persist in their offspring, there is also in most cases a distinct individuality in their offspring." This genetic continuity is the material link between the past, the present, and the future generations—it is the marvel of all marvels. To Darwin, the pinhead-like brain of the ant was the most marvellous piece of matter in the world, but Thomson asks: "Must we not rank as a greater marvel the microscopic germ-cells which contain potentially all the inherited qualities of the ant?" And these inherited qualities are for good and evil, for body and mind. Mott held: "It is not necessarily insanity that is inherited, but a neuropathic tendency in the stock which manifests itself in many forms, e.g., epilepsy, asthma, migraine, chorea, diabetes, exophthalmic goitre, neurasthenia, eccentricity, hysteria, criminality, fanaticism, suicide, genius of a certain type, and insanity." Now in the chart before you, you can see that this neuropathic tendency has been assigned as the chief factor of the insanity in 88 cases out of 600, or 14.6 per cent. That number is only approximately accurate, and is considerably below the real figure, as heredity is stoutly denied in many instances. I recall a man who brought his brother to the hospital saying, in reply to my enquiry as to heredity of insanity: "Well, whatever misfortunes our family had, we never had *that*." "That's good," I said, and added: "Of course, that attack I treated you for many years ago in the Richmond Asylum is not really of much importance, you have done so well." "Doctor, I thought you had forgotten me," he said in astonishment. There can be no question then as to the very marked degree neuropathic tendency plays in the production of insanity. It is, however, some consolation to know on high authority, that like other vicious lines, it dies out naturally, and that even when the disposition is inherited it need not necessarily be expressed in development. This is self-evident in everyday experience when one sees degenerate families "peter out," and when one member of a large family sprung from very insane stock becomes a victim of acute insanity, all the other members of the family enjoying sound mental health. Rational eugenic methods may also be of use in improving the breed, but the methods must be exercised on the people *en masse* rather than in individual pairing. Certainly the "surgical methods" are not likely to be more serviceable than they are for the cure of cancer, as I pointed out fourteen years ago in a presidential address to the Section of State Medicine of the Royal

Academy of Medicine in Ireland. Furthermore, no method of human device could eliminate the possibility of atavistic recurrence. Prolonged mental stress is the attrition which wears the neurons as the dripping water constantly wears the stone. It comprises nearly all the psychogenic factors that cause insanity, all the prolonged strain and anxiety. Omnipresent, it necessarily is a powerful factor in the production of recurring insanity. Sudden mental stress is not so frequent, but when it comes with the violence of a tornado, it tears up very often deep-rooted stability.

It is but right to state that while the heredity theory is generally accepted, some hold that the proofs are illogical, and talk of empirical coincidences—"As there are many instances of talents, vices, virtues, previously non-existent in families suddenly cropping up as sports."

The critical epochs of life—puberty, the climacteric, and senility—select their victims in increasing numbers in the passage of life.

Tuberculosis, the "White Scourge," takes heavy toll; its dual relation to insanity as cause and effect has long been recognised. As a cause it precipitates insanity of delusional and confusional type, which is well pronounced soon after the physical signs declare themselves. As an effect it manifests itself after longstanding insanity of a chronic character, associated with congenital mental weakness, which may be largely taken into account in this connection. It is of interest to note that in mental patients suffering from pulmonary tuberculosis, haemoptysis is comparatively rare, and that whatever the psychoses may be, the *spes phthisica* persists in the majority of cases, possibly because of the absence of shock from haemorrhage, and its acutely debilitating effects. Epilepsy, which is a symptom of many known and a still greater number of unknown conditions, comes high on the list. The patients are mainly young, but some, including old residents, develop it in pre-senile and senile periods. Injury stands unusually high in consequence of the war, during which most of the trauma had been received.

Alcohol has not lived up to its evil reputation, and would furnish a poor argument for the prohibitionists, as it only shows 2.3 per cent. Taken in connection, however, with congenital mental defect which follows it, it undoubtedly exercises a very bad indirect effect, as it is now well established that maternal alcoholic excess has an injurious effect on the embryo, resulting in congenital weak-mindedness. In my own experience, I had three members of a family of eight suffering from Friedreich's disease (hereditary ataxia). The mother, who was a strictly sober woman, attributed the sad state of her children to her husband's chronic intemperance, and said he was never sober at times of intercourse. Berkeley quotes Walter Pater as to "the keen puissant nature of the 'love child,' " and goes on to say that "a high degree of sexual ardour at time of intercourse probably modifies the growth, if not the structure of the fertilised ovum. Shakespeare's lines from King Lear are in point:—

> "Why brand they us
> With base, with baseness, bastardy, base, base,
> Who in the lusty strength of nature take
> More composition and fierce quality
> Than doth, within a dull, stale, tired bed,
> Go to creating a whole tribe of fops
> Got 'tween asleep and wake?"

Is it not then possible that paternal influence may be strong in the production of idiots and imbeciles when the lusty strength is replaced in chronic alcoholists by a besotted automatism?

