marks are decidedly useful. We congratulate the Sydenham Society on having added so valuable a book to their series, and on having secured so competent and sympathetic a translator—one so thoroughly *en rapport* with the author, and *au courant* with the matter of which the book treats. M. Charcot's treatises have long been favourites with English physicians, and the one under review will not, we venture to say, be the least appreciated.

The Pedigree of Disease. By JONATHAN HUTCHINSON, F.R.S. London: J. and A. Churchill. 1884. (First notice.)

We have here, we are told in the prefatory note, a reprint of the author's lectures delivered in 1881 at the Royal College of Surgeons. The purpose of the book must be read in the hope expressed by the author, "that these lectures may be found to *point* in the right direction." More than this is not possible within the compass of some hundred and odd pages, when the subjects dealt with have, as here, such wide bearings. What are these subjects, and what is the direction indicated to us? To many we fear the path may seem a backward one, which again brings us in view of those questions vexed—some of us had hoped, buried—which so long busied the minds of our predecessors. The words temperament, diathesis, idiosyncrasy, bring back a medicine of the past, recall ages dark with humours and vapours which clogged the senses, and which the light of modern science should have dispersed, but which, perhaps, she did but cast into the shade; for it may be that a clearer vision will enable us to penetrate these shades, and there discern the outlines of disconsolates, yet claiming at our hands either decent burial or restoration to the light of day.

Let us look, then, in the direction indicated, and, leaving metaphor, approach our task in plain, nineteenth century fashion. And first, this *temperament*—what is it?

The author's definition is: "The sum of the physical peculiarities of an individual, exclusive of all definite tendencies to disease." Stress is laid on the excluding clause as an essential in this definition, it being insisted that temperament thus defined has nothing whatever to do with disease—it is *physiological*, not *pathological*. It would be impossible, perhaps, to improve on Dr. Laycock's definition of temperament; Mr. Hutchinson thus quotes it: The

temperaments are "fundamental modes of vital activity peculiar to individuals." Note, however, that, whilst consistent with health, the temperament impresses its own features on disease. If we might be allowed the simile, we would enforce this by comparing temperament to the allotropic state of the chemist. Thus, *e. g.*, phosphorus in its uncombined state is known to us both as *clear* phosphorus and as *red* phosphorus. In either state it is phosphorus, no more, no less. But how different the fundamental modes of activity of these two forms; and, granting that they should be placed under conditions which, arbitrarily, we defined as abnormal, how different the reaction in the two cases; in other words, how different the manifestation of the disease. Concerning these two forms of phosphorus, be it said, in passing, that *red* phosphorus would take rank among the temperaments as *lymphatic* phosphorus.

With the word diathesis we at once enter the domain of pathology. The organism now shows, however it has acquired it, a proclivity to disease; each diathesis corresponding to a special type of disease. The author points out that this proclivity persists through long periods, usually throughout the life of the individual; further, that it may be inherited, or it may be acquired. The order of statement and the mode might, we think, in respect of the last, be with advantage altered to: it may be acquired, it will be inherited; for what is the relation of the offspring to the parents but bone of their bone, flesh of their flesh, type of their type?

Temperament and diathesis thus defined, Mr. Hutchinson proceeds to discuss the criteria of temperament. This is one of the most important parts of the book, though the results obtained are not very encouraging, being of a negative rather than of a positive character. We are told that "so long as health exists" the data as to temperament are exceedingly untrustworthy; and yet it is in health that temperament must be studied, else an already very complex problem is yet further complicated by the admission of new factors. Did the older observers escape this danger? The author thinks not; and he points to the very names of the *temperaments* as they have been transmitted to us as indicating the presence of the morbid element. Thus, selecting from Dr. Laycock's classification of the temperaments "the last and certainly by far the best attempt at classification," we are presented with the bilious and melancholic temperaments, both of which Mr. Hutchinson thinks are but different degrees of the same

thing, and very apt to pass the one into the other, as life advances; and, yet more to the point, that the distinguishing feature in either "is one which concerns disease rather than temperament," and "that it might be more conveniently known as the hepatic diathesis."

Returning to the question of the untrustworthiness of the data as to the temperament, and avoiding all confusion with diathesis, the author states it as his belief that we have "but little to guide us in a classification excepting the conditions which go to make up what we mean by complexion." By complexion, it is true, we mean something more than mere degree of pigmentation; thus "the state of the skin as regards thickness, thinness, or transparency, and the various degrees of freedom of distribution of blood in the capillaries of the face," all these are included in the word complexion; and yet, for all this, it is probably true that pigmentation is that on which we rely almost solely in our classification. Mr. Hutchinson brings this home to us by putting the question—Could you make the distinction of the temperaments among a highly pigmented race, as, for example, among the negroes? Very possibly this question might have to be answered in the negative; but we would caution against hasty opinion here, for every day we are strengthened in the conviction that we see what we look for. This cannot be better illustrated than by family likeness. This is always far better appreciated by the outside world than by the family circle. And why? The outside world seeks to group together, to classify, and it finds likeness; but in the family circle the question is how to dissociate or individualize, and accordingly unlikeness is found. With this warning, let us well consider the question put to us by Mr. Hutchinson, and also admit the cogency of the argument which dwells at some length on the subject of climate and pigmentation, and on what may be termed the accidental nature of this latter.

