THURSDAY, MARCH 1, 1888.

PHYSICAL SCIENCE AND THE WOOLWICH EXAMINATIONS.

W E are glad to learn that several Members of Parliament are interesting themselves in this important matter, and that Sir John Lubbock and Sir Henry Roscoe have both put down notices of motion calling attention to the changes that it is proposed to make in the regulations for admission to Woolwich. We hope and believe that their efforts will result in a rectification of these ill-conceived regulations.

We have already shown in our previous articles on this subject how completely the new regulations fail to find any justification, so far as their treatment of experimental science is concerned. We have demonstrated, by an examination of the professional course of training which the successful cadets will go through when at the Royal Military Academy, that of the subjects of general education experimental science stands below mathematics alone in practical importance for Woolwich cadets; whilst even a cursory inspection of the results of past examinations is sufficient to reveal the hollowness of the suggestion that in scientific subjects marks may be easily obtained by superficial study or cram. When we consider that the results of applying similar regulations in the case of the Sandhurst examinations are, or ought to be, familiar to the War Office authorities, it is astonishing that their extension to the scientific branches of the army should ever have been seriously contemplated.

The deliberate adoption of this scheme for selecting young men for a highly scientific profession, after the experience of several years had so completely established that it is eminently calculated to reduce the chances of candidates of scientific power to a minimum, can only be regarded as a remarkable example of official blundering. The rectification of the mistake is the more imperatively required because the treatment of natural science—that is, of candidates whose abilities are rather scientific than linguistic or mathematical—in public examinations has hitherto been altogether unsuited to the real wants of the age. Science in examinations being to a great extent a non-paying subject, the quality or even the existence of science teaching is regarded, at the best, as a matter of secondary importance in many or most of our schools. The question, therefore, deserves the closest attention from all who hold that it is absolutely essential that there shall be a steady and sure advance in the standard of elementary science teaching in this country.

In his reply to Mr. Howorth, the Secretary of State for War is stated to have said that these Woolwich regulations had been considered by a "strong Committee." It would be interesting to know of whom this Committee consisted, and whether it was strong from a military or an educational point of view. Such information as we have been able to obtain leads us to conclude that it was a military Committee, and that though, as such, it was no doubt eminently fitted to come to wise conclusions on military questions—such, for example, as the proper training to be given to successful cadets after their admission to the Royal Military Academy—it was

by no means composed of men equally fitted by experience to deal with the other side of the question. It is surprising to find that this important change, which will profoundly affect much of the higher school work of the country, was apparently decided upon without, or almost without, consultation with those most experienced in such questions. This helps us to understand how it has happened that regulations not altogether unsatisfactory, and to which many places of education had adapted themselves, often at considerable expense and trouble, are suddenly to be displaced by others that are open to the gravest objections.

The new regulations seem to have almost every order of fault. They will be unfair to the candidates, leading to the rejection of those best fitted for the work to be done. It is to be feared, too, that they will encourage residence and study abroad, with the consequent loss of the valuable moral and physical training that can be had only in England. They will also act prejudicially on the general tendency of school education. We hope we may soon hear that better counsels have prevailed, and that these unfortunate regulations are to be replaced by others more in accordance with modern needs and ideas.

TEA CULTIVATION IN INDIA.

Die Theekultur in Britisch-Ost-Indien, im fünfzigsten Jahre ihres Bestandes, Historisch, Naturwissenschaftlich, und Statistisch. Dr. Ottokar Feistmantel. (Prague: O. Beyer, 1888.)

HE subject of tea cultivation in India is one to which innumerable writers have devoted their attention, and not the least valuable portion of Dr. Feistmantel's work, "Die Theekultur in Britisch-Ost-Indien," is the bibliography of the subject with which, while recording his indebtedness for much of his information to many of the English and German authors enumerated, he commences his remarks. In his preface he explains that in the course of an address on the products and exports of British India, recently delivered by him in Prague, he alluded to the fact that on the Continent of Europe tea was generally known only as either Russian or Chinese, and that it was barely known that India produced a large and annually increasing quantity of high-class teas, which are largely used in London for mixing with and improving China tea. The correspondence which ensued when these remarks were reported by the local press induced him to publish the present work as the result of information he had the opportunity of collecting while serving in India for eight years as palæontologist to the Geological Survey.

It is Dr. Feistmantel's aim to place before the Germanspeaking peoples of the Continent as complete an exposition of the conditions of the tea industry in India as has already been laid before English-speaking people by other writers; and he therefore begins with an abstract of the early history of the tea-plant in India, the dates of its first discovery as an indigenous shrub, and its first introduction into the different districts in which it is now cultivated. He mentions the first export from India to England in 1838 of twelve chests of tea, which sold for 19s. 5d. per pound.