Such cases of congenital defect may also arise from some defect in normal metabolism. Werber has shown how minute quantities of butyric acid produce malformation in the developing embryos of the fundulus (American minnow), more particularly in the head. He suggests that a disturbance of carbohydrate in a mammal may produce the same acid, and may cause malformation by passing it on through the placenta to the embryo. Here in any case we have something very material in the possible production of idiocy and minor degrees of mental deficiency. "Psycho-physiology of the sex hormones are important to happiness, longevity, and physical perfection," says Berkeley, and further: "Sex love is physically conditional in the sex hormones which produce in the matter of the Freudian school an erotisation of the brain, spinal cord, and autonomic nervous system."

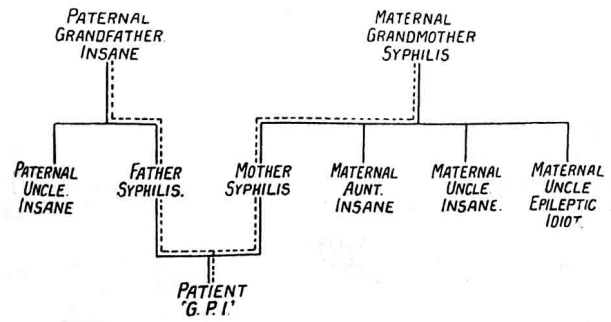
Syphilis is fortunately comparatively rare in Irish rural districts. It shows itself practically only in general paralytics who for the most part have contracted it outside the district served by the Mental Hospital. As a result the disease in female patients is still more infrequent, though from time to time a female general paralytic is admitted. Child-bearing, the puerperal (non-septic) state, and lactation are responsible in order of frequence named for an increasing number of cases under each head. There are other puerperal cases, but being of septic origin, they are classed with the toxic. I am glad to say that this latter class of case is not at all so frequent as it was some years ago when hygiene was less attended

to than at present.

Valvular heart lesions have been ascribed as a chief factor in the cases where the knowledge of its existence proved such a shock to the patients that they became, according to their mental make-up, either morbidly depressed or morbidly excited. There are a considerable number of such cases, and roughly speaking, the depression is mostly in association with lesion of the mitral valve, while excitement is more often found with aortic disease. Visiting an English mental hospital some years ago, the medical superintendent informed me that he had several Irish patients, chiefly former residents of County Down, that all were very excitable and many had cardiac lesions. They had crossed to England as labourers.

You will note how the remaining principal factors to which I have not yet referred—anaemia, disease of the generative system, influenza, gastro-intestinal disease, renal and vesical diseases, masturbation, brain lesions, disease of the spinal cord, and respiratory disease, play practically an equal part in aetiology. In every case the bodily disease was very intimately bound up with the onset of the mental malady. Next in degree of frequency we meet hysteria, chorea, and neurasthenia, and finally sexual excess. May I again remind you that all the foregoing factors here given as principal factors, and many others with them, crop up again as contributory factors.

E. N., aet. 20 years, male, juvenile general paralysis of the insane. Chart II shows three generations of syphilis and insanity.



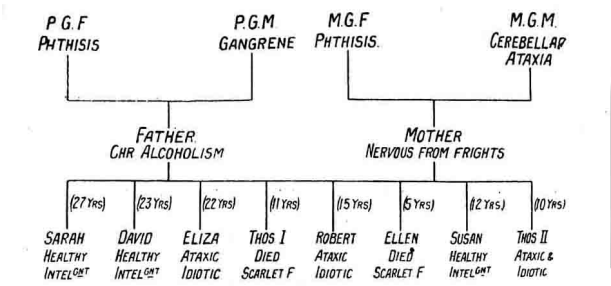


Chart III. Genealogical Table of Family affected with Friedreich's Disease.

Eliza, Robert, Thomas, idiocy, Friedreich's disease (ataxia).

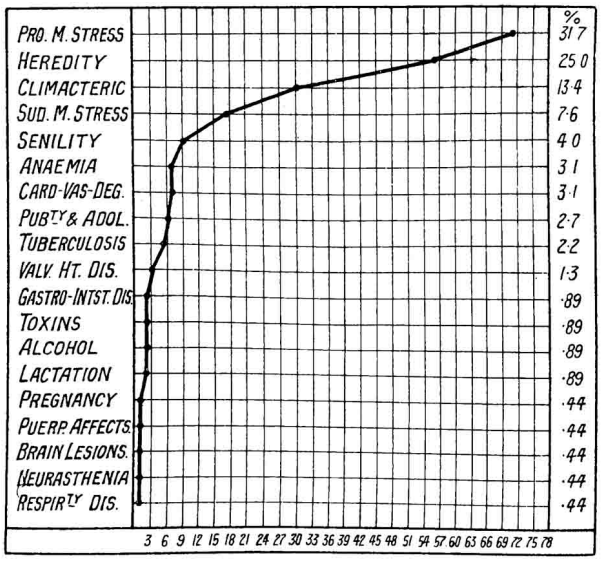


Chart IV. Showing the assigned principal factors in the causation of Melancholia in 224 cases during the years 1921-1925.

