organism of the fever-excitant, the pyrogenic matter (be this *contagium vivum* or what it may), and the onset of the characteristic phenomena, has not yet been demonstrated; in other words, the proximate cause of fever remains undetermined. Several minor *lacunæ* and unsettled questions we have had occasion to notice.

The work we have passed in review, as before observed, is almost entirely that of the last five-and-twenty years. Can we doubt, if we may venture upon a forecast of the future, that the final quarter we have just entered of the enlightened nineteenth century will witness a vast accession to this work, if not its completion? Can we doubt that voids will be filled up, that dubious or weak points will be corrected or confirmed, that difficult problems will be solved, that obscurities will be cleared away, and that the present *disjecta membra* will be united and consolidated into a true theory of fever? Can we doubt this, when, to say nothing of the advanced cultivation of science abroad, its claims have now come to the front at home, and original research is being stimulated and encouraged (if we except the measure before Parliament) to an extent utterly unknown at any previous period? Can we doubt it, when we look upon the beautiful pieces of mechanism, the elaborate appliances and apparatus, now in the hands of the biologist, and designed for the service of his laboratory, which are being exhibited at South Kensington? Can we doubt it, when the fraternity of science is no longer limited to local societies, the gathering of a few kindred spirits in the place of their abode, or to provincial associations, such as our own body at one time was, or even to national associations, such as our own body is now proud to be, but has come to extend to international congresses; men of science of different race and language speeding along the iron-way from capital to capital, or traversing the wide ocean, in order to confer on the subject of their common pursuit and to aid its advancement? Can we doubt it, when the ancient prophecy of Inspiration would seem to be literally receiving its fulfilment: "Many shall run to and fro, and knowledge shall be increased".

ON THE PAST AND PRESENT TREATMENT OF INSANITY.

Being the President's Address, delivered at the Annual Meeting of the Birmingham and Midland Counties Branch.

By G. F. BODINGTON, M.D., M.R.C.P., President of the Branch.

THERE has long been, as I need hardly remind you, a contention as to the necessity or non-necessity for specialism and specialists. Now I am not about to inflict upon you a dissertation on this somewhat trite question. But I desire to draw your attention for a moment to the incontrovertible fact that specialities do actually exist, and that, whether we will or not, we have to encounter them, to deal with them, and to be influenced by them. The field of knowledge is so vast that no one mind is encyclopædic enough to compass it—nay, no human being is able in the short space of a life time to "try the heights and fathom the depths", even of a single science. Hence it happens that in the pursuit of learning, just as in the mechanical arts, we have division of labour. Division of labour tends to perfection of knowledge. To become an adept, one must concentrate effort on a single subject. This principle is as applicable in medicine as elsewhere, but in medicine it has, so to speak, run to seed in sundry directions. We have doubtless conditions and circumstances to which exception may be fairly taken in reference to some of the developments of specialism. Still, however justly it may, for many reasons, be decried, there yet remains in it, I cannot help thinking, a kernel of good. The division of labour upon which it is based, and the concentration of thought which it entails are advantages not to be lightly thrown aside. "These specialists", says Oliver Wendell Holmes, in his *Poet at the Breakfast Table*, "are the coral insects that build up a reef. By and by it will be an island, and for aught we know may grow into a continent".

Now it happens that I myself am engaged in a branch of practice more open than any other division of the field of medicine to the charge of specialism. Whether this particular division of the medical art is rightly or wrongly so decidedly separated, I do not now attempt to decide. For the present I leave the question open. But being an arch-specialist, not from choice, but necessity, it becomes me, I think, in addressing this meeting to notice the fact, and to offer a

word or two of apology or explanation in introducing a very special subject.

Gentlemen, I propose to lay before you to-day some considerations upon the past and present treatment of insanity, and the method of dealing with insane patients. I select this as the topic of my address because now for nine years I have been engaged in the management of an asylum, and for a much longer period have been more or less familiar with some of the phases of lunacy. I do not pretend to be able to deal with the subject as it deserves, nor to expound it according to your merits; yet, bearing in mind the considerations I have just enunciated touching division of labour, bearing in mind what is comprehended or implied in the word experience, and having in wholesome reverence the maxim, *ne sutor ultra crepidam*, I feel it to be the subject which I am least incompetent to discuss, and therefore most justified in bringing before you, however imperfectly, on the present occasion. Should it seem to any of my hearers that a subject so special is likely to offer but little of interest for this auditory, I would remind you that insanity comes in the first instance under the care of the general practitioner, almost invariably. Further, I have to say, for your comfort, that it is my intention to avoid the technicalities of asylum routine, and as far as possible to make my observations bear more or less directly upon those phases of mental alienation, and those practical points in the care and management of the insane which are apt to come within the cognisance of the general practitioner or consulting physician in the ordinary course of daily work.

