of the weakest as his standard of measurement. Though we have already indeed been introduced to an embryonic torm of amphibious cycle capable of adapting itself to ploughing the pathless waste of the ocean, or dinting the public highway, it will not serve the present purpose to enter into such speculations, but it may be mentioned that an aerial bicycle has been invented and tried successfully, the cost of each machine not being more than £20.

For most of us the exquisite loveliness and delight of a fine summer's day have a special charm. The very life is luxury. The air is full of sound and sunshine, of the song of birds, and the murmur of insects; the meadows gleam with golden buttercups, we almost fancy we can see the grass grow and the buds open; the bees hum for very joy; there are a thousand scents, above all, perhaps, that of new-mown hay. There are doubtless many patients before whom "all the glories of heaven and earth may pass in daily succession without touching their hearts or elevating their minds," but, in time, it is possible even these would, by means of cycling, have their love of Nature, which had been frozen or crushed out, restored. Thus all Nature, which is full of beauties, would not only be a never-failing source of pleasure and interest, but lift them above the petty troubles and sorrows of their daily life.

The Propagation of Insanity and Allied Neuroses.\* By S. A. K. Strahan, M.D., L.R.C.P., Barrister-at-Law, Assistant Medical Officer, County Asylum, Northampton.

For the past thirty years our insane population, as recorded in the annual Reports of the Commissioners in Lunacy, has steadily increased at the rate of over 1,500 a year, until in December, 1888, it had reached the alarming total of 84,340. Nor can even this large total be taken as at all fully representing the number of our insane. According to the census returns in 1871, the Commissioners' figures represented only 82·1 per cent., and in '81 only 86·5 per cent. of those returned as idiotic and insane; and when we remember that the census returns were made by fathers and heads of families more likely to under than overstate the numbers of afflicted in their households, we may venture to estimate that at present our insane population is fast approaching the enormous total of 100,000.

<sup>\*</sup> Paper read at the Quarterly Meeting of the Medico-Psychological Association, held at Bethlem Hospital, May 15th, 1890.

Some time ago the Commissioners' annually-increasing figures attracted public attention, and in certain quarters caused some uneasiness. The cry got abroad that insanity was on the increase, and at once the figures were examined and analyzed with a view to setting the public mind at rest by proving that there had in reality been no increase in insanity in recent years. We have all heard of what can be proven by statistics, and it is almost needless to say that this attempt on the part of the statistician to allay the uneasiness in the public mind was in part successful. When he touched the figures it at once became clear that accumulation pure and simple was responsible for much of the apparent yearly increase of our insane. It was shown that the rate of admission into asylums in proportion to the population had increased only slightly within the past twenty years. In 1869 it was 4.71 to ten thousand of the population; in 1879 it had only increased to 5·16; and in 1888 the proportion still stood as in 1879. However, notwithstanding the equality of the figures for '79 and '88, it was generally admitted that there was probably a slight increase; and this was explained as being the result of the more perfect certification of the insane which is now practised, and which has led to the disappearance from their usual haunts of the village fool and eccentric wanderer of the last generation. Next it was shown that the death-rate in asylums had materially decreased in recent years, having fallen from 10.47 in 1879 to 9.69 in 1888. It was also pointed out that during the same decennial period the recovery rate had, unfortunately, also decreased, falling from 40.50 per cent. on the admissions—excluding idiots and transfers—in 1879 to 38.71 in 1888.

Here, then, was the explanation of the yearly increase in our asylum population. The people continued to be received into the asylums at about the same rate as heretofore; and as fewer of them died and fewer recovered, of course they must accumulate. This much the statistician proved, and this much only. Even Mr. Noel A. Humphreys, who recently read a paper on the subject before the Royal Statistical Society, did not prove more. He summed up the outcome of his labours thus: There could be no great increased tendency towards mental disease among the people since statistics proved that people are going insane to-day in almost exactly the same proportion as they did ten or even twenty years ago.

There are, however, one or two matters which the statistician did not touch upon, the consideration of which is absolutely essential to a proper understanding of the question of the prevalence of insanity and allied disease. Had he enlarged his field of inquiry so as to include these, I doubt whether even his verdict would have been so satisfactory.