ILLUSTRATIVE CASES.

Prolonged Mental Stress. M. B. G., aet. 55 years, female, rearing an only son mentally deficient from birth, and nursing an invalid husband. Melancholia, with depression and homicidal impulses.

Climacteric. Case 1.—Mrs. B., a widow, aged 45 years, dependent on her mother. Felt depressed at change of life. A man put his arm round her. She resented his attention, thought he had a bad opinion of her. Later believed she had committed the unpardonable sin. Lost sleep and appetite and became suicidal. She was a very small woman, weighing barely six stones. She declared she could never recover, that half her body was gone. After some relapses she made a good recovery, and was discharged weighing 7 stones 10 pounds.

Case 2.—Mrs. S., widow at climacteric, dependent on her mother. The polite attentions of ordinary kind from a retired military officer at a boardinghouse gave rise to erotic feelings. She was a very superior, religious woman; had feelings of self-abasement in consequence. She became very depressed, said she was the victim of hypnotism and mesmerism, refused to discuss her condition, wished only to die; if possible, to kill herself. Later her confidence was fully given. The evolution of her mental state was fully

explained to her, and its association with the critical period of her life. She was relieved to hear that she was in no way to blame for her feelings. She gradually became more cheerful, entered thoroughly into housekeeping, sewing, and amusements. She made a good recovery. One unusual point of interest in this case was that while mentally she was in the lowest depression, seeking every opportunity to destroy herself, she had a great craving for luxurious food, and gave daily elaborate menus of delicacies with intense sarcasm. One evening, when very suicidal, she consented to go to a dance on condition that she got meringues filled with cream. She came, danced, and ate.

Senility. M. A., aet. 86 years, female, marked amnesia, confusion, disorientation, and restlessness.

Sudden Mental Stress. F. O'R., aet. 43 years, male, house raided by special police and later by Sinn Feiners. Acutely hallucinated (visual and auditory), voices and visions of angels, etc.

Puberty and Adolescence. L. McK,, aet. 19 years, female. Quarrelsome, mischievous, and destructive, with stereotyped actions and mannerisms. Dementia Praecox.

Tuberculosis. J. G. C., aet. 28 years, male. Impulsive, restless, and exalted with grandiose relusions. *Spes phthisica.* Believed he was to save the world from tuberculosis.

Cardio-Vascular Degeneration. H. B., pronounced sensory disturbances. Speech difficulty, lightness in the head. Anaesthesia over right leg. Could write at times but not speak. "Memory left him and he went astray in his head." Recognised a new case as a neighbour who he said had been sent in long ago, as though never dog-mad he always showed a want of mental balance. Disorientated. "News-Letter" always three months ahead of actual date. Recovered.

Epilepsy. This condition has been found associated with so many varieties of mental disorder, and depends on so many organic and functional causes, I do not mention specific cases.

Injury. 1.—J. B. J., aet. 63 years, male. Fracture of femur, leg encased in splints. Claustrophobia with periods of extreme excitement caused by associated ideas of restricted movement.

2.—J. P. C., aet. 37 years, male. G.S.W. Head. Hemiplegia. Perversion and destructiveness with auditory hallucinations. Periods of mutism (ceases abruptly in middle of sentences).

Post-Operative. 1.—N. T., aet. 79 years, female. Cataract, right eye. Recurrent melancholia with marked agitation, excitement, and depression. "I am to die a thousand dreadful deaths. "

2.—R. W., aet. 66 years, male. Colonic resection (malignant tumour). Exaltation with numerous persecutory delusions.

3.—R. A., aet. 77 years, male. Prostatectomy. Exaltation and dissociation.

Alcohol. 1.—E. Q., aet. 51 years. Alcoholic neuritis. Cutaneous and auditory hallucinations with persecutory delusions.

2.—M. McD., aet. 55 years, female. Alcoholic dementia. Confusion and disorientation with amnesia. (Is unable to state the number of her own children.)

3.—J. M., aet. 32 years, male. Alcoholic mania transitoria. Depression with active suicidal tendencies.

4.—J. Y., aet. 58 years, male. Paraphrenia, an unusual sequence to chronic alcoholism.

Congenital Mental Deficiency. Congenital idiocy. Freidreich's disease. Three cases in one family.

H. C., microcephalic idiocy, aet. 41 years. Hair *à la* carnivora.

Syphilis. Cerebral. W. C., aet. 52 years, male, numerous grandiose delusions. (Maker of the world and the planets.)

General Paralysis of the Insane. (Few mental symptoms.) R. H., aet. 50 years, male. Mild persecutory delusions. All physical signs of general paralysis. Fits.

General Paralysis of the Insane. (Fulminating type.) C. S., aet. 38 years, male. Duration five months, extreme excitement with incoherency and fits.