In the *Lancet* for May 20th of this year there appeared a remarkable article entitled the *Physiological Treatment of Insanity*. I agree with the sentiments expressed, but I call the article remarkable, because it is wonderful to my mind that at this day it should be necessary to call back attention to the propriety of treating insanity on a physiological basis, or that it should be requisite to point out the futility of dealing with it by other than physiological methods. Why, even Hippocrates recognised insanity as a bodily disease, and located it in the brain. *Τῇ δὲ αὐτῇ καὶ μαινομένα καὶ παραφρονοῦμεν*. For by this same organ (that is, the brain) we are mad and become delirious, he says. He enunciated a pathology of madness, and laid down rules and maxims for its treatment, all referable to the view that it depends upon disordered physiological processes. Yet in the latter half of the nineteenth century, one of the leading organs of medical opinion in England writes these words: "Strangely, many able students and practitioners of medicine do not perceive the natural and indissoluble bond which holds these two departments together"—that is to say, the departments of psychology and physiology. Such is the language of the writer in the article to which I have referred, and I have little doubt it conveys an accurate impression, for many corroborative circumstances have come under my own notice in the course of my experience. Yet it is a stranger thing that it should be so, for, so far as I know, all our most trusted modern teachers inculcate physiological treatment.

Dr. Copland, to go back a generation, in his *Dictionary of Practical Medicine*, has an article curiously entitled "The Physiological Pathology of Insanity"; and in the Remarks more generally applicable to the Treatment of Insanity, therapeutical measures are advised which clearly indicate that treatment upon a physiological basis was fully recognised at the date of the publication of the *Dictionary*, 1844. Dr. Prichard, writing about ten years earlier, under the head of the *First Practical Indication in the Medical Treatment of Insanity*, speaks in these terms: "The first indication is to remove or lessen that diseased condition of the brain on which we have reason to believe that insanity depends as its immediate cause"; and again, under the head of the *Second Practical Indication in the Medical Treatment of Insanity*, he says, "The second indication for the medical treatment of insanity is to restore and maintain, as far as can be done, a healthy condition of the physical or natural functions, and to obviate or remove disorders in other parts of the system which may be connected or coincident with the diseased condition of the brain". What teaching can be more physiological than this? Esquirol, too, writing in the same decade, when discussing the moral treatment of insanity, insists that moral means are agents which exercise a direct influence upon the brain; not on the mind, be it observed, but on the brain. In laying down the principles of physical treatment, he points out that we must not fail to use hygienic and pharmaceutical means which will operate upon the brain, or upon those parts of the organism in which the primitive irritation arises. In short, his method of treatment is thoroughly physiological. Coming to our own time, we find amongst writers the tendency to found treatment upon physiology rather than upon psychology increasing day by day. The correlation of mind and brain is day by day more fully accepted, I may say demonstrated, and mental pathologists and therapeutists follow in the train of the mental physiologists. Let me quote one or two writers in proof of this.

Griesinger enunciates views of pathology and treatment which fully recognise somatic influences; and psychological treatment, he takes care to explain, is efficient in so far as it modifies cerebral activity. "All psychical acts, normal or abnormal, are cerebral phenomena" he declares; he dwells upon the necessity of pursuing somatic as well as psychological treatment, and warns his readers that when he speaks "in detail of the psychical and somatic as distinct modes of treatment, the fact of their intimate relation to one another cannot but be very evident". Dr. Maudsley, in his admirable chapter on the Method of the Study of Mind, urges with great ability the claims of the physiological and objective method. He says: "Though very imperfect as a science, physiology is still sufficiently advanced to prove that no psychology can endure, except it be based upon its investigations"; and again, "above all things, it is now necessary that the unholy barrier set up between psychical and physical nature be broken down". Dr. Maudsley's chapter on the Pathology of Insanity is a legitimate deduction from these and such like propositions, coupled with actual observation of diseased states. It is a most able vindication of the view that the basis of mental disease is physical, and must be sought for in derangements of physiological processes and changes of structure. The inference from this, that treatment ought to be purely physiological, is obvious. Dr. Hammond, in his work on *Diseases of the Nervous System*, says: "The fact is daily becoming more evident and more generally admitted, that insanity is to be treated as a material disease, and not as a metaphysical nonentity."

These examples are culled from text-books, and give a fair sample, I think, of the current teaching. If we turn to the most recent periodical literature, we shall find the same sort of doctrine pervading the whole of it, only, perhaps, even more decisively given forth, and certainly more fully elaborated. In proof of this, I cannot do better than cite the *West Riding Asylum Reports*. Those admirable Reports may, I think, be taken as a fair and trustworthy expression of the leanings of the medico-psychological world at the present moment, and anyone familiar with them will, I feel sure, agree with me that they overflow with the records of investigations which tend to link most closely—nay, I will say to identify—mental disease with cerebral lesion, or disorder of cerebral function, and to establish the therapeutics of insanity on a thoroughly physiological basis. I might go on adducing authority after authority in support of my present allegation, both from English and foreign sources. It would, however, be superfluous. Nevertheless, there is just one more reference which is so pertinent that I cannot refrain from quoting it. It occurs in the recently published volume of *Clinical Lectures*, by Auguste Voisin, the distinguished successor of Pinel at the Salpêtrière. He commences the fifth lecture of the volume in the following terms: "Gentlemen, I commence this new series of lectures with an ever increasing conviction that insanity is pre-eminently a bodily disease. Ever since the year 1870, I have been making autopsies demonstrating this fact; I have, moreover, been able to see more and more clearly that a purely moral treatment is altogether inadequate to ameliorate and to cure insanity. I shall enter into the question with you, in this first lecture, of the changes which occur in the cerebral tissue, and I hope by so doing to open up to you new vistas in the therapeutics of mental alienation."

