THURSDAY, JUNE 22, 1871

STATE MEDICINE

AMONG the duties which the State owes to Science, none are of more practical and vital importance, and none are more urgent, than those which concern the care exercised, or that should be exercised, over the public health by properly appointed State Medical Officers. The essays of Dr. H. W. Ramsay have so fully explained the term "State Medicine" that we do not feel it necessary here to do more than allude to the subject in very general terms. It will readily be acknowledged that some sort of a medical polity is a necessity for a State; but while in this country certain laws and regulations exist for the improvement of the public health, still there has been but little or no effort made to establish these laws on a scientific basis.

In the recently issued Second Report of the Royal Sanitary Commission, the true relations of the State towards the public in these matters are thus admirably enforced:—"Every person should be entitled to such reasonable public protection in respect of his health as he is in respect of his liberty and his property. For instance, he should no more be liable to have the water of his well poisoned by the neglect of his neighbour, than to be robbed with impunity. And he should be under this protection, as far as it is reasonably attainable, everywhere and at all times. The first principle, therefore, of sanitary administration is, that no member of the community shall wilfully or for profit damage another man's supply of the three absolute essentials of life, food, water, and air; and therefore that it is the duty of the State to secure, as far as possible, that these essentials shall be supplied in sufficient quantity and the greatest attainable purity in all circumstances in which these objects cannot be attained by individual care and resources. In this point of view it may appear a question whether the State should allow that any man, even by prescription, shall be held to have acquired the right to pollute, for his own advantage, another man's food, water, or air, or in any manner poison him. At any rate care should be taken that no one shall acquire such right in future."

The second requirement is laid down with equal clearness, viz.:—"Universality, through constant supervision by public health officers in every part of the country. The efficiency of the agents in sanitary administration is as important as their ubiquity. They must be well instructed and capable, without the pedantry or officiousness of sciolists. Ignorance, pretentiousness, or overmeddling on the part of the agents, would bring into disrepute any sanitary system. In a free country disrepute would bring about failure. Fitness in the agents is the third requisite in sanitary legislation."

When, however, the Commission comes to apply these principles to the existing state of things, the only practical suggestion offered is that the supervision of the public health be entrusted to the Poor Law Medical Officers, of whom there are in England alone about 4,000. The Commissioners have evidently a suspicion that this suggestion will not be favourably received by the country. And we have no hesitation in saying that it is miserably inadequate. When we look at the value of the examinations to which alone medical students are compelled to submit themselves before they obtain a license to practise, or when we look (must we say it?) at the life of the average medical student attached to any of our great hospitals, no two conclusions are possible on this subject. It is notorious that, as a rule, it is not the most competent of the London students who ultimately arrive at the position of general practitioner in a country village; and the Poor Law authorities, however discriminative their choice, can only select from the material to their hand. To effect the objects arrived at by the Sanitary Commission, a far more highly educated class of men is required.

That medical men should be educated in a knowledge of State medicine will probably not be denied, and that the State for its own good should encourage such knowledge will probably also be granted; but it is not easy to persuade a State to adopt even approved of principles, if these principles require a wholly new machinery for the effectual carrying of them into practice. The Universities are, however, engaged in the work of education, and upon them, we think, devolves the duty not only of keeping up the standard of education, but of endeavouring to push this standard ever a little advance of the day.

The training necessary for the medical profession is very different from that required to qualify one to be an authority on State medicine; it most certainly assists in this qualification, but a man might be a most excellent surgeon or a most skilled physician, and yet not be able to pronounce an opinion on many of those subjects on which his advice would be required by the State.

In a medical school belonging to a college which holds out considerable rewards to those students who distinguish themselves as classical or science scholars, there is always a probability that some of the students in medicine will have also been distinguished students in arts. Experience has proved that this is the case in Trinity College, Dublin; and experience has proved the incalculable advantage of a high training in art-subjects to the future medical man. What better combination of knowledge, indeed, could there be to form a model officer of State medicine than that of a thorough knowledge of science (using the term as it is generally understood at the Universities) and of an equally thorough knowledge of medicine? We are glad, therefore, to find that, acting on the suggestion of Dr. Stokes, their Regius professor of physics, the University of Dublin has determined to hold a yearly examination for a diploma on State medicine, the first of which was held on the 12th inst. This examination was open to all doctors of medicine of the Universities of Oxford, Cambridge, and Dublin.

The course is a long but a highly interesting one. It resolves itself into the following among other subjects:—1. Law: The legislation relative to sanitary measures, to the conduct and duties of medical men, to vaccination, inoculation, lunatic asylums, &c. 2. Engineering: This chiefly in connection with the construction of hospitals, barracks, troop ships, prisons, and the sewerage and waterworks of cities. 3. Vital and Sanitary Statistics, including the science of statistics as applied to man, and the practical application of statistics to medicine. 4. Meteorology, including a knowledge of climates, &c. In addition the

candidates will be examined in Pathology, *i.e.*, the laws of epidemics, of contagion and infection, influence of hereditary disposition, &c.; in Chemistry, under the heads of—1, air; 2, water; 3, gaseous poisons; 4, principal deodorising and disinfecting agents; and in Medical Jurisprudence under the divisions of Hygiene and Forensic Medicine. This course has been evidently selected with great care, and appears well calculated to test the qualifications of the candidates. The medical men who successfully pass it and obtain the diploma, ought certainly to be able to assist in establishing on a scientific basis the laws relating to the public health.

