of medicine, would have the means of referring to cases in, or which had been in the hospital, for his illustration of that portion of his lectures which must now be without the illustration, and therefore comparatively uninteresting. Large numbers are not essential, a few cases will serve for clinical instruction. In the Edinburgh Royal Infirmary, where the most systematic clinical instruction was formerly carried out, only a few wards and a comparatively small number of beds were devoted to Neither might it be advisable to burthen the the purpose. medical student with the additional expense or labour of attending more lectures than at present, but merely afford the lecturer on medicine the means of illustrating the nervous diseases more fully, by opening for him at every hospital to which a school of medicine is attached, one or two wards for the reception of a few patients, such as, recent cases of mania, epilepsy, "epotu" as known to military surgeons, combined with mania, and delirium tremens.

On General Paralysis. By Dr. HARRINGTON TUKE.

There is certainly no physician now engaged in the treatment of mental disease, who is not perfectly acquainted with that peculiar form of malady designated as general paralysis. In the wards of the public hospitals for the insane, in our consulting rooms, and in our private asylums, the disease in all its stages is perpetually passing under our observation. Its claim to rank as a special form of disorder is perfectly understood; its diagnosis has become speedy and certain; and yet in general medicine it is almost unknown, its most prominent features are overlooked; its indices are disregarded, and its very existence, except as either a modification of paralysis or a complication of lunacy, has been and is denied by able and experienced practitioners.

It is still a debated question whether the sub-division of medical practice into special branches be or be not advantageous to medicine as a science. However this may be in the other departments, it is certainly obvious that the study and treatment of lunacy has become too exclusively confined to a small section of the profession, and that great mischief arises from the fact that so few of even our most accomplished professors

have any knowledge of the various types of mental derange-The leading professors of the art and science of healing, turn in disdain from a department of medicine that appears to them to involve the taint of trade, and thus the working out of some of the most interesting and important problems in the field of psychological and pathological research is left in the hands of the few, while they really demand the talent and acumen of the many. The study of mental disorders is studiously excluded from the medical curriculum, alienist physicians, as they are therefore well called, work in a department of science the first principles of which are not even recognised by their medical brethren, and seem often to speak a language not understood by those around them; and thus indisputable facts and conclusions in psychological medicine become liable to be ignored or passed over, as the crotchets or the mere opinions of prejudiced

That this should be the fate of deductions from speculative or metaphysical theories is not surprising; but it does seem most marvellous that General Paralysis, a disease so frequent in its attack, and so serious in its result, the form of insanity, that is, perhaps, of all the most clearly marked out by physical and mental symptoms, should still remain unknown to the great mass of the profession. The consequence of this ignorance is even worse in this particular form of insanity than in any other, for it is in the stage of incubation, and the very onset of the disease that the chances of the cure are restricted; and it too frequently happens that valuable time has been lost, the friends of a patient have been misled, his property squandered, his reputation tarnished, because the inexperienced practitioner has been treating a disease, the peculiar symptoms of which he could not recognize, and whose connection with brain disorganization he never suspected, until at last obliged to admit the existence of obvious and undoubted mental derangement.

"I was staying recently at a friend's house in the country," said one of our most distinguished physicians to me recently, "and I was asked to see the wife of a tradesman of the village. who had been, as I was informed, suddenly attacked with madness. My friends were anxious about the poor woman. I gave them a favourable opinion of the case, and undertook to procure her admission into Bethlehem. I was mortified to find that they would not receive her there, because they detected symptoms of paralytic disease. A few weeks afterwards, I saw another case of mania, in a domestic servant, a woman.

I recommended her also to Bethlehem, and her admission was refused, and doubtless very properly, on the ground, that again in her case there were symptoms of paralysis. In neither patient were there, to my eye, any other symptoms than those of mental aberration, and none to lead me to fear any serious organic change in the brain. It is to be regretted that we have no systematic treatise on the subject of General Paralysis, and that the symptoms upon which so certain and rapid a diagnosis seems to be arrived at, should not be better known and appreciated."

I promised my friend that I would attempt a sketch of the rise and progress of this frightful malady, as I have met with it in my own practice. The treatise I must leave to abler hands. I propose, therefore, in this essay, to give a short history of the disease, to point out the sources from which a more extended knowledge of it may be derived, to explain the causes that render it still so comparatively unknown to the medical profession at large, and to offer such views upon its nature and treatment as I may have learned from my own experience, and adopted from the teaching of others.