General Paralysis of the Insane. (Slow type). S. M., aet. 38 years, male. Depression, persecutory delusions with visual and auditory hallucinations, 1908-1923. Apoplectiform seizures at long intervals.

Toxins. 1.—J. R., aet. 63 years, male. Violent pyorrhoea alveolaris. (Incoherency with confusion and delusions of of persecution.

2.—W.J. G., aet. 51 years, male. Acute mania, myocarditis. B. coliuria.

3.—A village dressmaker, aet. 35 years, suffered from chronic rheumatism. Having read De Quincey's "Confessions of an Opium Eater," took laudanum in steadily increasing doses until she enjoyed visions of gorgeous flower gardens and places of amusement of all kinds. At this time she took about sixteen drams of tinct opii daily. She failed in general health, got profoundly anaemic, lost weight, could not give attention to her work, became very depressed when money failed to come in for purchase of the drug, and finally became suicidal. She came into hospital a very large-framed woman in a state of great emaciation and clay-like pallor, weight 9 st. 4 lb. Treated by gradually diminishing doses of mist. ether c opii,

nourishment and rest, she recovered in course of a few months, became bright and cheerful and capable of doing good work at her trade. When thoroughly convalescent she was discharged and had no relapse. When leaving hospital she weighed eleven stone. Here we have the psychogenic factors represented by stress: the physiogenic heredity, rheumatism, and abuse of a drug, but you can see how all the factors in association set up a very vicious circle indeed.

Lactation. M. McA., aet. 39 years, female. Acute mania with fleeting and auditory and visual hallucinations.

Valvular Heart Disease, J. M., aet. 39 years, male, mitral regurgitation. Depression and confusion with auditory hallucinations.

Haemopoietic, etc. Anaemia is an outstanding feature in a very large proportion of cases. It tends to semi-starvation of the neurons. The "etc." covers many not uncommon vasomotor disturbances—Reynaud's disease, erythromelalgia, Henoch's purpura and intermittent claudication. If the opinion is correct that arterio-sclerosis with high blood-pressure may be due to suprarenal intoxication, this condition would be more properly classed under the endocrine disorders. Under this head vaso-motor tropho-neurosis is classed. It would be desirable also to have a separate heading for disorders of the lymphatic system. Angio-neurotic oedema is fairly common. Other special conditions of disorder of the system arise less frequently. At present I have a case of Mikulicz's disease under observation.

1.—S. R., aet. 55 years, female."Purpura haemorrhagica," agitation and depression followed by mutism.

2.—T. G., aet. 56 years, male. Extreme anaemia, simple mania, marked confusion, with auditory hallucinations and illusions of identity.

3.—E. M., aet. 48 years, female. Restless, garrulous, incoherent. Pernicious anaemia. Deformed blood corpuscles, haemoglobin deficiency, leucocytosis. Recovery.

Diabetes. P. D., aet. 72 years, male. Glycosuria (varying from 6 to 18 grs. per ounce). Dementia with marked irritability and auditory hallucinations. Post-mortem. Chronic simple ulcer of duodenum, non-malignant. Extreme fibrosis of spleen with disappearance of malpighian corpuscles.

Gynaecological Diseases. 1.— A. A., aet. 60 years, female. Carcinoma of body of uterus, delusions with depression, uninterested and agitated.

2.—M. A. B., set: 62 years, female. Carcinoma of body of uterus, secondary to re-section of rectum (malignant). High velocity machine working on her day and night, causing her pains; 100,000 dollars to be given to anyone who could stand up to the pains; tried to win it herself.

Ovarian Disease. M.. McC., aet. 46 years, female. Irritable, excitable, idioglossia, morbid sexual ideas.

Respiratory Diseases. 1.—P. D., aet 59 years, male. Chronic bronchitis. Depression with visual and auditory hallucinations.

2.—R. A. McA., aet. 40 years, male. Chronic asthma. Persecutory delusions and cutaneous hallucinations. "Magnetism and electricity make him sit up at night (orthopnoea). Gas put over him, etc." "A meglaphonic violin" was played on him. He was dazed.

Neurasthenia and Phobias. 1.—A. W., aet. 36 years, male. Irritability, loss of self-control. Hypochondriacal. Auditory hallucinations.

2.—C. N., aet. 29 years, male. Syphilophobia, Wassermann negative. Masturbator. Visual hallucinations. Suicidal. "Infecting the whole country."

3.—J. B. J., aet. 63 years, male. Claustrophobia. See "injury,"No. 1. Spatial hallucinations.

4.—M. G., aet. 28 years, female. Mysophobia. Olfactory hallucinations. Obsessional. "Clothes, hands, food, etc., are filthy. "

5.—S. M., aet. 69 years, female. Obsessional. Auditory and visual hallucinations. (Lilliputian.) Picks her steps lest she should trample on the "wee men" on the floor.