It appears, then, that the doctrines held and taught by the leading minds of the present day with regard to the nature and treatment of insanity are clearly founded upon physiology. How, therefore, does it happen that a great deal of current opinion and practice—may I say average opinion and practice—still cuts off insanity from the common category of diseases, bases its treatment upon mere psychological, metaphysical, moral, or social considerations, and relegates the patient and his malady to a totally separate and special arena? The answer to this question is to be found, I believe, in the history of the subject, in the views held regarding it from a very remote period. Although Hippocrates and other ancient writers held rational views as to its nature and treatment so far as the state of knowledge in their day permitted, yet it must be remembered that animistic theories of disease have been held in primitive and metaphysical states of society in all ages. They are still held amongst barbarous and savage tribes, and by the vulgar, even in the most cultivated communities, at the present day. Belief in the supernatural or demoniacal origin of bodily ailments descended from the Greek schools of philosophy, and pervaded Europe through the dark ages. Fed by superstition, it cast a lurid glare amidst the glories of the Renaissance, and only faded away in the latter half of the eighteenth century. Madness, of all others, was the disease most distinctly attributed to obsession or possession. As the phrase ran, a madman was "one possessed". Not till Pinel lifted the veil at the era of the French Revolution and let in the light of reason and science, was there any general recognition of the unity of madness and disease. He it was who wrought this great change in his celebrated

treatise on Insanity, "a work", says Buckle, "remarkable in many respects, but chiefly in this, that in it the old notions respecting the mysterious and inscrutable character of mental disease are altogether discarded". Before his time, Divine judgments, magic, and other supernatural agencies, were attributed as causes, possession by evil spirits was the pathology, miracle-mongering, exorcism, imprisonment, chains, stripes, and starvation were the means of treatment. Pinel opened up a new era; but the influence of the past hangs lowering over mankind. We know "how use doth breed a habit in a man", and as with the man so with the race. Exploded beliefs once promulgated by hierophants are long cherished by the people; the savour of old custom clings to the human mind, and the exhausted ideas of bygone days qualify modern life. Thus it is that notions are even yet prevalent in some quarters respecting insanity which smack of the ancient superstitions. The ontological hypothesis regarding madness, though not maintained by scientific minds, has not altogether vanished. Its effects upon treatment have by no means disappeared. They remain as an example of "survival in culture" of the thoughts and habits of pre-scientific days.

But metaphysical speculations touching insanity have been kept alive not by the vulgar and commonplace only. Writers of eminence since Pinel's time have upheld a science of mind wholly severed from biology, and mental pathologists and therapeutists have acquiesced in the doctrine. Abercrombie, for instance, great and original as he was as a pathologist, makes no mention of insanity in his *Pathological and Practical Researches on Diseases of the Brain and Spinal Cord*, but, curiously enough, he does treat of it at some length in a metaphysical work, the *Inquiries concerning the Intellectual Powers*. In that treatise, the function of the brain is sedulously ignored; and, although no distinctly ontological view is upheld, yet insanity is referred to causes purely psychical, mysterious, inscrutable; and the treatment recommended consists entirely of intellectual and moral means. The teaching of a man of so great repute as Abercrombie could not fail to have considerable influence upon the opinions of his time. We have sufficient evidence of this in the fact that his work on the *Intellectual Powers* went through eighteen editions; and, when we consider that the eighteenth edition was published so recently as 1869, we may see that an antiphysiological method has not only survived, but has been disseminated by authority, even down to our own day. If further confirmation were wanted of the fact that mental derangement still stands apart, to a certain extent, from other diseases, and still holds a disembodied spiritualistic sort of position, even in the opinion of the weightiest authorities, it might be found in the *Nomenclature of Diseases* of the Royal College of Physicians. In that work, insanity is placed, it is true, under the general head of Diseases of the Nervous System, but it is not classed with diseases of the brain, nor even with "functional diseases of the nervous system". It stands by itself in a class entitled "disorders of the intellect".

Another cause whereby the treatment of insanity has not kept pace with the scientific progress of the age is, perhaps, to be found in the sudden awakening of the national conscience in England to the enormities of the old system. The moral delinquencies, when once disclosed, stood out in such hideous relief, and the revulsion of feeling was so tremendous, that all minds were bent upon the moral and social aspect of the case. Revolting inhumanities had been in vogue as a legacy of the dark ages, and the public mind, roused to indignation, thought first and only of substituting human kindness for inhuman cruelty. It is unnecessary to revert to this further; it is well known how in our own time the reformation has been wrought. I only wish to point out here that, in the general centring of attention upon the abolition of abuses, upon the construction and regimen of asylums, upon the discipline, diet, clothing, amusement, and general comfort and happiness of the invalids, the vital question of medical treatment has been somewhat elbowed out and shoved into the background. Now, this is an inversion of the proper order of proceeding; while the things I have enumerated are all good in themselves and worthy of attention, yet the first question the physician has to ask himself is, How best and quickest can I cure the patient, and send him forth recovered, to rear his head a sane man amongst his fellows?

