

rotation of crops, the adaptation of particular soils to particular crops, manures and experiments in cultivation, which should be left to an Agricultural Bureau.

*By Mr. Baker :*

Q. Is it generally known that the geological or mineralogical works of the United States, such as has been exhibited here to-day, are bound in cloth and prepared for the small sum of 50 cents?—They send out circulars to everybody who they think will be interested in knowing this fact. They also advertize it in the *Engineering and Mining Journal* of New York; I saw the advertisement in several places, and then every copy that goes out has a fly leaf, upon which is advertised the price of the work.

Q. How do you think the mineral statistics of the United States compare with the immigration statistics, as regards reliability?—I cannot tell as regards that. I know there has been some dispute about the correctness of their immigration, but I know that these mineral statistics are prepared with a great deal of care in the different parts of the country, and I know a great many of the men who are employed in the work. There is a report on the phosphates of South Carolina, by Mr. Moses, who is on the spot and has collected all his figures with care and skill. I know also that the iron and steel statistics for Pennsylvania were carefully collected by Mr. Swank, the Secretary of the Iron and Steel Association, who has for years made it his great work to become informed upon everything relating to the industry, with reference to the production for the iron masters, so that these statistics will be most trustworthy.

Q. You stated that the work performed by the Geological Department of Great Britain takes more of the nature of topographical work?—Yes.

Q. Are not the mineral resources taken charge of by some other department?—No; except so far as collecting the statistics. There is now a Mining Inspector under the Home Office. I have received a letter from Mr. Robert Hunt, late of the Mining Record Office, dated 20th October last, in which he says: "The Treasury last year awakened to the fact that two departments were doing the same work, and that mineral statistics were published in duplicate. After some long considerations it was determined that my office (the Mining Record Office) should be abolished and the business of obtaining returns from the mines should become a part of the duty of the Inspector of Mines, under the direction of the Home Office. This arrangement has been carried out; my two assistants have been transferred to the Home Office, and I am retired on a special pension. The work which has hitherto been done by me, and under a strictly voluntarily system, is now to be carried out with the power of an Act of Parliament with the twenty-six inspectors and my two clerks." This Act of Parliament was only passed last year.

Q. You made reference to the Geological Survey of California, and that it had been preceded by the Mineralogical Bureau. How much was expended in the old Geological Survey of California and how long did it continue?—I cannot tell you; it continued for seven or eight years. It was not satisfactory, however; the Director spent large sums of money on topographical and general preliminary surveys, while little or no attention was paid to the economics, such as gold, coal and quick-silver, and the mineral wealth of the country generally.

Q. But the expenditure of the Survey was paid by the Federal Government at Washington?—No; by the State of California. It is only within the last two years that the Federal Government have attempted to interfere with State Surveys. They had previously to do with the geological work and the mining resources of the Territories west of the Mississippi. But the State of California was for many years the only organized State west of the mountains, and the Geological Survey was entirely independent of the Government at Washington, just as much as the State of Alabama was.

Q. With regard to our own Geological Surveys, I understand [that you are of opinion that the functions performed by it are not as practical as they might be, and that the greater part of the work is lost sight of by topographical or superficial work?—I suspect that to be the case; I do not know to what extent topographical work has