First, there is the question of child suicide. Fifty years ago suicide of children of tender years, which has of late become so painfully common, was almost unknown. Unfortunately, we have no statistics to fall back upon, but I believe members present will endorse my assertion. suicide among children is generally put down as the result of an earlier development of the mental powers in consequence of early and forced education; that is to say, the period of reasoning discretion is arrived at now at a much earlier age than formerly. To this there are two objections: First, that suicide was almost unknown among the children of the upper classes of fifty years ago, although they were as highly educated, and frequently at as early an age as the children of to-day; and, second, that this explanation to have any weight must be based on the assumption that suicide in these young people is the outcome of reasoning, which I believe few will admit. Even in adults the determination to quit life is less frequently the outcome of reasoning than of a morbid impulse which impels the individual to the act against his reason. In children, I should say, suicide is almost always an unreasoned, impulsive act.

Education at high pressure, and begun at too early an age, has doubtless something to do with this lamentable destruction of child life, inasmuch as it conduces to the building up of those disordered nervous conditions from which is evolved the insane diathesis; or it may act as an exciting cause in an already ill-balanced or ill-developed mind. Beyond this, I fear, we cannot make it responsible. There is no form of mental disorder so largely attributable to hereditary taint as the suicidal impulse, whether accompanying mental depression or standing alone, and to this cause we must set down the great majority of cases irrespective of age. Dr. Maudsley truly says of these child suicides:-" If the child's family history be inquired into it will usually be found that a line of suicide, or of melancholic depression with suicidal tendency, runs through it; so it comes to pass that a slight cause of vexation is sufficient to strike and make vibrate the fundamental life-sick note of its nature."\*

Another matter which requires notice from the statistician and explanation before we can admit that there is no increased

\* "Fortnightly Review," May, 1886.

tendency to insanity in the populace is the suicide of adults. If it be true that the increase in the numbers of the certified insane is almost entirely due to the gathering together of the bulk of our insane population in asylums, then it follows that the proportion of insane outside asylums must be proportionately diminished; and, consequently, suicide, which we must take in the majority of instances to be the result of mental disorder, should be less frequent than it was before the insane were so carefully weeded from the general population. But what is the fact? On reference to the Registrar General's Reports we find that deaths from suicide are increasing year by year much as the certified insane are. The number of deaths from suicide registered in 1864 was 1,340, which by a steady and gradual increase had mounted up in 1888 to 2,308. Nor is this an apparent increase only, for while the proportion of deaths from suicide in 1864 was only 64 to the million, it had risen in 1888 to 81 to the million, an increase of as nearly as possible 33 per cent. within less than twenty-five years.

How those who maintain that there is no increase of mental disease among the people explain these figures of the Registrar General I do not know. So far as I know, they have not been considered in this connection; but I fail to see how they can reconcile the fact that suicide, which is an unmistakable sign of what we know as the insane temperament, is increasing among the people with their assertion that the insane have been winnowed from the general population to an extent hitherto unknown. Until this be satisfactorily explained we can hardly believe that insanity is not more prevalent now, when suicides rank in the Registrar General's Report at 81 to the million and we have over 84,000 certified lunatics in asylums, than when the certified insane were less than half that number and the suicides 33 per cent. under what they are to-day.

The third point to which I would call your attention is the fact that the number of deaths registered under the head "Diseases of the Nervous System" has increased from 33,429 in 1864 to 49,985 in 1888, being an increase of no less than 50 per cent., or of 146 to the million, within less than 25 years. This shows clearly that nervous disease other than insanity has vastly increased, and would agree with the often-repeated assertion of the general practitioner, that nervous disorders are the curse of the present age.

And now as to the cause of this increase of nervous disease, for I think we must admit that there is an increase. Shall we accept the list of causes usually set forth, such as forced

education, abuse of alcohol, increase of city life, and the wear and tear of the feverish pace at which we live? These are, indeed, causes of nervous degeneration and disease; but they are only the remote causes in the vast majority of the cases to which we now refer. They are the causes of nervous disease just as they are the causes of scrofulous disease; they are the causes which have laid, and are laying, in one generation the foundation for the disease which is to appear in the next. Nervous disease of the graver kind, as met with in the imbecile, the insane, the epileptic, or in the habitual drunkard or criminal, is very seldom the work of one generation. True, we may at times have idiocy or imbecility, apparently arising from some unhappy blending of parental characters in themselves sound and healthy, and insanity, or epilepsy, or general paralysis arising in healthy stock, apparently from one or more of the causes mentioned above, or from sunstroke or mechanical injury to the brain. Yet these cases, which might well be classed together as traumatic, are very few, and, I am convinced, would be rarer still could we get anything like an accurate family history. It is not everyone who has suffered sunstroke or got knocked on the head who goes insane. Latterly I have been inquiring as carefully as I could into the family histories of the few such cases at my disposal, and I am led to the belief that even here we shall find that the inherited insane diathesis is responsible for the mental disturbance in the majority of such cases.

