punishment of the insane is objected to. To say that an insane person should not be punished for a crime, because he "could not help it," is simply to betray confusion of thought, or to accept a doctrine that, rigidly applied, would render punishment in any case indefensible. The object of punishment is to modify character, to add a new force to the abiding springs of conduct. The possibility of carrying out this object is the one thing to determine in considering a question that cannot yet be regarded as definitely settled—Whether in any case it is right to punish the insane. No matter how numerous may be those who say that an insane person should never be punished, and no matter with what heat of passion they uphold their view, the question cannot be regarded as settled so long as clearly-thinking, humane men, with competent knowledge, hold the opposite opinion. The subject is, however, a large one, and would repay with interest a thorough-going discussion.

A feature of great value in Mr. Sully's book is the copiousness of bibliographical reference. At the end of each chapter is a list of writings on the subject dealt with.

The work is a good one for those who, having no previous acquaintance with the subject, desire to be put in possession of the main facts of psychology. Notes on the training of the various qualities of mind render the book specially interesting to persons concerned in education.

W. R. H.

The Pedigree of Disease. By Jonathan Hutchinson, F.R.S. J. and A. Churchill, 1884.

(Continued from page 292.)

That the argument may not be a broken one, it is necessary that we should very briefly re-state the results obtained in the first part of our review of Mr. Hutchinson's book. A very few words will suffice. The subjects under consideration were Temperament and Diathesis. These were, in the first place, defined, in the next, contrasted; and here it will be remembered that Temperament applied to the organism in Health, Diathesis to the same in Disease. From this we passed to a discussion of the criteria of Temperament, which ended in the conclusion that, though the data available were most scanty, though these scanty data were most unreliable, yet that temperament was not a feu follet, but a searchable something, and accordingly to be sought. This brought the first part to a close.

We now have to pass on to consider another of the vague bequests of the past—Idiosyncrasy. Concerning this, Mr. Hutchinson insists, and very truly, that the word is intended to indicate our ignorance of causes, not our disbelief in them. Idiosyncrasy signifies to us a behaviour of the organism for which we cannot account—for which no knowledge we may possess concerning the organism gives us warrant. What we are pleased to term individuality is a fact of the same class, but of a lower order, for idiosyncrasy is "individuality run

mad;" this definition can scarcely be improved on.

Looked at thus, the question which next arises is—under which heading shall we place Idiosyncrasy—under Temperament or Diathesis? On this point, we think the reader would be somewhat confused as to the answer the author intends to give, for on page 24 we read—"Idiosyncrasy is, indeed, to a large extent, nothing but diathesis brought to a point;" whilst further on, bottom of p. 25, we read-" We have defined idiosyncrasy to be a peculiarity of the individual, usually a rare and exceptional one, which does not necessarily entail any degree of proclivity to disease. By the first of these statements we are led in the direction of Diathesis, by the second in that of Temperament. If we halt midway, we may take this comfort to ourselves that had we followed either indication we should have attained only to a partial truth. Let us examine the question a little more closely; and first in the direction of Diathesis. Imagine a family with a well-marked pathological tendency—say in the direction of phthisis—hospital and general practice will tell us every day concerning such that this tendency will be manifested by the different members of the family in very varying degree; in some it will be possible, by careful treatment, to keep in abeyance the tendency; in others, treatment may fail to do so, but may yet prove a powerful factor in modifying the course of the disease; whilst in one, perhaps, we may find that, despite the most careful preventive treatment, the disease arises, and then, apparently without the smallest regard for curative or palliative means, runs an uninterrupted and rapid course. Clearly here we have "diathesis brought to a point," in this one member the pathological tendency Why-we do not know. Let us now look culminates. at the question from another standpoint, and suppose, e.g., that a capacity for work marks a family, this we know to be the case not uncommonly. Whilst then the family, as a whole, is known by this quality, energy, we shall perhaps find that, in one particular member this same quality will manifest itself in a most unusual degree, in the performance, viz., of an almost incredible amount of work on very possibly a spare diet and a seemingly inadequate allowance of sleep. Again, we have individuality "running mad," if you like, but in the direction of temperament this time, for surely none would dream of classing, as pathological, capacity for work. We are looking, in fact, at "a fundamental mode of activity of the organism." Again, we could hardly class as indicative of a pathological tendency, the fact that one organism will react to a very minute dose of atropine, whilst another will show an unusual insensibility to the same drug. There is no pathological tendency here—nothing, indeed, "but a fundamental mode of activity."