Sexual Excess. A. P., aet. 35 years, female. Sexual excess without issue owing to premature withdrawal (*Coitus interruptus*). Restless, agitated, and depressed. Hypochondriacal. Delusion: "Ball of wind in her stomach and head." Recovered.

S. R., sexual excess with contraceptive appliances, the cost of which so reduced wages of the husband that food was insufficient. Patient was literally a nervous wreck, quite incapable of any domestic duties. Recovered.

Anon. A wealthy city merchant aged 45 years, recently married. Marked mental ability. No evident organic or functional disease. Strictly temperate, and has been sexually continent since twenty years of age, when he had intercourse with a delicate young woman of his own age in his native town in a remote county. Soon after he was twitted by a chum with having, by his amours, killed the girl, who had just died rather suddenly. He gave the coarse joke little thought, but felt regret for the girl. Twenty-five years later, during which he was absolutely chaste and was engrossed in business affairs, he married a very attractive lady much younger than himself, resembling in looks and about the same age as the

deceased girl. After a long and happy honeymoon he returned home. Immediately his thoughts reverted very vividly to the early moral lapse, and more particularly the bantering jocularity of his friend as to the cause of the young woman's death. Some few evenings later, when dining with his wife, he suddenly saw the figure of the deceased standing by the table in an attitude of despair. He left the room to escape from what he regarded as an hallucination. He successfully concealed from his wife that he had had a shock. He lost sleep and sexual desire. He spent his day plunged in business matters, but the figure reappeared every evening at the same place and the same hour. The idea that he had really caused her death then became imperative. He endeavoured to dismiss it by looking at the official record of her death. He ascertained she died of acute phthisis. For corroboration he journeyed to his native town. For the moment he was convinced of his innocence in the matter, but on the return journey the idea seized him again, and at a junction he got out and went back again to the town. The idea now completely filled his mind to the exclusion of all others, and his distress was the greater as he felt he was a fool to give way to it. At last he decided life was too intolerable to be prolonged. He carefully prepared a razor and placed it in a drawer to use when he had courage to act. At the same time he made his will, placing it in the same drawer. Then came the thought that the hallucination, and its accompanying obsession, possibly could be dispelled by a mental specialist. He came to me with that object. I explained to him that, in my opinion, the obsession arose from the association of ideas called up by his recent marriage, and that the hallucination was the result of nerve exhaustion, due to the very great sexual excess which he admitted he had indulged in so freely after marriage. He accepted the explanation which I gave him with perhaps rather much licence as to psychological certitudes, but he fully accepted it, and said he would set the whole strength of his will against the morbid ideas. After some months he returned from a tour, which I had advised, quite restored to his normal mental state. He was more moderate in cohabitation, and had no recurrence of his trouble up to his death several years later.

I have given this case rather at length, as it also illustrates what is known as Larvated or Concealed Insanity. It is of the type which furnishes so many horrors to the press, unexplained and unexpected suicides and homicides. The insanity is recognised and suppressed so far as external signs or symptoms go. Sometimes a letter gives a reason for tragedy, the writing of which is often the one and only evidence of mental instability.

Mrs. E., at climacteric, regretted that since marriage she had practised contraceptive methods. She applied certain scriptural texts as condemning her to damnation as a punishment. She became actively melancholic and suicidal. She was removed to the mental hospital, and was discharged recovered. Meanwhile her husband became depressed, and on her return home he committed suicide.

I am satisfied that when contraceptive methods are associated with the sexual excess which they encourage, the combination is a potent cause of insanity in married people. It usually assumes a melancholic type, more particularly at the climacteric, or at time of death of one or other of the partners. In single persons the ill-results are less marked.

Thrombosis. T. O'N., aet. 59 years, male. Middle cerebral thrombosis. Periods of confusion and excitement, alternating with a quiet, emotional, apprehensive state.

Influenza. A. B., aet. 56 years, male. Melancholia. Attempted suicide.

Puerperal Affections. E. M., aet. 25 years, female. Mania with auditory hallucinations of a sexual type.

Pregnancy. M. M. M., aet. 40 years, female. Mother of four children. She shut up her nursery after third baby. When she experienced "quickening" of fourth *in utero*, mental symptoms slowly developed. Depressed, listless, anergic, uninterested in her children, melancholic and suicidal.

Gastro-Intestinal Diseases. 1.—S. M., aet. 76 years. Carcinoma of gall bladder. Hallucinated and incoherent, with periods of excitement.

2.—M. R., aet. 49 years, female. Chronic constipation. Delusion: she has a "rigid rectum."

Renal Disease. M. C., aet. 69 years, female. Chronic interstitial nephritis. Depression, disorientation, confusion, with auditory hallucinations.

Masturbation. N. H., aet. 27 years, male. Delusion: "Too many wrinkles on his penis," to prevent which he had to masturbate continually.