A good example of the wonderful influence of inherited taint is seen in those painful cases of melancholia which we so frequently meet with among those of atheromatous habit who have passed the meridian of life. In these cases, when the vessels become so loaded with earthy matter as to be impervious to the blood, the surrounding tissue undergoes the usual degenerative changes consequent on starvation. Now, if the patient be of stable nervous temperament, he will, as the nervous degeneration proceeds, sink quietly through his second childishness into the oblivion of dotage; but if, on the other hand, he has inherited the insane diathesis, delusions of persecution, of impending poverty, or of eternal condemnation will arise to make miserable the evening of his life. And as this inherited innate tendency acts in these cases, so, I am convinced, does it act in most of those cases in which we find mental aberration following sunstroke, reducing bodily disorders and mechanical injuries to the head.

I do not mean for a moment to deny that civilized life,

artificial and unnatural as we know it to be, is the cause of a great mass of our nervous, as it is of all other of our degenerative diseases. What I wish to infer is that the nervous disease commonly met with by us as alienists is seldom the production of the individual. The foundation for it has been laid in previous generations. Consequently we can look upon the present unfortunate state of things without any self-reproach, recognizing it to be the outcome of the system which the State has established and which it is our duty merely to administer.

From time immemorial it has been recognized that the great cause predisposing persons to insanity of all kinds is hereditary taint, and as time goes on, and we are enabled to make more careful inquiry into the influence of hereditary predisposition on the production of disease, the truth of this old-time belief becomes more evident. Unfortunately we are not in a position at present to say authoritatively what amount of the insanity met with to-day is due in the first instance to inherited weakness. What statistics we have on the subject while pointing directly to heredity as the great predisposing cause, vary so greatly that it is almost impossible to strike an average for the whole. This variation of the figures of different observers, which is so much to be regretted, is directly due to the efforts of relatives and friends of the insane to conceal what they consider a stigma upon the family. We are all only too well acquainted with the manner in which these people, even in the poorer ranks of life, endeavour by every means to keep from us a knowledge of such family taint. Every writer on insanity has commented on it, and all condemn it. One writer has compared the difficulty experienced in getting at the truth in such cases to that which might be expected in dragging from an erring woman a confession of her one frailty. notwithstanding this hard lying on the part of relatives and friends, careful observers have been able to trace in from 25 to 90 per cent. of the insane coming under their notice a distinctly marked hereditary tendency to insanity or allied nervous disease. Moreau put his percentage as high as 90. Burrows said 85, Holst 69, Jassen 65, Michéa 50 to 75, Thurnam 51, Webster 32, Needham 31, Guislain 30, Maudsley 28, and

These figures vary widely. They vary with the amount of prevarication and untruth practised by the relatives of the mane, and it is to be feared that until human nature becomes something different from what we know it to-day, or

until families are compelled by law to keep some kind of family record, little more than we at present know on this most important subject will be learnt from statistics. From education, the modern cure for all ills, we can expect nothing, for we find that in the upper classes, where education should be most advanced, truth upon this one point at least is less plentiful than among the ignorant.

The Commissioners' summary of the whole number of persons certified as insane in 1887 shows that in spite of error, accidental and premeditated, close on a fourth—23 per cent.—were by heredity predisposed to insanity, while of the total admissions for the ten years 1878 to 1887 inclusive, in 20.5

per cent. inherited taint was admitted.

With our present knowledge we can say positively that a great part of the insanity and other nervous disease which afflicts all civilized people is the direct result of hereditarily transmitted predisposition. Nor can it be doubted that the tendency of the age is toward the cultivation and spread of these hereditary diseases, for while our artificial life, with all its feverish haste and worry, is prolific of nervous degeneration, the customs of civilized society, as at present constituted, are designed to bar the course of Nature and prevent, so far as is possible, the operation of those laws which weed out and exterminate the diseased and otherwise unfit in every grade of natural life. The beneficial, or let us say the hygienic, working of these laws we see among the more savage races, where the mode of life is less artificial than our own; that is, where the individual is in more perfect accord with his environment than is the case among the more highly civilized communities. Even here in natural life we occasionally meet with the unfit (for the unfit is a variation, a pathological variation, and variations, both pathological and physiological, must of necessity appear at times even under the most favourable conditions), but when such variations from the normal or healthy type do appear in natural life their survival is of brief duration. Here natural selection remorselessly weeds them out, and so prevents contamination of the race. It is by this means the high standard of health is maintained amongst savage and semicivilized races and all through the inferior animal world.