Insanity, then, it is clear, was cut off for a long time from the general category of diseases. I have endeavoured to point out reasons for this exceptional mode of treatment, and to show that the effects of the severance are felt even down to our own day. It is needless for me to declare, after the tone and drift of my remarks, that I believe this severance to have been wrong and injurious, and that insanity ought long ago to have been classed with other bodily diseases, and to have been dealt with upon the common principles of medicine. It does not concern us now to discuss the much-vexed question of the nature and origin of mind. I am not sure that it at all concerns us, simply as stu-

dents of pathology and practitioners of the healing art, to inquire how mind is conditioned. Probably, the mixing up of this question with practical medicine has been an impediment in the way of knowledge, and a cause of the evils to which I have made allusion. Whether thought is, as Cabanis taught, an organic secretion of the brain, or whether mind is an animistic extra-corporeal thing, which uses the body merely as a mechanism to execute its behests, is a matter of no moment in considering our present subject. What we have to consider, and what alone concerns us in this present relation, is not what mind is, but in what manner we may know its operations, and by what means we may deal with them. Whether the nervous system be the cause, or merely the instrument, we need not ask. All we need for our immediate purpose is to trace such a connection between the series of phenomena we call mind, and the agencies by means of which they may be dealt with, as will enable us most surely to correct and cure disorders when they come before us. Whatever may be the true rôle of the brain in mental organisation, it is, I think, safe to assert that the correlation of mind-disease with brain-disease is now firmly established. Not many years ago, it was common enough for writers to dwell with a sort of hopelessness upon the impossibility of connecting mental diseases with changes in the structure of the brain. Even those most convinced of the material source of the malady, were constrained to confess that insanity left, after death, very little trace of anything whereby to identify the seat of lesion. But the microscope, in the hands of numerous able investigators, chiefly medical officers of public asylums, whose opportunities for the study of morbid anatomy are abundant, is doing much to reveal the site and nature of the morbid changes of structure connected with insanity. At the same time, modern doctrines of vaso-motor physiology and pathology, and such investigations as those of Hitzig and Ferrier, on the excitability of certain parts of the cerebral hemispheres; those of Lombard and of Schiff, on the elevation of the temperature of the nervous centres; and others of a kindred order, are calculated to throw light upon, perhaps hereafter to supply, adequate explanations of cases which hitherto have been extremely obscure. By tracing the connection between symptoms during life and the disclosures of the microscope after death; by comparison of pathological states with states produced by artificial experiment; by these and similar methods—in short, by the ordinary principles of pathological investigation, and also *per viam exclusionis*, we have arrived, it seems to me, at a stage in the history of the subject at which may be confidently asserted, that all mental disorders arise out of the brain, and that we may paraphrase the dictum “*omne vivum ex ovo*” by another, namely, “*omnis insania e cerebro*”. We come, then, to the conclusion, that insanity is a local disease, and that we know the organ involved. From this, we deduce the general aim and method of our treatment. Knowing the organ whose physiological processes are disturbed, the obvious indication is that we should endeavour to reinstate these processes in their integrity. This reinstating of physiological functions is surely physiological treatment.

The brain-affection, like many other affections of particular organs, may be, and undoubtedly often is, merely the local expression of a general pathological condition. Or it may be, as happens in those cases of insanity known as sympathetic, the central result of a peripheral irritation. Or it may be the result of morbid processes, commencing centrally in the vessels or the special tissue of the brain itself. But whether the cause of the brain-disturbance be immediate or remote, there is, it seems to me, one grand principle of treatment to be borne in mind—the principle of rest to the organ affected. Now, this is a well-known and acknowledged principle in therapeutics, so I need not dwell upon it. Every one will agree with me that it is a sound principle to use a machine within the limits of its powers. In insanity, the nutrition of the higher nervous centres is impaired, and the intellectual apparatus thrown out of gear, to a greater or less extent; but always below, never above, the normal standard of its working capacity. The working power that remains ought to be most carefully husbanded, and no strain whatever put upon the weakened machine. I am not satisfied that this principle is formally recognised as it should be, still less that our methods of treatment meet its requirements. Nothing is more common than to postpone the treatment of insanity until the case becomes so desperate that it must, for the sake of society, be taken in hand. Now, this is a practice which does not save and husband the diminished powers of the machine which is out of order. It is a practice quite opposed to the views of the most experienced and trustworthy observers, and contrary, I may say, to good sense. The earlier any disease is treated the better; and I am certain it is especially so with insanity, which is often allowed to run on into an incurable condition for want of early remedial measures. I feel sure that many more cases of simple insanity would recover than do recover, if they were submitted to sound physiological treatment at an early stage. The evil, I

believe, is not for the most part to be laid to the charge of medical advisers, who have to cope, not only with the patient and his malady, but with friends, relatives, and social, domestic, and financial circumstances. All these things clash with early treatment; but the one above all others which, perhaps, constitutes the most insuperable obstacle, is the extreme sensitiveness of families with regard to the stigma supposed to attach to insanity. Not till the evidence becomes “gross as a mountain, open, palpable”, are people willing to acknowledge that a relation is insane. Any interpretation but the true one is put upon the symptoms, and every sort of plausible reason is given to account for deviations of conduct of the gravest import. Not till acts of violence, or perhaps suicidal attempts, occur, are any steps taken to submit the patient to systematic treatment. Now, this postponement and delay is chiefly dangerous by excluding that rest to the affected organ, which I look upon as the very pivot of physiological treatment.

