LUMLEIAN LECTURES, DELIVERED BEFORE THE ROYAL COLLEGE OF PHYSICIANS.

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II.—On Some Points in the Relation between Medical and Legal Practice.

THE object of this lecture is to show that there exists a radical difference between the tendencies of scientific study and of legal practice; the tendency of science is to destroy artificial lines, that of legal practice to create them. It is only necessary to glance at the scientific development of the present day in order to illustrate this position.

Every science has, during its progress, to draw artificial lines, and the attempt of each science is to make them as conformable as may be with the facts of nature. We make use of such lines for the purposes of description and distinction, and thus, in medicine, biology, chemistry, and physics, employ them to separate from each other the materials, phenomena, and groups of phenomena, a history of which makes up those sciences. By means of artificial lines we separate, and describe, and group various diseases, functions, organs, systems, orders, plants, animals, substances, and forces. But all the lines which the scientific worker creates he holds to be provisional, or hypothetical, and the moment that this character is lost sight of they become a hindrance and not an aid. As the sciences increase in complexity fresh lines are needed, but at each advance they are possessed of an increasing amount of the provisional character, and a decreasing amount of persistent value; at each step onward they represent more of human thought, and less of nature's plan.

At different epochs of scientific development, these lines—lines of provisional character—have been adopted as those to or against which science must be brought to bear in its legal relationships. It has been agreed that the line shall be here or there, and all the evidence that an expert can give must be brought to that standard and be tried by that test.

But science is progressive, and such tests must, in proportion to its progress, fail to represent its true position. The lines of twenty years ago are inconvenient in the present day, are often incorrect, and undiscoverable in nature.

The progress of science is to be seen in two directions; the one is in that of increasing and more appreciative minuteness of distinction; the other is that of bolder and more satisfying generalisation. Together with an augmented demonstration of difference in detail, there is a more extensive proof of unity in plan, and uniformity of action. This may be illustrated by a reference to pathology, biology, chemistry, and physics, and in each of these sciences it will be further seen that there is a growing belief in the general principle, viz., that the likeness is greater than the unlikeness, that it is to be found in that which is essential, whereas the unlikeness is displayed in that which is relatively trivial or fortuitous. What has been said applies to the complicated problems of pathology, and it does so, not only on account of their intrinsic character, but because those problems are a complex of more simple sciences,

in which the same great tendencies are at work. Although, for example, systematic botany and zoology were never so vast as they are at the present time, and although the differences between the species of plants and animals were never before so minutely examined and detailed, it is likewise true that our notions of both the animal and vegetable kingdoms were never before susceptible of such wide generalisations as those which have been propounded and, in part at least, accepted during the last twenty years. Although the several physical forces—of heat, light, electricity, magnetism, and the like—were never before so fully known or so skilfully applied; never before so distinctly shown in their differences from each other, and in the variety of the uses in which they may severally be employed, it is within the same last few years that their "correlation" has been established, and their common nature been regarded as something much more tangible than a scientific dream. Further, while advancing to a more correct appreciation than was possible in the past of the manner in, and the degree to which physical and vital phenomena differ from each other, old and artificial lines have been broken down, much that was thought to belong to the one category has had to be removed into the other, and together with this process of destruction and tossing to and fro there has been one of rearrangement and construction, and a glimpse has been gained of some point wherein the physical and vital are so closely brought together that we can scarcely affirm they are not one—i.e., one in their essence, though widely separated in their results and modes of action. The process of differentiation may be carried so far that it defeats itself, by bringing us into contact with that which is common to many diverse structures. As examination, starting from widely different points, is prosecuted with ever increasing delicacy and minuteness, the tendency is towards the convergence of its lines of progress: we unravel separate organs and tissues so completely—we trace them to such fine division and subdivision—that at last we scarcely know with which we are dealing; even muscle, nerve, and vessel seem to merge into each other, and we find ourselves lodged amongst fibres, nuclei, and cells. Again, in the very exact science of chemistry, where differentiation has been carried to its extreme, and has become, in one sense, the measure of its progress, there are hints, and more than hints, of a generalisation far wider than any that has yet received scientific proof. It is even doubted whether our notions of an "elementary" body may not yet be somewhat rudely shaken, and whether some of the guesses of past centuries may not become established facts in the science of the future.

From all these considerations, it is obvious that science is in a transition stage, and that its existence is one of growth and of change. Science is dead when it does not grow, and its growth must remove old lines. It should not do so carelessly; it cannot progress unless it effects this carefully; but even in its most cautious advances it must sometimes come into collision with established human law, and sometimes appear at variance with itself in legal practice. Herein lies one radical difference between the scientific and the legal process, and from this difference arises much of the unnecessary obloquy that is thrown on the testimony of experts. The law-court is the exponent of that which was agreed upon in times gone by. The scientific witness knows that the terms of that agreement were not always true. They may have represented the knowledge of the past, but they fail to express the science of the present. The lawyer is governed by a precedent that may be wrong; the expert witness is directed by facts that he knows to be true. The one says the line between innocence and guilt, between sanity and insanity, lies here; the other that the line lies yonder, or does not exist at all. The one asks a question which he is bound to ask; the other makes

a statement which is not an answer. The one brings everything up to an artificial line which it may have been convenient to draw; but the other refuses to maintain a distinction which does not exist in fact. The blame of this does not lie upon the individual on either side; each may fully act up his to own sense of duty as to the requirements of the case. But the lawyer has to regard the evidence from his point of view, and the scientific witness has to furnish evidence from his. The tendency of the one is to make good and enforce the line; that of the other to destroy it, or place it somewhere else.