How different is this from what obtains in the artificial life which civilized man has created for himself. With him the weakling and the diseased, who in the natural state would at once succumb, are nursed and protected; they are surrounded with an artificial environment designed to render a

continuance of life possible; and finally, if they be endowed with the procreative function, they are permitted to beget their like. We make an attempt to hold Nature at bay. We fight and struggle with all our strength against the inexorable law which condemns the unfit to extinction. Fortunately for the race, however, our greatest success can only be temporary. At best we can but for a little time put off the evil day—if it can be called evil—and where is our gain? In the more primitive and natural conditions of life the weakling is at once removed because of his inherent weakness—his unfitness, his inability to suit himself to his surroundings—whereas we in our wisdom struggle to postpone that consummation, and frequently it is not until one, two, or perhaps three generations of suffering wastrels have fretted and wept their hour upon the stage that we stand aside, unable longer to bar the path, and see Nature do her work.

I do not for an instant intend to question the righteousness of these endeavours of civilized man on behalf of his afflicted brother. Upon that great question we shall not venture. We can but admire the beauty of the unselfish spirit which prompts his action, and regret that Nature vouchsafes him such a sorry reward. Our business at present is but to point out that by this means disease is being propagated, and that much avoidable

suffering is thus created.

All hereditary diseases tend toward extinction of the family, and for this reason are only to be found in perfection where the laws of Nature are interfered with. It would be impossible to cultivate in natural life a family bearing even such an apparently innocent abnormality as, say, colour blindness, for the individual in whom the condition first appeared would undoubtedly fall a victim to some enemy early in life, and so the abnormal character would be lost. Even in civilized life the necessarily fatal type is reached sooner or later if reversion to the healthy type be not secured by crossing with the healthy. In this way Nature ultimately rights herself in all cases by setting her veto upon the perpetuation of disease, and were it not for the suffering experienced before oblivion is reached, nothing need be said. The erring might be left to their fate. But this suffering, which is serious even in natural life, becomes grievous in these days of the higher civilization when those who owe their continuance in life to the exertions of others are not only permitted, but are aided by every device known to science to propagate their kind. Nowadays, when the maniac, the melancholiac, and the would-be suicide of yesterday, the imbecile, the epileptic, and the habitual drunkard are married, and given in marriage, the suffering has become so terrible, the contamination of the race so great, and the care of the useless offspring begotten so heavy a charge upon the community, that if some effort be not made voluntarily to stay this curse upon the land the legislature must be called upon to interfere. At present, except only the idiot and the raving maniac, who in the eye of the law are unable to make a contract binding on themselves, there is no one so diseased, crippled, or deformed that he or she may not marry and become the parent of a suffering, helpless family, so far as the law is concerned. That this should be so is a scandal upon our boasted civilization. As Dr. Benjamin Ward Richardson has wisely said, "The first step towards the reduction of disease is, beginning at the beginning, to provide for the health of the unborn. The error commonly entertained, that marriageable men and women have nothing to consider except wealth, station, or social relationships, demands correction. The offspring of marriage, the most precious of all fortunes, deserves, surely, as much forethought as is bestowed on the offspring of the lower animals. If the intermarriage of disease were considered in the same light as the intermarriage of poverty, the hereditary transmission of disease, the basis of so much misery in the world, would be at an end in three, or at most four, generations."\*

Let us see how the present system works among the insane, 50 per cent. of whom it is not too much to say have inherited their disease. Take the case of a young man who in consequence of inherited nervous instability becomes insane; he is treated in an asylum, and as soon as he recovers from the acute attack is discharged, however bad his family history may Being naturally impulsive and emotional, and having but slight control over his passions, he not infrequently marries early—perhaps a very short time after his discharge—and when he returns to the asylum, as he is almost certain to do, he is probably the father of two or three children. Again he recovers, and again he returns home to beget a tainted race. Ultimately he may return to end his days in the asylum, but before that stage in his downward course is reached he has probably left a large family behind.

Or take the case of a woman cursed with a bad inheritance. She marries, becomes pregnant, and, unable to bear the strain thus thrown upon the system, her mind gives way, and for a time

\* "Diseases of Modern Life."