To Esquirol, the most eminent psychological physician of France, the man to whom our department of science is most indebted, we owe the first notice of this affection, and French alienists have devoted much attention to a disorder, whose importance Esquirol had thus indicated. Within a few years, Bayle published a description of it, as an inflammatory affection of the meninges of the brain; and in 1826, Calmeil produced his admirable monograph, entitled "De la Paralysie considére chez les Alienes," in which the disorder was first mapped out, and the terrible significence of its symptoms demonstrated, with a terseness and success that may be considered as rendering his work unrivalled in medical literature. In France, the knowledge of the disease, and its pathology, has been further extended by the researches and writings of Parchappe, Guislain, Foville, Ferus, Lelut, Briere de Boismont, Baillarger and others, and distinct treatises have been written by M. Delaye, M. Rodiguez, of Montpellier, and lastly by M. Jules Falet, whose comprehensive summing up of our knowledge on the subject, and whose clear views as to the diagnosis and treatment of the malady, make the study of his work essential to the psychological student, and most interesting to the practical physician. Still more recently, the pathology of general paralysis has been made the subject of an inaugural basis by Mr. Linas, which I have not seen, but which is mentioned in terms of high eulogy by the French physicians, and particularly by M. Brown-Sequard.

In England, although there is no systematic treatise on this special disease, the stress laid upon it by the French school of psychological medicine, the frequency of its occurrence, and its usually fatal progress, have rendered the symptoms of general paralysis perfectly familiar to the alienist physicians, and have induced among them a particular study of its nature and treatment. Unfortunately the result of their labours is almost entirely confined to the pages of the journals specially devoted to mental science, and this easily recognisable and important disease remains almost concealed from the observation of the medical public. The best account of general paralysis is to be found in the Croonian lecture of Dr. Conolly, published in the Lancet for 1849, and delivered before the College of Physicians in the same year. It is much to be regretted that the clinical lectures of the same esteemed physician, to which I owe my own acquaintance with the disease, and from which the Croonian lectures were condensed, have never been published. They yet may be; but the lecture referred to, graceful and eloquent, yet essentially practical, may be taken as an evidence, that I only follow Dr. Conolly's opinion in dwelling upon the importance of the malady, and the lamentable want of a more general knowledge of its symptoms among the profession at large. In Dr. Copland's Medical Dictionary, the subject, as might be expected, is admirably, though briefly discussed; and I believe these two instances embrace the amount of information on the subject that has been addressed to those members of the profession not actually engaged in the department of medicine to which I myself belong.

As Calmeil's work appeared so late as 1826, the disease being previously perfectly unknown to us as a distinct form, the older English works on insanity do not throw any light upon the subject; and the treatises upon psychological medicine published since, seem to consider that the French authors must be so well known to their readers, that they may themselves cursorily pass over the symptoms and treatment of this formidable disease. Still some admirable articles on general paralysis are to be found scattered through the journals devoted to mental science, and the materials exist for a very full description of it in all its stages. The principal aim, however, of the English writers seems rather to have been to elucidate the pathology of general paralysis; and there are elaborate researches by some of our most eminent psychological and other physicians, among whom I may mention Dr. Bright, Dr. Webster, Dr. Sutherland, Dr. Bucknill, and Dr.

Hitchman, to the last of whom I should especially wish to acknowledge my obligations; sharing as I do to a great extent his views, and remembering his personal courtesy to me while attending many years ago his admirable lectures at Hanwell. In America the disease has received much attention, and foremost amongst the writers upon it, I may mention the names of Dr. Bell and of Pliny Earle.

In addition to the almost universal disinclination of the profession to the study of psychological medicine, and the absence of any treatise on the subject of general paralysis in our own literature, there is another fact which has had considerable influence in restricting extended enquiry into this very important disease, and in preventing its recognition as a distinct malady. This fact of more importance than it would at first seem, is that the name by which we have designated the disease, and which has become of almost universal employment in our reports and case-books, already belonged to another malady, by no means necessarily connected with affection of the brain. General paralysis is known to every student in medicine as existing without mental aberration, it means simply that the upper and lower extremities on both sides of the body, have lost either motion or sensation or both; and it may arise, as all know, from peripheral nervous disease, or from accidental or idiopathic disorganization of the spinal column. I am aware that it has been said that general paralysis may advance still further, and the tongue and some of the senses be affected, the intellect remaining unimpaired. I have never seen such a case; still it is theoretically possible, and thus Dumas in the veracious pages of Monte Christo, describes the paralytic Nortier, as possessing great mental power, and capable not only of executing a will, but of assisting those around him by wise counsels, signalled through the agency of the muscles of his eye-lids, which alone retained the power of voluntary movement.