As the immediate and necessary result of this position it follows that in medico-legal inquiries the issue that is raised is oftentimes the wrong one. The real point of dispute may be the fitness or unfitness of an individual to manage himself, his family, or his affairs; the issue raised is that of sanity or insanity of mind. A line has to be drawn between these two conditions, but often it is drawn unfairly, sometimes on the one side and sometimes on the other of the points through which it should be carried. Common sense would determine the question upon one ground; science might determine it upon another; but science fails to do so when brought to a legal but artificial test. The physician may require some special knowledge to appreciate some cases that come before him; but in the majority of cases he is guided in his "diagnosis of insanity" by the same principles as those which govern the minds of the unscientific when they assert that "a man is mad."

The practical evils flowing from the raising of a wrong issue, and the using of a wrong test, may be appreciated by an examination of the nature of "delusions," which may be shown to pass through every degree of value from the highest to the lowest. The mere fact of the existence of a delusion is of little value; it is the nature of the delusion and the power that is possessed for its distinct demonstration as such, which may constitute it a test of insanity.

Again in the question of responsibility for conduct, the wrong issue is sometimes raised. It has been laid down that if a man knows the consequences of his conduct, and the difference between right and wrong, he must be held legally responsible for crime; but yet it often happens that lunatics are well informed upon these points, and that sane men are not; that the lunatic is a clever casuist, and the sane man only an indifferent one.

Often the sense of a difference between right and wrong in the general or abstract is confounded with a knowledge of the rightness or wrongness of a particular act. The sense is a part of our healthy human nature; the knowledge is a result of our education; the sense is not necessarily absent in the lunatic; its presence is not a proof of sanity of mind. Most commonly the cases in which the question of responsibility is raised, are those in which a perversion, and not a destruction of the sense is alleged to exist; the individual thinks some particular thing to be right which society has determined to be wrong. Now to the interpretation of such cases all that has been said with regard to mental delusions may be seen to apply. It is not the mere fact of difference from the many that warrants the assertion of insanity; it is the kind and degree of departure. The moral sense may remain, but there is intellectual perversion as to the mode of its exercise; and this perversion may be of such kind as to be at once repudiated by the sane, or it may be of such sort as to graduate into mere eccentricity or prejudice. If a man thinks it right to kill his aged father, his infant, or himself, we treat him at once as a dangerous lunatic, and are right in doing so, although the banks of the Ganges may have shown that other societies have regarded even these acts from a different point of view. But a man may pursue a course which the world calls "mad," which is against all reason and all common sense; may destroy his children, besot himself, and bring down the grey hairs of his father with sorrow to

the grave: and yet there is no power to stay him. If he should suddenly do that which we say is wrong, we treat him as he ought to be treated; if he does the same thing slowly, we let him alone. The essential difference between the two mental conditions is, I think, less than has been supposed; each betrays a departure from moral and mental health; and it is not easy to apply a scientific test which shall distinguish them. It may be said that the one is motiveless, or that the homicidal deed is attempted in obedience to some delusion, some subjective voice which prompts, some impulse which determines it; and we readily concur in saying that such a one is insane. But with regard to the other, may we not often search in vain for motive? nay, may we not discover that every motive which should guide a sane man is in the opposite direction? Do we not, if any motive can be found, agree in regarding it as wrong, and as based upon some mere chimeras which no sane man would follow? And are there not voices and impulses that direct him; those of intense and even morbid egotism, now emerging in self-indulgence or self-denial, and again in self-will or vanity, which pass the bounds of reason or of right? Where, I ask, is the scientific test that we can apply? Is it to be reduced to mere chronicity? An important condition, I well know; but one which cannot be made the distinguishing point between insanity and sanity. Time has much to do—much more than it is commonly supposed to have to do—with the complexion of vital results. It may be such as to influence opinion in the detection of insanity; but it is not enough of itself to constitute the test. A man cannot work for sixteen months and then sleep for eight; but he may manage for years to labour and rest during an exactly proportionate number of hours. The proportion is the same. But we are constructed with definite relationships to time; and among the influential conditions of life this of time is, perhaps, one of the most imperious. We know that conception, birth, dentition, puberty, adult life, decay, and death bear relations to time that we may compute with approximate accuracy for the individual, and with certitude and minuteness to three places of decimals for the mass; and I would not for one moment underrate the diagnostic or prognostic value of a consideration of time. But what I feel is this, that it—time—is the only difference that we can detect between the symptoms of many a man now at large, and many a man now in our lunatic asylums. The issue raised legally is a technical one as to what constitutes or characterises "insanity of mind:" the burden upon friends and upon society is the individual, and the question as to the fitness to take care of himself and of others, of their property and his own.

What I am anxious to show is that the tests that are applied are, in many cases, quite inadequate; and that some serious and searching revision of them is most urgently needed. Society suffers from the errors of the past, and its present wrongs cannot be redressed by the slow growth of legal precedent. The cases that are fairly dealt with are in a small minority, the majority consists of those which are not dealt with at all; and it behoves us, as members of a learned and honourable profession, to grapple with this evil, and meet this difficulty. It behoves us to do something that shall be more effective than the mere acquiescence in established customs can be; for such acquiescence is marked by action in cases which require little or no medical knowledge, and by inaction in those which most urgently demand it. The medical profession is called upon to show that the tests to which it is submitted are unsatisfactory; that its decisive action is limited to circumstances in which it is not really needed; that it is unable to treat many very urgent cases as they ought to be treated; and that this is because artificial lines have been created, and wrong issues have been raised.