It has often happened to me to receive under my care cases of insanity, the previous history of which has revealed one continued course of incitement to action rather than to rest. In melancholia especially the practice is most common. Friends think they can stir a patient out of his lethargy and depression by encouragement or by remonstrance. So efforts are persistently made to cheer and rouse him. He is dragged off to the sea-side perhaps; that failing, he is carried about from one health-resort to another, constant change being inculcated and put into practice. Amusements of various kinds are provided, and every sort of diversion is attempted until the whole array of moral means is exhausted. Now, I believe it is useless, and worse than useless, to attempt to amuse a melancholic patient, especially by means that either overtax the bodily energies in general, or call into action the impaired brain. You must first cure your patient of his melancholy before attempting to make him cheerful. He suffers from disease, and is, in fact, not amusable till the disease is removed. Amusements are no rest nor relief to a melancholic; they are, on the contrary, literally as well as metaphorically, a weariness to the flesh.

The first practical step in the treatment of acute or recent cases of insanity is to take the patient out of his own control. Volition is disordered, or becomes subordinated to the dictates of a disordered intelligence. Perhaps hallucinations or delusions urge him to the commission of outrageous absurdities. Under such circumstances, control alone is often an agent of rest and relief, by regulating conduct which would otherwise run off into the wildest extravagancies. It is generally said that patients must be removed from home, for the purpose of separating them from scenes and associations to which they have been daily accustomed. Break the train of association of their ideas is the advice given, and this is one of the main reasons assigned for removing them to asylums. In asylums they undoubtedly encounter new scenes, but I doubt if there is any evidence to show either that the old scenes are injurious, or the new ones beneficial. For my own part, I believe that if proper discipline and control, and medical treatment, could be exercised at home, insane patients might be as well treated in their own houses as in asylums. If it is a question of an association of ideas, it seems to me the balance is strongly against asylums, where the surrounding circumstances are, as a rule, less likely to be agreeable, and less likely to call up pleasing ideas than the circumstances of a patient's own home. But unfortunately there are very few homes where the patient can be controlled, very few friends or relations wise enough, or who themselves possess sufficient self-control to watch with patience a prolonged course of firm and consistent treatment. In their crass ignorance of the nature of the disease they presume to give advice, and to take the direction of affairs. They judge the disordered mind by rules applicable to a sound mind. They interfere, or allow others to interfere, with all sorts of irrelevant recommendations, they disturb and excite an already too much disturbed brain, they avert any tendency there may be to recovery, they hasten the tendency to downward progress, and are too commonly responsible for rendering the case incurable, and the patient a lunatic for life. The advantages a patient derives from an asylum are the rest he obtains by being placed under regulated discipline and control, the uninterrupted treatment he receives, and the negative advantage of being removed from the mismanagement of foolish relations, or the disturbances of a panic-stricken household.

Of all the symptoms of insanity, sleeplessness is one of the most prominent and most constant. It is one of the earliest to occur and, in my opinion, continued sleeplessness ought invariably to be looked upon as a grave symptom, and submitted early to treatment. It is astonishing to observe the protracted sleeplessness which occurs in insanity, and though, as Dr. Crichton Browne has recently pointed out, it may continue for many months in chronic mania, without visibly affecting the bodily health, yet in recent cases I cannot conceive that it is safe to let it go on unchecked. Our object is—it must never be forgotten—

not merely to keep the patient alive and in good vegetative health, but to restore his brain to health and good working order. My observation leads me to believe that, in cases of simple insanity, a great step is gained when the habit of sleeplessness is overcome; and I further believe that many patients who enter asylums might be kept out of them, and the case cut short in an early stage, were this indication effectively pursued. A lunatic suffering from acute insanity, exhausts his brain by one long-continued incessant toil, the object of his thoughts being himself and his own imaginary affairs. The brain is perpetually in action. Morning, noon, and night it is incessantly engaged in abortive reasoning, in morbid perception, in the production of disordered ideas. The whole twenty-four hours is one uninterrupted round of overstrained attention. The functional action of the intellectual centres is never relaxed. They never even get the relief of change of subject, for a lunatic is for the most part a thorough egotist, and it is impossible to divert his attention from the hallucinations, delusions, or imaginary circumstances which his diseased brain concocts. Under such circumstances as these, I have no hesitation in procuring the needful rest by means of hypnotics. I am perfectly aware that this practice is not accepted by some authorities. The sleep is said to be not natural, to be a coma or a narcosis; and a narcosis Dr. Anstie has defined to be "a more or less complete paralysis of the nervous system". Sleep obtained by hypnotic drugs has also been defined as "chemical restraint" of the brain-cells. It seems to me just as likely to be chemical liberation, as chemical restraint; but I am really not curious to know which. For practical purposes, and in the present stage of physiological knowledge these finedrawn surmises are not *ad rem*. There may come a time, and I think there will, when we shall have a much more intimate knowledge of the action of drugs upon the cells and vessels of the nervous centres. Meanwhile, we must content ourselves with rational empiricism. Guided by that light, we shall see our way to interrupting, by means of hypnotics, the exhausting irregular action of the intellectual centres. As a matter of experience, I find hypnotics to be of the greatest use in various forms of insanity. Whether the sleep be good sleep or bad, I feel sure that the cessation from time to time of otherwise incessant irregular brain action is a positive good which brings in many cases safety and recovery to the patient.