Clearly, then, it would seem that individuality may signalize itself both in health and disease, and therefore that idiosyncrasy is not only Diathesis, but also Temperament brought to

a point

We may here remark incidentally that the fact of our employment of such a word as idiosyncrasy is significant of scientific degradation. If we search the exacter sciences-mathematics, physics, even chemistry, we search in vain for such a term; yet we might, if we so willed, use the term even in these —as, for instance, in the case of a number of balances, some of which we discovered would turn to a milligramme, others not to a centigramme. Here is idiosyncrasy, but the physicist is content to say that one is more sensitive than the other, fully satisfied that, if he investigate, the reason will be forthcoming in a greater nicety of finish of the fulcrum, or in a higher or lower pitching of the centre of gravity of the beam of the balance. Nothing whatever would have been gained by the use here of the word idiosyncrasy, just as we gain nothing by it. It is, indeed, we think, a very useless term. Let us not be misunderstood, the word idiosyncrasy is not meaningless—on the contrary, it means something very definitely, only it is useless, because we already possess words capable of expressing that meaning. It may be argued that the word avoids periphrasis; but even admitting this, it may be questioned whether the disadvantage of a periphrase is not more than counterbalanced by the objections to the multiplication of terms.

Leaving this, we have next to consider a very important subject. Accepting the term idiosyncrasy, as we must here, we find the statement, p. 25, "that they (the idiosyncrasies) depend upon structural peculiarities, we can not doubt, though we may be quite unable to demonstrate their physical cause."

Here, surely, is an article of faith on which Pathology must stand or fall; to this we must all give in an absolute adhesion -we shall see, later on what adhesion to this statement involves. Mr. Hutchinson next advances to the further point, that not only must functional idiosyncrasy involve structural idiosyncrasy, and vice-versa, but that structural idiosyncrasy may be the only fact which may strike us, i.e., the functional peculiarity entailed may be quite subordinate or altogether escape notice. As examples of such structural idiosyncrasy, we find instanced—coloboma, retention of their sheaths by the retinal nerve-fibres, clefts in the eyelids, absence of levator palpebræ, hare-lip, etc. We think this part of the book particularly valuable, enforcing, as it does, the doctrine that functional peculiarity involves structural peculiarity; for, knowing that the structural peculiarities above recorded must entail corresponding peculiarities of function, and yet that these latter are not apparent, we shall, with this before us, find it the less difficult to grasp the teaching that abnormal function will also involve abnormal structure, though the latter be not apparent.

The above instances of structural idiosyncrasy do not involve any definite pathological tendencies. They remain stationary as fundamental modes of structure—the counterpart of temperament; but we may find structures showing peculiar and definite departures from the normal-which departures we must class as morbid—and then our structural idiosyncrasy associates itself with diathesis. This diathetic form Mr. Hutchinson illustrates by certain skin diseases, e.g., by molluscum fibrosum, xanthelasma, psoriasis, and others; and in concluding this part he points out that it is not very far from the position thus reached to the consideration of the development of morbid growths in general as indicative of local morbid proclivities of certain tissues. Should we be very much further on our way if we granted this? That is a question we are not desirous of entertaining, but we think that we are the further for this juxtaposition of structure and function which the employment of the term structural idiosyncrasy effects. It is hardly possible to ring the changes too often on these points, for—to alter an old saying:—"What the eye doth not perceive, the mind doth not believe." Let us see how this applies. Take the doctrine of Heredity in insanity: is it not held by many authorities in this domain that this is not proven, i.e., that the evidence is not such as to exclude simple coincidence on the laws of probability? Admitted, but none the less can you doubt the doctrine of Heredity here! To answer this we