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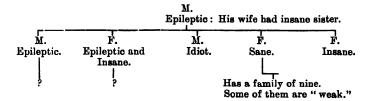
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she becomes an inmate of some asylum. In the majority of such cases she, too, recovers for a time, and goes out into the world to bring forth perhaps a large family loaded with a double allowance of original sin. No asylum is without scores of such cases. They make up a large part of our moving population, men who beget families in the intervals between attacks of mania, melancholia, of epileptic excitement, and women who return to the asylum time after time, each visit following, or in some cases preceding, the birth of an unfortunate child.

Now this procedure can have but one result, and that is the propagation of insanity, idiocy, suicide, epilepsy, chorea, neuralgia, and like nervous diseases.

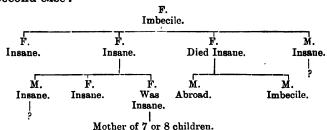
During the past ten years (excluding idiots and those discharged not recovered) there has been an average of 5,500 persons discharged from asylums annually. Taking the males with the females, it is not too much to say that 50 per cent. of these are within the procreative epoch of life. With that I think you will agree. Here, then, we have 2,750 persons who have actually been insane annually turned loose to act as parents to the next generation; 2,750 centres of infection deliberately laid down, and yet we marvel that nervous disease increases. Quatrefages says: "Man is subject to all the general laws of nature. The law of heredity is one of those from which he cannot escape."\* Man is aware of this fact. Yet while he takes the greatest care not to violate this law of nature in the breeding of his horses and cattle, and even his dogs and cats, for some inscrutable reason when it becomes a personal question he ignores this fundamental law, and every year thousands of children are born with pedigrees which would condemn puppies to the horsepond.

Take the following two cases which have lately come under my observation. They are good, but by no means rare or extraordinary examples of what is constantly going on around us. Here are the two family trees:—



\* " Human Species."

Second case:-



Now what would the world have lost that it could not well have spared had the ancestors of these wretched families been forbidden the right of procreation? Nothing. It would have escaped an inestimable amount of suffering, past, present, and to come: a considerable amount of pauperism and consequent tax-gathering—that is all.

In view of the conclusive evidence we now possess of the hereditary transmission of so terrible a disease as insanity—a disease whose ravages in society scientific men and economists alike deplore, and whose increase under the present state of things medical science is unable to stay—I think the time has come when something should be done to limit its propagation. This is to be done in one of two ways: either by educating the people, or, as a last resort, calling in the aid of the legislature. Ultimately, I fear, the latter course must be adopted, for the reason that many of those who aid in this propagation are actuated by sordid motives, as rank and wealth, rather than ignorance, while many of those bearing the insane diathesis are so impulsive and ill-balanced that they are at most semi-responsible, and with these the teaching of science, however convincing to the thoughtful, can never have any great weight. Sir William Aitken says: "Legislative enactments regarding the intermarriage of persons tainted by disordered intellect are greatly to be desired; and the concealment of such disorder with a view to marriage ought to render marriages null and void which are concluded under such circumstances."\* The legislation here suggested should be framed to meet the requirements so far as is possible of three distinct classes of propagators of the insane diathesis, viz.: 1. The unwilling propagator. That is the man or woman who has been entrapped into marriage with a tainted person by fraudulent concealment of the fact. 2. The criminal propagator,

\* "Science and Practice of Medicine." Seventh Edition.

as I would call the person who for sordid or selfish motives wittingly enters into marriage with a tainted person, and 3. The natural propagator, under which head would come all those who have already been insane, all confirmed epileptics and drunkards, and all those who are so ill-developed or tainted that there is not what might be called a reasonable chance of their offspring being healthy.

No one will say that for the first class legislation is not required. The person who has been induced to marry a tainted person by concealment of the fact should have relief as Sir William Aitken suggests. Concealment of the existence of such family blight in these circumstances is a fraud. It is a moral wrong, and should quickly be made a legal one. This fraudulent concealment, deliberately practised as it too often is with a view to marriage, should be sufficient ground for nullification of the marriage contract. I believe if a Bill were at present brought forward with this object it would receive the support of both the scientific and legal schools of thought.

The second class, which would be most difficult to reach, is made up of those who, well knowing the family history of the tainted one, disregard it. This disregard arises from various causes. In some cases it is the result of ignorance, and here from education we may anticipate good results. In some others it arises from gross carelessness, which is nothing short of criminal, and should be prohibited. But in the vast majority of those cases in which this law of nature is wilfully disregarded, the offenders are guided solely by sordid and selfish motives, as social elevation and love of wealth. In all civilized countries, even in the highest families—not excepting royalty itself—we find men and women for their own personal aggrandisement deliberately, I had almost said with malice aforethought, entering into marriages which can only end in disaster to the luckless children.