This suppositious case of M. Dumas may seem very absurd, but it is by no means unparalleled in actual life, and very important medico-legal questions may arise upon the mental condition of a patient in whom there is a general paralysis. Recently in America, an important issue, the Parish Will Case, turned upon the very point whether a paralytic unable to speak or write intelligibly, was or was not competent to execute a will. There does not appear to have been any evidence in this case, as to the existence of the special disease I am about to describe, and I only allude to it as instance of the necessity for a clear discrimination between the ordinary

general paralysis, and that distinct brain affection to which we have improperly applied the same name. This difficulty as to the name of the disease has been felt, and various titles for it have been suggested, either founded on its pathology, as the "chronic menigitis" of Bayle, or on its mode of advance as the "progressive paralysis" of Baillarger and Rodiquez. None of these appear to me so well to translate Calmeil's original designation, "paralysis générale des alienés," as the name "paralytic insanity," and it must be understood that I only technically employ the appellation of "general paralysis," because the most familiar to me, and that I draw a wide distinction between the diseases, which can only be confounded together in their last stages, and even then their diagnosis, though difficult, is not impossible to any physician conversant with the symptoms of the mental as well as the

physical malady.

The cases that I am about to detail,—and they are such as occur every day in the practice of the alienist physician,—will exemplify the terrible nature of this malady, by whatsoever name it may be called, and will prove that I cannot lay too much stress upon the importance of recognizing its early symptoms. To those not familiar with general paralysis, the alleged certainty of its diagnosis may appear marvellous. I can appeal to many practitioners in my special department of the profession, to attest the fidelity of my descriptions, and to bear witness to the fact, that I have in no way over-estimated the importance of this disease and the ignorance of the profession at large as to even its existence. They recognize only the later stages of it, and it frequently happens to the psychological physician, sent for at last by the practitioner attending such a case, or by the anxious relatives of a patient, in whom some apparently slight indications of mental unsoundness have appeared, to be obliged to give an opinion, that is received with incredulity or anger. The ordinary medical attendant, inexperienced in the treatment of mental diseases, has detected only some strangeness of manner and some slight paralytic symptoms, or transitory spinal disorder in his patient, whom he thinks suffering under temporary excitement, he doubts the justness of the opinion which the practised psychological physician must at once pronounce; and he will not believe that he can have overlooked the existence of distinct delusions, and peculiarities of gait and speech that are so full of fatal significance. The special practitioner is politely dismissed, and rest, sea air, or change of scene are tried, in the hope of restoring the patient's nervous tone, and the strangeness of manner and hesitating articulation are expected to disappear under alteratives, wine and tonics. A few months pass over, and, as might have been foretold, that strange manner, far from disappearing, becomes absolute insanity; the physical symptoms once so obscure, have now assumed frightful prominence; the patient can no longer speak intelligibly; his hand is unable to return the pressure of a friend's grasp; his limbs can no longer bear the weight of a body, which still continues to keep up a fallacious appearance of health and vigour; and then, if sudden effusion upon the brain does not earlier close the scene, within a few years, the disorder still further progressing, speechless, and motionless, his mental faculties entirely lost, he will slowly sink into the grave, unable to appreciate the attention, or even to recognize the faces of his nearest and dearest friends. It is in this last stage that this disorder so exactly resembles general paralysis, as seen in ordinary hospitals. The points of difference may be shortly stated. The history of the true mental affection I have already given, there has been delusion and progressive paralysis; these symptoms by no means indicating the near approach of death; in the other case, there has been some blow upon the head, or accidental injury to the spine, or sudden apoplectic seizure, there has been progressive paralysis also, but each limb, or each side, has been separately attacked, and most important of all, although the memory may have become impaired, and there may now be delirium or coma, there has been no extravagance of conduct or want of reason manifested previously to the seizure that affected the whole motive power. Again the prognosis of this form is not altogether hopeless; the blood or serum poured out may be absorbed, the patient may recover, and if not, he will survive but a very short time. In the mental disorder, the patient's state is hopeless, but his life with care may be prolonged for months.

If it should happen that no previous history of the case can be obtained—a supposition practically absurd—there is another distinctive sign of the general paralysis of the insane, which renders its diagnosis sufficiently clear from the ordinary disease. Reflex action in the limbs is entirely, or almost entirely, lost. Dr. Bucknill has paid particular attention to this symptom, and to his pages I would refer the reader for further information. I have myself verified the statement, that tickling the soles of the feet of patients suffering under paralytic insanity in its last stage, is followed by very slight reflex muscular action; while in paraphlegia or other palsy, from pressure or local injury, reflex action is active, and most

easily induced. To such an extent does this want of reflex power in paralysis of the insane extend, that it is not uncommon for patients to die asphyxiated with morsels of food, that the pharyngeal muscles fail to send on, from diminution of their ordinary reflex power of propulsion.

This subject must come again before us in considering the pathology of "paralytic insanity." I have said enough I think to show the distinct line of demarcation between this disorder, and the paralysis of muscular movement described

by the writers on general medicine.

