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Editorial and Publishing Offices: MACMILLAN & CO., LTD., ST. MARTIN'S STREET, LONDON, W.C.2.

Editorial communications should be addressed to the Editor. Advertisements and business letters to the Publishers.

Telephone Number: GERRARD 8830. Telegraphic Address: PHUSIS, WESTRAND, LONDON. NO. 2961, VOL. 118]

The Practice of Forestry in the British Empire.

"HE practice of forestry as a science has been a plant of slow growth in the British Empire. Many reasons have contributed to this cause, the chief being the facility with which we have been able to obtain our requirements, either by imports from closely adjacent forests belonging to our Continental neighbours, as in Great Britain, or from the existing primeval forests, as in India and the great Dominions and Colonies. Forestry as a science on a par with agriculture has long been known and practised in many of the great European States. A study of the methods employed and the comparative ease with which forest property, both belonging to the States and to private proprietors, is managed and protected, will show that not only the people on the countryside, but also even the dwellers in the towns, and the great industrial classes, understand the value of forest property and to some extent the aims of a forest policy-that, in effect, the forest, in the economy of the countryside, has an equal value with the tracts devoted to agriculture.

Many motorists from Great Britain annually make the journey from the north to the south of France and pass through great tracts of forest, either in State or private ownership and managed with an efficiency which has long been unknown, or at least unpractised, in Britain. They will have remarked upon the absence of fences. Boundary ditches there may be, or hedges, but little in the nature of the artificially constructed fences so necessary at present in Great Britain if the forest areas are to be safeguarded from a public to whom their economic value to the nation at large is unknown, and from that pest the rabbit. During the War thousands of men and women from the British Empire must have seen some of the forests of France, but very few possessed even the little knowledge of forestry practice which would have enabled them to recognise the differences which underlie the management in France and in Britain; or to have appreciated one of the most essential necessities for the successful practice of forestry in a country-that the public should be so far educated as to understand its true value to themselves and therefore to respect and help in the protection of forest areas.

It is unfortunately a not uncommonly accepted idea in Great Britain that a proper conservation of forest tracts means entire closure and the prohibition of picnic parties, and so forth; or that the introduction of rational management into such areas of forest as have come down to us from early times in the form of Crown forests, *e.g.* the Forest of Dean, New Forest, etc., entails their destruction as beauty spots or what are termed ' playgrounds ' for the public. The controversy which recently took place in the press in connexion with certain beautiful spots in the New Forest-old decrepit woods of admittedly great beauty and picturesquenessis a case in point. It has had its counterpart in the past in the case of other beauty spots in Great Britain, and even outside Great Britain in other parts of the Empire. The enunciation of such opinions, often by men whose names carry weight with public opinion, incontestably proves that what may be termed a forestry 'sense' is at present lacking in the British public and, it may be added, in the Empire public, if we except perhaps India. The growth of this forestry ' sense ' can only arrive with the young generations and through the schools; it is an asset for the future that some schools in Great Britain and the Empire are introducing the teaching of the elements of forestry and its potential value into their curricula.

The love, which is strong in the British, for the maintenance of beauty spots and old woods, is a perfectly natural one and an attribute which any race may be proud to possess. Where trees and woods, however, are in question, it will be conceded that, unlike old historic buildings and famous ruins, no Government department, such as that for the protection of Ancient Monuments, with which the late Lord Curzon was so closely identified, both in India and Great Britain, can maintain them in perpetuity. Each succeeding generation which clamours to maintain untouched, for example, the afore-mentioned old woods in the New Forest, is merely assuring the disappearance from England at no distant date (though they themselves may not live to see it) of one or more famous beauty spots. Yet, as the Continent of Europe well shows, to those possessing the education and knowledge to be able to see and appreciate the management of such problems, it is quite possible to put in practice a method of management which, whilst assuring the minimum of change in artistic values, for forestry and the cult of trees is a lengthy business, will preserve for future generations what the present ones are enjoying.

This is but one aspect of the practice of forestry science, far removed from the commercial aspect, but one in which, owing to the interest aroused, it is of the first importance that the present generations should endeavour to make themselves acquainted with-if only in the interests of their future posterity and the maintenance of many beautiful spots and regions in Great Britain.

That the introduction of and practice of scientific forestry within the Empire has come to stay appears assured from the fact that the Prince of Wales is setting an example to the country by his personal interest in the subject. As president of the Empire Forestry

Association, he delivered an address at the annual meeting in March last. As would be expected from the Prince of Wales, he dealt with the matter from the Empire point of view. He alluded to the ten-years planting programme of 150,000 acres undertaken by the Forestry Commission in Great Britain, which it was hoped to complete within the next three years; he then discussed the present position of forestry in South Africa and the planting schemes being carried out in that country to provide its population with "the conifers which Nature has denied them," and the work upon which Canada, Australia, and New Zealand are engaged.