When the day of tribulation comes, some of these, falling back on puling sentiment, assert that they were led by love's legendary single hair, but such are not to be believed. A bow-string would not drag a right-thinking man or woman to such a fate. Others, who might be called the quasi-religious, throw all responsibility on Providence. These are selfish creatures, who for their own ends refuse to understand that Providence, having established benign laws for the government of His creatures, will not stultify Himself by staying those laws at the cry of those who have wittingly violated them. In all these cases, high and low, selfishness pure and simple is the

motive power, and the strong arm of the law should be invoked to prevent, as far as possible, such selfishness saddling the com-

munity with a helpless, worthless offspring.

The third is by far the largest and consequently most important class. This class claims our sympathy, but we must not permit our pity to overbear our reason. It is better that one generation should suffer than many. If this class could for one generation be forbidden the right of procreation, the effect upon our insane population would be enormous, and the world would lose nothing worth having. Dr. Maudsley has said that in forbidding the marriage of those of the insane temperament, we should be to a certain extent stamping out genius, but the species of genius which occasionally springs from the insane family is not of the most useful order generally, and I would venture the assertion that there is not sufficient probability of the insane enriching the world by begetting the genius to justify him in hazarding the experiment.

I have seen a man whose mother was an imbecile, whose sister was an idiot, and who was little better himself, come to visit his wife and wife's sister—whose mother had also been insane—who were confined as lunatics in the same asylum in which his idiot sister resided, and I have watched this creature, the father of three children, laugh gleefully at the antics of his relatives in the visiting-room. Shall we expect genius from such as this? There are thousands of just such illdeveloped men and women in the country, and these we can only hope to guide by force. Education is all very well in its place, and it must have a beneficial effect among those who have sufficient mental development to appreciate the evil under which their families labour, and who have sufficient strength of will to enable them to choose the good rather than the evil, but with those like the man I have mentioned, it is useless to plead, only coercion will keep them in the right path. They attend upon the calls of their instincts and passions as does the unreasoning beast, and not even an angel from Heaven could hope by moral sussion to induce them to curb a single appetite or in any way mortify the flesh.

Of course the old cry of "interference with the freedom of the subject" will arise like a spectre to bar the path of legislation, but this ghost has been laid before and will be again. These wretched creatures far down in the scale of degeneration, with just sufficient intelligence to keep them from outraging the usages of society, who create nothing, add nothing to the commonwealth, but are instead a charge upon the community; these have no more right to claim freedom of action as to procreation than has the leper to mingle with

the populace.

All men and women who have been insane once and have a bad family history; those who have been twice insane, even if the history be good; and all who are confirmed epileptics or drunkards, should be prevented by the State from becoming parents. These people have no more right to carry suffering and contamination amongst the people than has the person suffering from small-pox to do so by travelling in a public conveyance. As with the victim of the small-pox, it is their misfortune more than their fault, but of this society can take no notice. The unfortunate few must always suffer for the benefit of the many. It should be the duty of the State to see that such unfortunates are protected and cared for, and that their lives are made, so far as is possible, useful and happy, but that they should be permitted to hand down their disease to innocent children any more than the sick one should give his small-pox to his neighbour is unfair to society and to the race.

Does Mania include two distinct varieties of Insanity, and should it be Sub-divided?\* By George M. Robertson, M.B., Senior Assistant Physician, Royal Asylum, Morningside, Edinburgh.

The first difficulty one meets with in deciding these points is in knowing exactly what is meant by mania. Pinel's definition of mania+ was insanity, marked "by a strong nervous excitement" of the mind and body, "accompanied by lesions of one or more of the functions of the understanding." Melancholia was distinguished from it, by there being "no propensity to acts of violence," and by the insanity being "exclusively upon one subject."

Pinel thus divided insanity into two forms, one of which was accompanied by excitement, and the other was without excitement, the insanity in the latter being also only upon one subject. It is obvious that we do not now understand the

<sup>\*</sup> Paper read at the Quarterly Meeting of the Medico-Psychological Association, held at Manchester, March 13th, 1890.

<sup>†</sup> His Manie avec Delire.
‡ Pinel, "Treatise on Insanity," translated by Davis, p. 159.