In an address of this kind, partaking, as it does, more of the nature of a general view than of a discursion into details, I do not propose to enter into the relative merits of the various hypnotics in the medicinal catalogue, nor into their special application. Nevertheless, I must stay for a moment to observe that, of all of them of which I have had any experience, none equals opium. It is most astonishing to note the diametrically opposite views held by authorities with regard to the use of this drug in the treatment of insanity. I cannot now enter into the controversy. All I can say is that, in my hands, it has in numerous cases proved of the greatest benefit; and I can by no means coincide in the adverse opinions of some physicians, of the highest repute, upon this question. Morphia is the most easy of administration, as it is also, I believe, the most effectual form of the drug, and its efficacy is often increased by combining it with tartar emetic. Whether the tartar emetic acts by diminishing the force of the heart, or by relieving tension of the cerebral arteries, or by some direct sedative action upon the brain cells, I do not pretend to say; but I know that it often, when added to morphia, will act as a hypnotic and sedative in cases, especially of acute mania, where morphia alone is less efficient. Hypodermic injection of morphia is most valuable, both because it can be easily administered to a patient who refuses all medicine, because it acts quickly, and because it acts effectually. I have treated cases of acute mania by hypodermic injections of morphia, most successfully, during the last few years. It may be continued for lengthened periods without losing its effect. For detailed information and cases treated by the hypodermic method, I refer you to a paper by Dr. Bywater Ward, in the first volume of the *West Riding Asylum Reports*, and would especially commend to you the passage with which he concludes. It is this: "In the earlier stages of insanity, often seen in private practice, but rarely met with in asylums, I should expect that this mode of treatment would prove of great benefit." In the *Journal of Mental Science* for last April, there is a most instructive paper by Dr. McDiarmid of the Perth District Asylum. He sums up the results of three hundred and ninety-four hypodermic injections in insanity of various forms, both acute and chronic. One or two of his conclusions I will read to you. They are as follows. "Of all single drugs, opium, or its alkaloid morphia, is the most potent and reliable hypnotic and sedative in the treatment of insanity." "Attacks of acute and recurrent mania and paroxysms of excitement, in chronic mania and dementia, may be cut short in the outset, or beneficially controlled, by morphia subcutaneously administered." "Morphia so administered has no marked ten-

dency to cause constipation; and, even in melancholia, by alleviating the misery, and thus lessening the waste of nervous force, it predisposes to improvement in appetite and digestion." With these conclusions, my own experience of the hypodermic injection of morphia leads me entirely to concur. Of course, there are many cases in which morphia must be avoided or used with the utmost caution. I should hesitate to employ it in senile insanity, or in any case in which there was reason to suspect atheromatous degeneration of the cerebral vessels. I should certainly withhold it in cases of Bright's disease, and in many others perhaps. But in uncomplicated insanity, I look upon it as a most precious remedy; and would strongly recommend its use, in such cases, at a much earlier stage of the disease than I am in the habit of meeting with in asylum practice.

Dr. Ponza, Medical Director of the Asylum at Alexandria, has lately drawn attention to the influence of coloured light upon the insane, and has proposed to treat patients by placing them in rooms of different colours. According to his views, red light, possessing the most intense electro-chemical rays and heat rays, is adapted for melancholic patients, whilst blue light, which is absolutely destitute of calorific, chemical, and electrical rays, is, on account of its negative quality, suitable for the furious agitation of maniacal persons. This statement has been received, I believe, with some degree of ridicule; but I would remark that darkened rooms are grateful to maniacal patients, who often desire to have the light shut out. Further than this, I was lately talking to a person, on whose statements I can thoroughly rely, who told me that, when suffering some time ago from puerperal mania, she was always distressed by red coloured objects, which seemed to her connected with the idea of fire, and produced the most painful sensations, while blue colours gave relief. During the period of recovery, the notion of fire went away, but distressing feelings continued on seeing such things as red curtains or other articles of furniture, until recovery was complete. All this may appear a trifle; but, though I am not so sanguine as to expect patients to be cured of insanity by placing them in chambers painted in certain colours, yet, I think, the treatment by means of colours is worth consideration. It coincides with my views respecting rest; for rest must be granted to the sensory, as well as to the higher centres; and I should recommend its adoption as an adjunct to treatment, even supposing it only to concern the comfort of the invalid.