One very serious omission we observe in the list of subjects to be examined in, and it is one we would have least expected, viz., the Microscope and Spectroscope. It is perfectly astonishing to find the number of well-educated men in the medical profession who are unable to understand the ordinary manipulation of an ordinary microscope, or of a spectroscope in connection with the microscope. The medical men who pass this examination will, we believe, take rank at once as medical experts—but fancy one qualified to act as a medical expert and yet not knowing how to manage an achromatic condenser!

At present this movement of the Dublin University can but be regarded as an experiment, but it is an experiment in the right direction, and one that has been, and we hope for years will be, conducted under the watchful eye of a most able physician, who thoroughly understands the subject of medical education, and who, throughout his whole life, has laboured to elevate the profession that he adorns.

*PRIMITIVE CULTURE**

II.

THE chapters on mythology, which naturally follow those on language, form an admirable summary of the history of myth from its vigorous infancy in the earlier ages of human thought through the various stages of growth and maturity onwards to second childhood, death by ossification of the heart, and final post-mortem existence through millenniums of disembowelled mummydom. Myth, in fact, is as ubiquitous, as multiform, as language. Nay, it is perhaps more ubiquitous, more multiform. The spaniel, who fawns on his master or flies at a beggar, who bays at the moon or cowers from the thunder, has evidently framed to himself some simple dog-theory in connection with certain phenomena, which is closely analogous to, if it be not absolutely identical with, a rudimentary myth. It is, indeed, probably not too much to say that wherever a phenomenon is stated or explained, whether with or without the intervention of language, there exists a myth, though a higher knowledge than that which creates the myth is always requisite in order to recognise its mythic character. The Ptolemaic system of astronomy, for instance, has been long ago conclusively demonstrated to be a myth, although a myth belonging to an advanced stage of culture, and a thousand and a thousand others are everywhere around us only waiting for the extension of knowledge to effect the metamorphosis requisite for their recognition. It is evident that if this theory of myth be even approximately correct, the statement or explanation of any phenomenon in language is in effect merely the creation of another phenomenon out of which myth may be evolved *ad infinitum*; in short, that myth is essentially the outcome of the complex action, reaction, interaction, and counteraction of human thought on the one hand, and the sensible phenomena of the universe, including those of language, on the other. The sensible phenomena of the universe may thus not inaptly be regarded from the standpoint of Democritus or Lucretius as continually throwing off films or likenesses of themselves, which films or likenesses, once seized and appropriated by language, become additional phenomena, with a vitality, so to speak, and reproductive power of their own. On the other hand, if, in accordance with the spirit of Scandinavian philosophy, we regard philosophy itself, art, poetry, science, morality, and religion—all the products of human thought—as a single living organism, we may then consider myth as the former substance of the organism, the physical atoms which have been gradually eliminated and replaced in the process of growth and development. Or, not to complicate matters by the introduction of evolution,—civilised knowledge, as a whole, may be likened to an old canoe, of which no plank nor nail is the same as when she started on her first voyage, and myth to the old timbers and metal which once formed a part of her, but have now been some lost, some metamorphosed into wholly different shapes, some utilised again in the construction of other vessels. We can thus understand how every department of thought has absorbed and assimilated more or less of myth,—how myth has absorbed and assimilated more or less of every product of the human intellect. It is, in fact, the non-appreciation of the true place of myth in human knowledge, which has led so many earlier students of mythology astray. One school looked on all mythology as crystallised poetry; another as indurated chronicle; a third as frozen philosophy; a fourth as petrified religion, and so forth;—each school doing something towards really making mythology what it believed mythology to be, and all, as a net result, extracting from one of the most vitally-interesting investigations a mere *caput mortuum* of doubly-distilled platitude, and quintessential commonplace. So long as "mythology" meant simply an acquaintance from without with the Greek and Roman Pantheon, such a result was, perhaps, inevitable. Unfortunately the doctrines of these schools are not even yet by any means universally recognised as being themselves mythic; and many of them are still to be found reproduced in contemporary works of no inconsiderable learning, to supply future students with illustrations of Mr. Tylor's theory of survival. It must be admitted, too, that even the late brilliant achievements of more scientific inquirers still leave a vast field untouched for classification and comparison. Nor is this task an easy one. A myth is always the statement or explanation of a phenomenon, and myths may thus be classified according to the phenomena to which they refer; but first of all "to catch your myth," and then to determine the phenomenon to which it refers, are feats, for the most part, beyond the skill of ordinary students. An amusing instance of these difficulties is afforded by Mr. Tylor himself. "No legend," he observes, "no allegory, no nursery rhyme, is safe from the her-

* "Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Art, and Custom." By Edward B. Tylor, author of "Researches into Early History of Mankind," &c. Two vols. 8vo. (London: Murray, 1871.)