Brain Lesions. Brain tumours are oftentimes associated with mental disorder, but the evidence of the tumour is sometimes so disguised as to be altogether elusive. Dr. Figgo Christiansen in his recent work, "Les Tumeurs cerveau," states in this connection: "The mental state of the patient can sometimes guide us. I am not thinking of the true psychoses which frequently complicate encephalitis. I am thinking now of the less dramatic changes (but

not less evident) in the entire mentality of the patient. All the psychic processes unfold themselves in a more inert manner, slower than usual. Emotion is less quick than previously. The psychic visual field is more restricted. And often enough one finds an appreciable alteration of the character, of the moral faculties of the entire psychic personality, which contrasts in an astonishing manner with the former activity of the patient."

1.—J. A., aet. 61 years, female. Tumour of pia-arachnoid.

2.—M. M., aet. 54 years, female. Tumour of left frontal lobe. Periodic epileptiform convulsions. Amnesia, restlessness, irritability, with occasional joviality.

N.B.—No headache, vomiting, or optic neuritis. Slight astigmatism and hypermetropia.

3.—M. C., aet. 93 years, female. Senile dementia. Tumour of tentorium cerebelli.

Encephalitis Lethargica. 1.—P. S., aet. 14 years, male. Lethargic, anergic, and uninterested. Unable to feed, clean, or dress himself.

2.—A. S., aet. 44 years, male. Dull, confused, uninterested, and lethargic. Slow cerebration and some incoherency.

3.—S. C., aet. 63 years, female. Chronic nephritis. Confused, lethargic. Later: restlessness, hallucinated. Muscular twitchings.

Endocrine System. Adrenals.—J. M., aet. 55 years, female. Impulsive, excitable, and confused, with periods of mutism. Post-mortem suprarenals showed marked fibrosis, with cortical atrophy and excess of pigment.

Thyroid. E. J. B., aet. 38 years, female. Exophthalmic goitre. Restless, incoherent, excitable, and emotional, with periodic outbursts of violence.

Pituitary. M. B., aet. 37 years, female. Degree of microcephalism. Marked obesity. Weight, 22 ½ stones. Frequent attacks of diarrhoea. Depression with impairment of volition and suicidal tendencies.

Spinal Cord Lesions. M. H., aet. 47 years, female. Disseminated sclerosis. Melancholia with active suicidal tendencies. Delusions: "Soul lost," "in eternity," etc.

A. McB. Erotic, emotional, sense of well-being. Disseminated sclerosis. Some ataxia and intermittent retention of urine.

It will be noted that in all the foregoing cases there existed a very close interchange between psychogenic and physiogenic factors, and that in not a few there was a very distinct clinical relationship between the disease and the delusion.

Dr. Henry Head, in his recent exhaustive work on "Aphasia," has shown in a new and strong light the organic and psychological relations of speech defects. It has struck me that many of the latter very closely resemble speech disorders so common in the insane, and that they may be explained on same lines, though they are ephemeral, and sometimes can be originated at will.

The headings on Chart I before you are identical with those of the official returns, but are not in the same sequence, being arranged in the order of relative frequency. Long as the list is, I think it requires the addition of at least four other headings: Voluntary Sexual Deprivation, Involuntary Sexual Deprivation, and Endocrine Deficiency. Sexual Deprivation has been included under "Prolonged Mental Stress," and Endocrine Deficiency under "Other General Affections." But surely "sexual excess" is no more specific than "sexual deprivation"; nor is "lesion of the heart" more specific than "myxoedema." A few brief examples will demonstrate the leading parts taken by sexual starvation and disease of the endocrine glands. The disastrous effect of psycho-analysis in certain early cases cannot be overlooked as the exciting cause of an acute breakdown.

VOLUNTARY SEXUAL DEPRIVATION.

Mrs. R., 30 years of age. She and her husband had a contempt for physical relations. After a long engagement, however, during which they enjoyed "intellectual union," these "highbrows," if not of even super quality, married, but only because they could not enjoy constant association without a scandal. Shortly after marriage Mrs. R. often wondered "what people thought of her," then she "thought people looked at her in a peculiar way," and when going into a restaurant or other public place she heard them "whispering about her," and later heard them say she was a "highly immoral woman." This caused her so much annoyance and misery that she determined to commit suicide. She came to consult me as to the possibility of any of her worry arising from her own imagination. I interviewed her husband in an adjoining room, who confirmed all her statements as to their arrangement before and after marriage. He stated they had no inclination for ordinary married relations and had agreed to replace it by "mutual intellectual enjoyment." I explained to this lady that nature resented her attitude, which was not normal, and that in consequence the annoyance which she suffered was imaginary. Finding her suffering from retro-flection of the uterus, I suggested that she should consult a gynaecologist, and after treatment conform to the usages of ordinary married life. I

advised the husband on the same lines. The result was successful, she had the necessary treatment and informed me later that, acting on the advice, she was now leading a happy life.

INVOLUNTARY SEXUAL DEPRIVATION.