may observe that it is not hard to trace in the resultant of two forces the likeness to its parents; but multiply the forces, not fiftyfold, but a thousandfold, and then seek in the resultant the resemblance to any one of its parent components. What will be the result? You may then not only not see a likeness, but you may see apparent unlikeness; and yet would any physicist in the world deny that this same resultant bore the traces of the component we were seeking? Can we not even go further, and ask the question, if theoretically one could deny the possibility of a resolution of the resultant into its constituent components, and then behold the likeness sought! As well, indeed, might you deny that the projection of a given flake of foam was the offspring of and resembled its countless parent forces, on the grounds that you could not prove it, could not eliminate chance, as deny in things mental that cast of thought in the parent will be projected into the psychosis of the child, and be there for him who knows how to look for it. Anything short of this belief shakes at the foundations of a structural psychic pathology, and it is well that we should recognize this. It is, it must be confessed, a praiseworthy condition of mind which avoids giving facile credence to doctrine, and demands demonstration, but it is doubtful wisdom which, on the grounds of negative, not positive evidence, discredits a principle.

Our task is nearly finished, for it would not be in place here to follow Mr. Hutchinson in detail. The broad lines of the argument of the book are throughout amply illustrated by examples; thus, Idiosyncrasy is considered in reference to diet, to drugs, to the poison of specific fevers, to local irritants; and under each of these headings we find most valuable material, much of which is the result of, or is enforced by, the author's own most careful observation. Diathesis finds similar extensive exemplification, which, however, does not call for criticism here. If, in taking leave, we may be allowed a Parthian shaft, we would draw attention to a statement on page 71. We are there asked to accept as a definition of diathesis "that it is any condition of prolonged peculiarity of health giving proclivity to definite forms of disease." This definition we think not very happy in its wording, for surely the conditions under which health should give proclivity to disease would cease to be health. It would not have been needful to draw attention to this, which may be but a slip on the part of the author, if it be not on the part of our understanding, but that it seems to us most essential to be very clear on these points of definition, and here to recognize concerning diathesis that entering on this we take leave of health, and find ourselves in the domain of the morbid—Temperament taking account of all conditions on this side of disease.

It is impossible to conclude without expressing to the author of the "Pedigree of Disease" our gratitude for having again brought into prominence problems so important. It is needless to say that the subject is ably handled; this could not be otherwise by so accurate an observer and so careful a thinker. But Mr. Hutchinson has other qualifications more especially his own, viz., a most exceptionally wide range of observation and large store of accumulated facts; these it is which fit him as very few others to treat of subjects of the nature of those dealt with here. If the result of his labours are not very definite, let us remember that the best minds of the past have been engaged in the attempt to master the difficulties besetting the consideration of Temperament, Diathesis, Idiosyncrasy, and have not been more successful. To Mr. Hutchinson has belonged the task of showing us what we ought to know and do not know, and of pointing out to us the direction in which we should search.

Need we again apologise for criticizing this book here—surely not. Had we examined evidence in detail, this might have been called for, but we have limited ourselves to the consideration of points of doctrine, and these concern every element of the body, not omitting those serried ranks of cells of the cortex cerebri, of which Physiologists count up five layers! It is here more particularly that Idiosyncrasy finds a home, and here more particularly that we are called upon to believe that underlying the eccentric behaviour is corresponding eccentricity of structure. Should doubts arise, let us quell them as unworthy, and following the wise example of Sir Thomas Browne, in relation to other subjects it is true, never allow such doubts stretch the Pia Mater of our brains.

H. S.

The Law of Sex: being an Exposition of the Natural Law by which the Sex of Offspring is Controlled in Man and the Lower Animals. By George B. Starkweather, F.R.G.S.

The subject of this volume is one of great interest. If it can be shown that the determination of sex is amenable to control, a potent spring of disappointment and of domestic unhappiness would be dried at its source.