ON THE STUDY OF NATURE AS THE FOUNDATION OF MEDICAL SCIENCE AND THOUGHT.

Delivered at the Annual Meeting of the Lancashire and Cheshire Branch.

By JOHN HARKER, M.D.,
President of the Branch.

DR. HARKER commenced by indicating the necessity for the sound elementary scientific education of medical students, but at the same time he dwelt on the advantages of a real taste for nature, cultivated from student-life throughout the rest of a medical man's career. It gave training, foresight, and prevision for the healing art. The whole essentially progressive scheme of nature taught us to favour and live up to the idea that a true natural human aristocracy might yet be built up as the result of intelligent action, founded on knowledge. Dr. Harker then spoke of the physical characters of air and water, and of the impurities of the latter compound. The perfection of microscopy had enabled Dr. Dallinger to detect desmids measuring cubically one-millionth of an inch. The subtle character of invasion of histological elements by bacteria had been detected by the same advances in the use of the microscope. Even in the plant *anacharis*, a kind of bacteria-fever had been discovered. Dr. D. Astley Gresswell had studied the recrudescence of throat-symptoms in patients who had suffered from diphtheria; and it had thus been discovered that the specific germs of the disease were apt to lodge in the follicles of the fauces, and thus cause both recurrence and the infection of other persons. Bacteria theories required scrutiny; and Dr. Troup in a "Note on Bacteriotherapy" in the JOURNAL of June 19th, showed that the relatively innocent *Bacterium termo* did not kill the specific *Bacillus tuberculosis*, as had been supposed. Dr. Harker then referred to a primitive method of purifying suspected water, long carried out in some parts of the country. The water was boiled and poured over toasted bread; when cool, it was used for drinking purposes. Its hardness was taken away, and germs appeared to be filtered away by the process.

Reference was then made to our advance in knowledge of the blood, and to the lectures of Dr. Osler, recently published in the JOURNAL. His researches indicated further fields for yet more important discoveries.

The lecturer concluded by observing that there was for us in nature a revelation even more sure and valuable than that which we had in tradition, venerable and revered though the latter might be. The witness of nature was always with us for verification. It was a teaching learned from our surroundings, with which we must live in harmony, or else we should signally fail in our life and happiness. We should know ourselves as we were, and how to the circumstances of our existence. We were taught to appreciate the beauty of natural objects.

We learnt from the study of nature that certain foods were provided for certain creatures, not merely by adaptation, but also as provision. In the case of man, certain fruits were for the north, as, for example, the gooseberry-bush, which, in southern regions, became an evergreen, and ceased to produce succulent edible fruit. On the other hand, the grape was for the sunny south. Nature taught intelligent man the knowledge of good and evil by rewards and punishments. Evil began in the mind, but remained not there, becoming apparent in the life. So also did its converse, good; and, in life, they each had their mode. This we were taught by witnessing the effect of each vice. Sexual infidelity and excess were punished by sexual disease. Taught by nature, we believed not in the epicureanism of the ancients. We must develop and advance, or we should quickly retrograde. Purity and righteousness brought health and peace; dirt and vice brought, as a consequence, disease, misery, and unrest. Matter was sufficient to account for all we saw and knew. Yet we knew that the pure speck of gold, and the sparkling diamond-crystal of carbon, to be as wonderful and as worthy of admiration as were their various compounds and combinations; and even, if at the base of all the elements we should at some future time learn that there was pure matter, our admiration would be but increased. We were taught by design, by Providence, by dominant righteousness, by eternal power. We were no Agnostics, as some who thought in many things so much in harmony with us styled themselves, but in searching into the secrets of nature we found the knowledge of God.

ON HOSPITALISM.

Delivered at the Annual Meeting of the Yorkshire Branch.

By DAVID GOYDER, M.D.,
President of the Branch.

THE subject of the address, namely, Hospitalism, in the very widest and most literal sense of the word, had been forced upon Dr. Goyder's attention by recent and prolonged discussions occurring amongst the members of the Honorary Staff of the Bradford Infirmary, as to the manner of enlargement of the institution, the need of advancing pathological and clinical research, the revision of the laws of its management, the influence of the staff on its board, and the increasing difficulty of dealing with its out-patients. The last point was an especially important and pressing question, whether regarded in its relation to the public or to the profession. The growth of hospitals, in proportion to the aggregation of populations, had reached a point at which their economic management began to excite serious doubts and misgivings. A medical man was interested in assisting thorough inquiry into the causes which produced the increased application for hospital-treatment, in assisting to reduce to some definite system the rules regulating admission of patients, and in ensuring the appointment of some responsible authority to enforce those rules. For the causes of the financial failure of hospitals, which was decidedly threatened, not only deteriorated his own work, but depreciated the reasonable expectations and rights of his fellow practitioners outside. Besides, the admission of unsuitable cases tended to produce what was noxious to the state of which the medical man was not an unimportant member, the killing of the self-respect of the well-to-do artisan, and increased pauperisation of the masses.

The abuse of gratuitous hospital-relief had been well proved by statistics. This subject called, he considered, for a searching inquiry by a Royal Commission. This evil was chiefly due, not to uneven distribution of wealth, but rather to faulty safeguarding of the portals of hospital-relief; and, perhaps, not only lay managers, but the part of the profession directly concerned in hospitals, might have shared in distributing lax and lavish benevolence.

Dr. Goyder next discussed the alleged increase of disease. It did not appear to increase in proportion to the growth of the population. The greater frequency of neurotic affections, arising from the wear and worry of life, was counterbalanced by the diminution of zymotic disease effected through sanitation. Intemperance and its consequences were certainly decreasing, and malignant maladies, though their augmentation was alleged, might be dependent for this appearance upon the greater skill exercised in their diagnosis. But if disease was not increasing relatively to population, yet massing of populations increased it in bulk. Thus the increasing centralisation of large commercial and industrial interests concentrated people from the country districts into cramped town-dwellings. This centralisation furnished one great factor in increasing applications for hospital-relief. This, however, could only be ameliorated by sanitation. Some persons, by the way, believed that this excessive centralisation would find its own remedy in the gradual loss by England of its great manufacturing supremacy, and the return of a large mass of the inhabitants of towns to agricultural pursuits—a belief more humane than patriotic, however likely to prove true.

The lecturer then referred to the lavish distribution of recommendations from subscribers to hospitals, which resulted in the admission of numerous cases well able to pay for private advice, to the great detriment of the general practitioner. These recommendations ought to be abolished, and every case henceforth admitted solely on its merits. In some towns in which hospitals had abolished recommendations, especially in centres of teaching, cases were often admitted, whether able to pay or not, because they illustrated to students special characteristics of disease or treatment.

In justice to those who sent them in, it must be admitted that any motive so sordid as payment was never even thought of; but, apart from the benefit to patient or student, was not evil thereby wrought to the practitioner outside? Was it not the first duty of the hospital physician or surgeon, the circumstances of the patient being known, to remit the case to the practitioner who had attended it, and even to urge his prosecution of the case, not for his monetary benefit merely, but that he might increase his skill and acquaintance with the treatment of severe disease? Such a course would do good in every direction.

Another cause of the increase of hospital applicants, was the com-