Mrs. Z., who was verging on the climacteric, married for a home. Her husband, aged 50, took her as a housekeeper. It was mutually understood and expressed that there would be no marital relations. After some time Mrs. Z. "felt different," "restless," and had "strange and hitherto unknown feelings." She lost power of attention, failed in her housekeeping, and was taken to the seaside for a change. Here she became acutely maniacal and endangered her life. She was removed to a mental hospital where she was violently excited, and had visions of the "creation of the world," and described it as "the union of lust and matter. " She recovered in a few months, but insisted that she was "a virgin," and this at the time was noted as a delusion. Later on, in an interview with her husband, he stated that he had intercourse with her, which was untrue. From his appearance and from my previous experience of a like case I taxed him with being impotent, incapable of coition. He indignantly denied the assertion, but finally admitted its correctness. He even submitted to physical examination, which showed arrested development of the sexual organs. The storm having passed over Mrs. Z., she adjusted herself to the position in which she found herself and had no recurrence of her attack.

PSYCHO-ANALYSIS IN UNSUITABLE CASES.

I must refer to the growing danger from psycho-analysis as a factor. I cannot for obvious reasons give details of cases, but as one of those who has had comparatively little opportunity of seeing cases suitable for psycho-analysis at an early stage, may I express some views regarding its explanation, so far as my limited experience goes, in a certain class of patients. Men and women, young and old, suffer from some form of anxiety—neurosis. I have seen such cases which while on the border line were treated by psycho-analysis with the result that I was unwillingly forced to the conviction that their condition had been aggravated by the treatment. Though I have always been of the opinion, long antecedent to Freudian days, that in a very large percentage of mental disorder sexual conditions operated, yet I am by no means a full believer in the Freudian doctrine. I am grieved to say that from time to time I have been asked to see the sad havoc made of minds which had been subjected to psycho-analysis. That these minds were possibly potential hotbeds for morbid sexual imaginings does not excuse the planting of the seed which produced a jungle of erotic thought of such inconceivable pruriency that the unfortunate victims wished themselves dead, rather than feel themselves capable of the horrible ideas called up by the suggestion. Some at least of these kinked minds would have straightened themselves out with the aid of treatment based on the assumption of some sexual complex, the nature of which it was unnecessary to lay bare in more detail, than voluntarily expressed by the patients themselves.

It must not be assumed from what I have said that I am hostile to therapeutical psycho-analysis, which, on the contrary, where in the hands of competent professional experts, and when used on suitable cases, is a splendid measure which has saved many from psychoses of the gravest kind. I think, however, it is the duty of every one who sees bad results from it to state the facts and thereby tend to establish psychoanalysis in its legitimate and most useful sphere.

Chart VI.— Shows the number of cases attributed to (1) physiogenic causes, and (2) psychogenic, during five years 1921-25. It is self-explanatory and shows at a glance that the psychogenic causes are much less frequent than the physiogenic causes, the proportion being roughly as one to four. Just one point calls for comment. In 1922 the physiogenic causes rose sharply, to fall again in the following year. That increase may be attributed to the influenza epidemic of the previous years which was very severe in the district. You will also note that there is a tendency to approximation in the relative frequencv of the two classes of causes, mainly by a considerable fall in the physiogenic, and a slight increase in the psychogenic

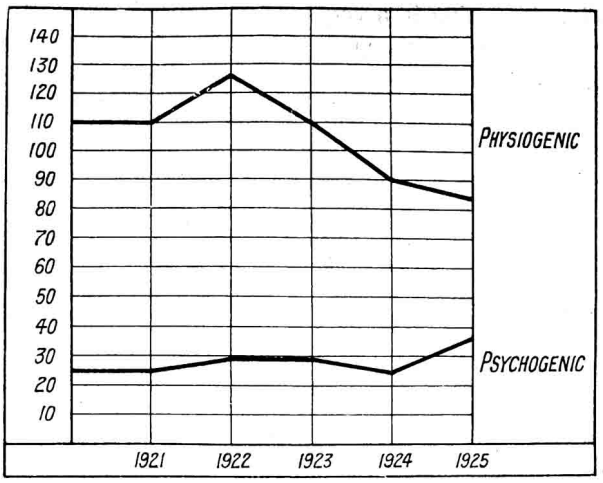


CHART VI. *Showing the number of cases during the years 1921-1925 attributed to (1) Physiogenic and (2) Psychogenic causes.*

factors.

Now, it must be obvious to you that these bodily diseases ascribed as the principal factors are not *per se* the *cause* of insanity. You see far more of these conditions in your sane patients, so it would seem that a special type of psychic constitution is necessary for the precipitation of a nervous breakdown. The exact nature of what that nidus is has not been determined. In any event it does exist, and in reality forms the only and fundamental difference between sane and insane patients. It is an essential predisposition, and may be inherited or acquired. Whatever its nature may be it brings about that inability of the process of the adjustment of the self to the circumstances which radically alters the status of the patient.