It may be imagined that I over-estimate the importance of "general paralysis," that supposing it to exist, it is not a common disorder, and therefore the physician engaged in the treatment of ordinary disease, may be excused for not studying so rare a malady. I do not know that this would be a valid reason for the neglect of a disease so fatal in its consequences to the patient, but a few figures will show at once the fallacy of such an excuse.

The mean mortality of the population of England and Wales, is given by the Registrar-General, as being in round numbers about 2 per cent. per annum. The average death rate among the insane, according to the last returns of the Commissioners in Lunacy, is about 10 per cent in the county, and 9 per cent in the private asylums; of these it may be estimated that, of the male sex, 50 per cent. of the deaths were from general paralysis; and of the females about 11 per cent. sank under the same disease. This has been shown to be the case at Hanwell; and in the private asylums there would appear to be a still higher mortality from the same form of disorder. Nor is this all, for it must be remembered, that general paralysis may be considered, (as will appear hereafter,) to be an acute disease, and if we restrict the examination of the question to cases of recent attack only, 70 per cent. of the deaths may be put to the account of this terrible malady. This has been my experience in my own asylum. And in the Croonian lectures already referred to, Dr. Conolly quotes a return from Dr. Stilwell's asylum at Hillingdon, where of the deaths 66 per cent. were from paralytic insanity, although it is not mentioned whether in any of these cases the disorder supervened, as it may do, upon other forms of mental derangement.

It unfortunately happens that the published statistical returns of the results of treatment in cases of recent brain disease, are deficient and confused. Dr. Alexander Sutherland gives as his experience, and his own returns confirm his

statement, that under active medical treatment in the early stage of the malady, from 75 to 80 per cent. of those attacked for the first time with insanity, are restored to reason. Now as general paralysis is almost invariably incurable, and always fatal if not arrested, it follows statistically, that the physician who can detect the existence of paralytic insanity, or who is convinced that the patient is not attacked by it, can prognosticate almost with certainty the issue of the seizure; in the one case, that of recent insanity without paralysis, the chances of cure are four to one in favour of the patient; the chances of death under proper care, and except in a few cases, infinitesimal; on the other hand, the chances against the unhappy patient attacked with general paralysis are too great to estimate; but although I am by no means inclined to think that the disease, if treated at its outset, is altogether hopeless; there appears little doubt that its later stage once being entered upon, more or less miserably, as his disease is or is not understood, every sufferer from this form of disorder sinks under the remorseless ravages of this deadly malady, within a very short period from its first appearance.

Though there may be many who demur, as I do myself, to the opinion, very confidently expressed, that paralytic insanity is incurable, its gravity and danger are sufficiently attested by the fact, that patients in whom even its early symptoms are detected, are refused admission into the hospitals of Bethlehem and St. Luke's, on the ground of the uselessness of treatment. I need not dwell upon the importance it may be to many families, that the existence, or even the approach of such a malady, should be discovered before mischief is irretrievable, and hopeless disease set in; even on the supposition that only a few cases recover, it may be of the utmost importance that in the cases in which a contrary result must ensue, the fatal termination of the malady should be foreseen, the date of its invasion ascertained, its probable duration accurately foretold, and the suffering it entails as

much as possible alleviated.

There is again another reason that renders this form of insanity one of peculiar interest; its invasion is almost always upon men, and upon men in the very prime of life; in females of the lower class it does occasionally occur; in the same sex in a higher rank of life, very rarely. Dr. Conolly has never seen in his long experience, a single case of a lady attacked with general paralysis; Dr. Sutherland has met with one case only. Paralytic insanity therefore seems to single out the individual whose life as the head of a household, perhaps,

(To be continued.)

Commentaries on Insanity. By D. F. TYERMAN, Esq. Continued from Page 372.

Case 7. Chronic mania; death preceded by convulsions. A. J. C., 32, unmarried, by occupation a chimney sweep, admitted in June, 1852, had been insane for eighteen months, the cause and history of the disease being unknown. The case was characterized by constant restless excitement, and, although of small stature, the patient was frequently impelled to attack other patients even of great muscular strength, and challenge them to fight; much vigilance being required to prevent injurious, or fatal retaliation. His habits were very indecent; and he was addicted to eat any description of filth; even excrementitious matters. The case terminated fatally by very gradual exhaustion, fifteen months after his admission; an attack of convulsions, ending in coma, having set in three days before death.

Autopsy. Brain substance highly vascular and firm; the lateral ventricles (the cornua of which were not prolonged into the posterior lobes) containing much serum. Membranes of the brain highly vascular, opaque, and partially adherent to the cortex. Very abundant serous effusion into the arachnoid sac. Thorax. There were scattered tubercles in both lungs: and effusion, to the amount