It is impossible, in considering the treatment of insanity, to pass over altogether the question of restraint. The "non-restraint system" has become the object of a creed, which it is dangerous to doubt, in England. There is much to be said about the subject; but all I shall say here is that, if restraint is a remedy of any value, it is wrong to relinquish it on account of any system, doctrine, theory, or creed whatever. This is the question I ask myself: Is restraint a remedy? Is it calculated, under any circumstances, to do the patient good, to promote his recovery? If so, I will not cast it aside because it has been once abused. If we are to give up entirely those good things that are liable to abuse, we shall have to go about our daily work in a very destitute, ill-furnished sort of fashion. I have certainly confidence enough in myself, and I have quite enough confidence in the educated class of men generally, who are in these days engaged in asylum practice, to use restraint without abusing it. On the other hand, I have not supreme confidence in the attendants, to whom manual coercion is entrusted, to use that kind of restraint with good temper and humanity. But, again, the question is, Is restraint of any value as a remedy? I believe there are numerous instances in which it is an effectual means of tranquillising maniacal patients, who, when effectually restrained, cease to struggle, and go quietly to sleep. The wild movements by which they are tormented and racked, though made by voluntary muscles, are not, strictly speaking, voluntary movements. They are rather impulsive agitations of the limbs, and are quite beyond the patients' own control. Mechanical restraint, under such circumstances, is a relief and a rest. Maniacs gladly welcome this means of a quietude they long for, but, unaided, cannot maintain. This I know from my own observation; but, to support my assertion, I quote Voisin, who, in his clinical lectures, says: "Gentlemen, you must not hesitate to employ the strait-waistcoat. . . . This apparatus saves them (the patients) from their own violence, and hinders them from injuring themselves in a variety of ways. Do not believe that they hold it in horror, as is said and supposed. I could show you patients, who at first have made resistance, it is true, but who subsequently themselves help to put on the strait-waistcoat, when their agitation renders that means necessary."

I have been led to consider rest to the brain as an essential part of treatment, not only from such considerations as those put before you, but from watching chronic cases and acute cases during the progress of recovery. I will mention two examples, just to illustrate what I mean. A young lady, the subject of confirmed dementia, had become quiet, orderly, and docile for the most part, but incapable of mental

exertion. It happened, from circumstances not necessary to be detailed, that efforts were made to evoke some intelligent action from her and to train her somewhat in the same way as idiots are trained. The experiment went on well, and the patient seemed to be making progress in employing herself by needlework and in other ways. But the effort was too much; a paroxysm of excitement supervened, clearly due to over-exertion of an enfeebled incapacitated brain. When the paroxysm subsided, she relapsed into her usual torpid state, but was rather more demented than before. The second example is a case of mania, accompanied by constant *risus sardonius* and long continued tonic spasms of the flexor muscles throughout the body of very severe character. The case is of twelve months' duration, and now in process of recovery. On two occasions the patient has seemed so far advanced that she has been allowed to mix with others, has done needlework, has read, has entered into various amusements and occupations, but on both occasions has relapsed. On being sent back to bed and kept in the strictest quietude, she has again recovered, and will now only be allowed to enter into association with others and resume the ordinary pursuits of life after more prolonged treatment, and with the utmost care and caution. Such cases as these, and I could cite many of them in illustration of the same thing, convince me that, though evolution of mental power may be right to encourage in the undeveloped brains of congenital imbeciles, yet rest is absolutely necessary for the impaired enfeebled brains of patients suffering from insanity. I believe it is often thought that all that is wanted to rest a brain is change of subject or change of occupation, and perhaps this is so with healthy brains which are merely fatigued. But the brain of a lunatic is not merely fatigued; it is in a state of disease, or, at least, of disordered function, therefore the analogy does not hold. No doubt, when any of us are overworked, it is a great relief to travel or seek after amusements. But the lunatic carries with him wherever he goes the disease which is wearing and exhausting him, and no pleasure-seeking will rid him of this sort of fatigue. On the contrary, excitement of the senses is superadded to his troubles, and his burden is doubled. In utter rest is his only safety. I laid stress at a former part of this address upon the necessity for early treatment. I reiterate this, and urge again the necessity of rest of the completest kind at the very earliest period. As soon as insanity is detected, the patient should be laid by. I know the difficulties, but I speak only of what should be done if a truly physiological treatment is pursued.

Voisin says that in simple insanity he finds certain alterations in the grey matter of the cerebrum, consisting of minute apoplexies, effusions of hæmatin and hæmatosin into the lymphatic sheaths, infarctions, atheroma, capillary dilatations, and necrosis of vessels, and certain changes of cerebral cells. But these changes he does not find in insanity of short duration. Up to a certain period, there is only intense hyperæmia and very marked injection of the finest capillaries, the cerebral cells appearing healthy in the midst of the network of capillaries distended with blood. He goes so far as to fix the date after which the changes in question occur, and places it at two months. Perhaps this is only approximatively correct; but, at least, it tends to confirm the experience of all clinical observers as to the necessity for treating insanity at as early a period as possible, and it confirms also the notion I have uttered regarding rest. If complete rest can be obtained within these first two months, or whatever the period may be, while the cerebral cells are still uninjured, and the disorder is, in fact, only functional, the probability is that the hyperæmic condition may disappear, the destructive changes be averted, and chronic cases of insanity much diminished in number.