As the argument stands, then, in relation to classification by temperament, certain of the older terms employed would involve the fallacy of pointing to diathesis rather than to temperament, whilst certain others would appear to rest on a basis accidental rather than essential. How, then, are we to discover the several "fundamental modes of vital activity?" for Mr. Hutchinson nothing doubts their existence, though he thus disparages existing criteria. Will race serve us? Will a British ethnology—on the need for which we are told Dr. Laycock insisted—will such yield a means of

classifying? The author is cautious on this subject, and, though of opinion that race would prove a more reliable guide than any yet available, still is not sanguine of the practical results to be thus gained. This must become at once apparent when we consider the accomplished fact of the intermixture of the races. But we would suggest on this question of race and of family, both of which signify for us *heredity*, whether we are not losing sight of the real object we have in view, which is to discover the outward and visible signs of an inward and hidden activity. It surely is but jumping the difficulty, or admitting incompetence, to tell us that certain modes of vital activity have a father and mother (family) or a long train of ancestors with a vanishing point in obscurity (race). Both of these facts we shall learn, if we do but push our enquiries sufficiently diligently, and in this our search we need never even pause to gaze at the individual before us. But if we be reminded that likeness runs in family and in race, we would answer—Yes, but do we make use of it? Suppose, for instance, two patients present themselves, the one with decided Jewish cast of countenance, the other moulded on no such type, and that enquiry elicits a Jewish lineage for this latter, but none such for the former. What then? According to which of the data before you, will you classify? As we read Mr. Hutchinson we should here rely on the history, and most probably we should be right in so doing, but let us recognize clearly that in so doing we proclaim the worthlessness of external conformation as revealing temperament. It is in view of this, and of the inextricable complexity of the subject, that Mr. Hutchinson, in conclusion, suggests the actual abolition of the word *temperament*. Is this advisable? Let us in the first place remember that the word has obtained a deep hold amongst us, and that it stands to us for *something*—let us admit that this *something* is vague in the extreme, and that the paths by which we would approach to a clearer recognition are truly labyrinthine. But if we are to discard the vague, what will remain to us in medicine? and if for fear of deviating we are to halt, how many will be the quests that we shall undertake? Much of harm results from the view not unprevalent amongst us, that the vague and the false are synonymous, whereas they bear no relation one to the other. The vague signifies the indefinite, and the indefinite results, not from error on the side of the thing defined, but from defect on the part of the definer. As it would seem to

us, our duty would be to let stand the "temperament," but to discard the "temperaments" as they have been handed down to us—to carefully avoid confusing diathesis with temperament and to beware of basing any distinctions on mere accidental features—such as, perhaps, degree of pigmentation may prove to be. Finally, to make use of "race" if possible, fully recognizing the while that this is but the crutch we look forward to throwing away in the future of a more definite biology.

With regard to diathesis, we tread surer ground, and, to quote the author, "We can study the result of causes in detail and with much precision," and "we can express our knowledge in clear terms." . . . "It is in this direction that the work of the future will be done," thinks Mr. Hutchinson. No doubt, more immediately; this accomplished, we shall hope for the further step in the direction of temperament.

We have not thought fit to apologise for the introduction into a Journal of Mental Science of the above considerations; lest, however, any should be inclined to question the propriety of this, we would, in defence, only point to the definition of temperament here accepted, viz., "a fundamental mode of vital activity." That the activity of our nervous system, as a whole, is here included, none can doubt; can anyone doubt that, included equally, is the working of certain more highly differentiated parts of this system?

H. S.

Science du Cœur Humain ou la Psychologie des Passions d'après les Œuvres de Molière. Par Dr. Prosper Despine. Paris: F. Savy. 1884.

The idea of a psychological study of a great writer is, as far as we know, novel, and is certainly not without scientific interest. In the book before us Dr. Despine has carefully gone through the works of Molière with the view of bringing out what he calls the Philosophy of the Passions contained in his dramatic works. Of the two forms of mental science—that which concerns itself with the intellect and that which treats more specially of those instinctive manifestations which are found in the history of human sentiment or passion—there are plausible reasons for maintaining, as Dr. Despine does, that the second is not the less impor-