Perhaps as great and, in some cases, greater advances have been made in the many forestry services, some already of considerable age, under the Colonial Office in the Malay States, Nigeria, Gold Coast, Kenya and the other East African colonies, and elsewhere. But the greatest of all, in point of progress, is the case of India, The first scientific forest service inaugurated in the British Empire was commenced in that country more than sixty years ago. A paper dealing with the practice of forestry read in the north of Great Britain a short time ago commenced with the sentence. "Forestry is a new industry which is happily growing up within the Empire, and nowhere more rapidly than at home." In the past, and at the present day, the Empire has often been accused of working in watertight compartments, and the practice of forestry is no exception to the rule. India is the only country within the Empire at the present day in which it can be said that forestry as a science, occupying its place in the economy of the countryside and in the true interests of the people as a whole, has become recognised and appreciated alike by the statesman, the cultivator, and to a considerable extent by the more educated of the public outside the great towns. The Journal of the Empire Forestry Association, to the value of which the Prince of Wales alluded in his address, has clearly exhibited to the trained forest officer the position which forestry science and practice has attained in India-a position which in some parts of the country vies with the best to be seen on the Continent of Europe. A study of the lines of management and work in the Indian forests and the research work which has been carried out, especially in connexion with the utilisation of tropical timbers, will be as useful to many of our Empire forest officers as the studies they have made in Europe.

It would not be in the true interests of forestry in Great Britain to say that, within the short space of time which has elapsed since the Forestry Bill was passed by Parliament some seven years ago, the industry-or, to give it its true name, since the industrial is but one side

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of the business—the science of forestry has as yet made great strides. A beginning has been made, but forestry cannot hope to take its real place in the economy of the nation or of the Empire as a whole until the public has become educated and has accepted its aims and objects, alike from the economic and amenity points of view.

E. P. Stebbing.

Science and Psychical Research.

The History of Spiritualism. By Sir Arthur Conan Doyle. In 2 vols. Vol. 1. Pp. xiii+342+8 plates. Vol. 2. Pp. vii+342+8 plates. (London, New York, Toronto and Melbourne: Cassell and Co., Ltd., 1926.) 42s. net.

THE recent publication of two large volumes entitled "The History of Spiritualism" by Sir Arthur Conan Doyle is perhaps a suitable occasion on which men of science may once again turn their thoughts in a direction in which many more of them are probably interested than would be willing to admit it. Spiritualism is a cult, a faith, or perhaps even a full-blown religion, the central tenet of which is sufficiently well stated by Sir Arthur (vol. 2, p. 263) in the following words :

"A belief in the existence and life of the spirit apart from and independent of the material organism, and in the reality and value of intelligent intercourse between spirits embodied and spirits discarnate."

Spiritualism as a religion does not come within the confines of the subjects which a scientific periodical like NATURE may appropriately discuss. But right through the warp of Sir Arthur's book, though by no means carefully distinguished, and most certainly very unscientifically handled, runs the woof of psychical research, which is, or at any rate purports to be, the scientific study of what are called supernormal phenomena. These phenomena are of two kinds-(a) physical, such as telekinesis, or movement of solid objects without contact ; independent voice, or the production of sound recognisable as that of the human voice and recordable objectively on a dictaphone ; the formation of the substance known as ectoplasm or teleplasm; psychic lights and cold breezes ; formation of structures invisible except by the reflection of ultra-violet rays; and so on: (b) mental, such as clairvoyance, clairaudience, automatic script, telepathy and other similar types of phenomena not involving the use of material objects.

Many years ago, when this question of psychical research was brought to his notice, Huxley replied, "Supposing these phenomena to be genuine, they do not interest me." We are sorry to be obliged to have to record so unscientific a remark from so great a man,

and even sorrier to have to admit that Huxley's attitude is still that of the great majority of biologists at the present day. The opinion of any man, however great, or of any body of men, however influential, on a subject which they deliberately refuse to investigate, either because it " does not interest " them, or because of a preconceived idea that the phenomena involved are necessarily fraudulent, is really not worth much. It is a sad commentary on human nature that, even at the present day, when the reality of some at least of these phenomena has surely been put beyond the shadow of a doubt by the work of such men as Lodge and Richet, no scientific man can take up the study of psychical research without ' losing caste ' and undergoing either secret or more or less open persecution from his fellows. Truly, we have not got very far from the Middle Ages after all, and there is a very real danger that organised science in the twentieth century is taking its seat in the very chair from which it once drove the medieval church. "E pur si muove" applies equally to the movement of the earth round the sun or to the movement of a levitated table upwards against gravity without visible support. The former was no more incomprehensible and no less anathema to the medieval church than the latter is to-day to organised science. But the spirit of to-day is different from that of the past, and martyrdom no longer wins many converts. Modern Galileos may undergo persecution for what they hold to be the truth, but the modern world will soon forget them in the hurry and rush of modern life, and the truths for which they suffer will perish with them unless they can be presented in such a form as to appeal to the reason of mankind.

It is just here that a great danger lies. The history of the world is full of evolutionary failures; for every organism, Nature selects a path from which there is no turning back. The advance of science during the past seventy years has been definitely along the road to materialism. Though the pace has somewhat slackened and many an anxious glance is now being turned backwards, yet the impetus is still driving us forward mainly in the same direction. For hundreds of years mankind looked to religion to lead them along the right path. Now, in the western world, their gaze is fixed on science. It is certain that, for the next hundred years at any rate, where science leads, there mankind will follow. Are we, the men of science, the leaders of mankind, so absolutely sure of the path along which we are travelling?

Pilate's question "What is Truth?" has never yet been answered, and perhaps it never will be. It is, however, the duty of science to search diligently for truth and to leave no avenue unexplored in which it may be found. The broad highway may lead us to

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