The general practitioner in the activities of his widespread work has little time, even if he has the inclination, to speculate on what is regarded as the practically insoluble problem of mind and matter. Not so with the mental hospital physician who is placed in continued close association with patients in whom deranged mind is calling out for his attention. If he is possessed, as he should be, of a keen curiosity, he is perforce confronted with that problem in a very acute and concrete form. He makes an effort to get some clear grasp of the question, reads and digests, as far as they are digestible, the various theories propounded in ancient and modern times, and he finds himself in a maze of contradiction and discrepancy. Not a year passes by, but a fresh stream of literature is poured out by the press, not converging to the great river of enlightenment, but winding on to swell the vast ocean of doubt which has been spreading itself from the days of Aristotle. No one, however interested, can keep pace with this great flow of speculative hypotheses. In arriving at any decision one is undoubtedly biassed by one's own intuitive tendency to materialism or idealism.

Now I desire to make a few very general remarks as to treatment in the mental hospital. On the physical side the patient receives treatment on the same lines as prevails in public hospitals. The medical staff endeavours to keep apace with advances in therapeutics, and does so, I think, fairly well. On the mental side, as you understand, the treatment must vary in accord with the class of case to be treated– every tactful physician is guided in his attitude by the mental cast of the invalid. But there is something more to be done in cases of every form of mental disorder: the physician in charge must get as thorough a knowledge as possible of the patient's normal make prior to his illness, and of all the ideation that underlies that illness. Dr. William Brown says truly: "We may sum up our views on treatment by saying that there are four fundamental and relatively independent psychic factors at work in the care of mental disease: psycho synthesis, psycho catharsis, autognosis, and the personal influence of the physician (suggestion). The last of these four is of the utmost importance, since it is the determining condition of the effective working of the other three factors."

It is with autognosis the mental hospital physician is most concerned. Dr. Brown has coined this excellent new word to cover the process of sect knowledge. It is very much better to have one word than a phrase, to express a meaning, and as a matter of fact autognosis is one and the same with the very old-time practice of knowing your patient. The object in attaining an intimate knowledge of the patient was to enable the physician to teach him how to readjust himself. This personal relation of patient and physician has been entitled "empathy," or feeling into (*Ein-fühlung*) and "does not necessarily imply sympathy, nor does it partake of sentimentalism." As Heymans and Weirsma lay down eight types of character, the physician must play at least an octave to establish syntonic touch with "all sorts and conditions of men. "

My first mentors in psychiatry were very keen "on knowing their patients," and I have never ceased to hold it as of primary importance in treating those who have come under my care. The one great advantage in treating the psychoses in contrast to the psycho-neuroses is that as a rule complexes come to the surface, as in dreams, the censor is swept aside, and there is no disguise of the instincts and their emotions. It is said the characters of boys discover themselves in play, so the characters of men and women reveal themselves when all control is lost. Experience in treating mental patients develops in a physician a quality named pronoia (Hippocrates). It is a quality which, in the treatment of mental disorder, is of the highest value–"it is the quality of knowing things about a patient before you are told them," and it can be exercised with the greatest advantage to secure the confidence of all patients, except a limited delusional class who believe you read their thoughts and therefore refuse to discuss their ideas, etc. Though the patient's ideas and conduct may vary according to age, sex, social environment, and basic character, yet the basic emotional feeling is essentially the same in the majority of cases. In the exercise of pronoia one lays the foundation of the best mutual relations, and thereby the best chance of

the betterment of the patient's mental state.

Every insane individual is a human document who must be read and understood in twofold relation to himself and others.

Insanity, though it cannot be satisfactorily defined, has characteristics that fall into types of disorder, which are modified by the constitutional mental make-up of the individual affected.

In at least ninety per cent, of cases, insanity is closely associated with organic or functional bodily disease.

The remaining ten per cent. are due to psychical disturbance of pathological degree. The disturbance may be attributed to some failure in neural potency due to bio-chemical or other unascertained causes, and manifest by dissociation and loss of control.

The restoration of the mental balance advances *pari passu* with the improvement in general health.

The improvement in health in effected by treatment on the usual medical lines, and by the special mental treatment which is covered by the term "mental hospital care." The word "care" to be regarded as "covering all the factors involved in the environment and treatment of the patients." (Report of Royal Commission on Lunacy.)

I fear I have treated a necessarily diffuse subject in a rather diffuse manner. If I have succeeded in giving an idea, however imperfect, of what "Insanity" means in actual practice—of the recognition of its various types, and of their intimate connection with bodily ills—my object is attained. There are not, and never can be, absolutely water-tight compartments in efficient medical work. There are not only points of contact, but areas of overlapping in each and every branch of study, and though we may follow widely divergent paths, we are making for the same goal. So far as psychiatry is concerned there is much need of wider co-operation in the profession, and of more co-ordination in research. It is well to be assured that there is hope of advance. The report of the Royal Commission on Lunacy states that, "Fortunately, now that the scientific fascination of its problems is coming to be realised and their solution is regarded with a greater hopefulness, a new spirit has been aroused, and many of the best investigators in this and other countries are devoting themselves to this branch of study. The stimulus of public interest must be provided."