Gentlemen, I commenced this address by something like a vindication of specialism. But as I have gone on, paradoxical as it may seem, you have, I hope, perceived this much, namely, that it is not my aim to maintain insanity as a specialism. If it must for certain reasons be necessarily, at least for some time to come, in special hands, yet I fully believe it to be part and parcel of the great field of medicine. There is nothing whatever to separate it in principle or in practice from the general body of medical science and art. It should be taught clinically at every medical school, and every practitioner should be made as familiar with it as with other branches of medicine. It should be treated physiologically, upon the common principles of therapeutics. The public should be taught to look upon it in a new manner, to recognise it as an ordinary disease, and to cease to regard it with that sense of awe and mystery which now prevails. Were these things done, I am strongly of opinion that many cases of insanity might be treated successfully at home, that there would be fewer of those simple, uncomplicated cases which terminate in chronic lunacy of twenty, thirty, fifty, and even sixty years duration, cases which are to my mind an *opprobrium medicinae*, and finally that there would be much less necessity than there is at present for lunatic asylums.

TOPICS OF THE DAY.

An Address Delivered at the combined Annual Meeting of the South Midland and Cambridgeshire and Huntingdonshire Branches.

By H. W. SHARPIN, F.R.C.S., Esq., President.

GENTLEMEN,—I should gladly have availed myself of some excuse, could I have found any, other than a feeling of my own incompetency, for not reading to you an address this day; but custom appears to call upon me as President to say a few words. The anxiety which I feel at the present moment is not diminished by the remembrance of the able address most of you heard at Cambridge last year.

I must, in the first place, thank the members of the South Midland Branch for the honour they have conferred upon me in electing me as their President for this year; and, in the second place, allow me to congratulate them upon the way in which the members of the Cambridgeshire and Huntingdonshire Branch have responded to their invitation to join them at Bedford.

Such meetings as these are highly calculated to promote good fellowship and to enlarge our ideas. They draw us out of the narrow sphere of self-interest into a purer and more wholesome atmosphere; for, "by the conversation of one friend with another are the good parts and faculties of men improved", and truly has it been said that as "iron sharpeneth iron, so a man sharpeneth the countenance of his friend". They also afford an opportunity to discuss the leading topics of the day affecting our profession, and to debate upon subjects strictly professional.

Whatever may be the differences of opinion as to the advantages to be obtained from these meetings from a scientific point of view, I never remember to have heard anyone dispute that their influence upon our social relations one to the other was great, and that this would be even greater still if we made an effort to attend in larger force every meeting of the Association.

I was very much struck by an anecdote I came across the other day showing the way in which a medical man of eminence treated another many years ago—long, long before the time of such social gatherings as these, at a time, too, when medical and surgical knowledge was not so equally divided by those practising the arts as it is now. The incident to which I referred occurred at the commencement of the last century, and, though a matter of history, it may not be familiar to all. I will venture, therefore, to repeat it. Dr. Radcliffe, the first physician of the day, then practising in London, was summoned to Windsor to see, in consultation, the Duke of Gloucester, the heir apparent to the throne. It would seem that the physicians in ordinary had not recognised the true nature of the young Prince's ailment; they thought that he had taken cold, and bled him. It is related of Dr. Radcliffe that he turned abruptly round to the other physicians in attendance, pronounced the illness to be scarlet fever, and desired to know if it were true that the child had been bled. One of the physicians replied that it had been done by his order. Then, said Radcliffe, "you have killed him, and shall be answerable for his death; I will not prescribe". All entreaties to induce him to change his resolution were unavailing, and, as we all know, the boy died. I can hardly think that the learned doctor would have thus acted had there been a British Medical Association in those days, and he a member of it. Not that I would have you, for one moment, think that I regard a medical association necessary to make one gentleman treat another as such. It is now-a-days taken for granted that all are gentlemen before joining the Association; but the meeting together of educated men engaged in the same noble, though laborious, career of alleviating human suffering, experiencing the same conflicts of duty, and exposed to the same trials, successes, or failures, must have a tendency to foster a kindly and friendly feeling one towards the other, and to make us judge each other charitably and leniently. One medical man may be very far removed from the other in intellectual power, another in his success in life; but each, even the most gifted and the most fortunate, has his trials and his failures to recount, and his frequent and utter ignorance to acknowledge and to bewail over.

A confession of this kind is very humiliating. It is a great leveller, and makes us regard one another in a more kindly manner than anything else could. For there are few things more humbling than to see that we have done mischief and are quite powerless to lessen it, much less to undo it; to have made a mistake, and to discover it when it is too late; still, who, I would ask, is there, even amongst the most skilful and talented of our profession, who must not admit to having done much mischief and to having made many mistakes?

I am afraid that I may be thought by some present to have viewed this subject from a rather low standpoint; and that we ought to be actuated by higher motives in our conduct one towards the other.