

however, of this kind of writing and thinking, is reached by Professor Sumner, when, in one of the non-economical articles (p. 134), he gravely tells us, speaking of elections, that "they are not a source of energy, and therefore cannot cause any thing at all."

We have dwelt thus at length upon these faults, because we consider them as most hurtful to the cause of sound discussion, and to the influence of the very methods in political economy which, with Professor Sumner, we wish to see upheld. We have not attempted to give a full account, or, if one prefers the expression, a fair account, of the papers collected in this volume. In the article on wages, and even in those on bimetallism and on protection, there are instructive passages and telling points. The articles are not made up entirely of impatient assertion and sweeping denunciation. In the discussion of bimetallism, valid practical reasons are adduced against it, and the same is true with regard to protection; but it is precisely the theoretical core of the argument which is made weak and powerless by the defects which we have endeavored to point out.

#### SCIENTIFIC CULTURE.

THE question of the position of the physical sciences in courses of instruction, as compared to that of the classics, was scarcely thought of at the time when Professor Cooke began his work as an instructor in the experimental sciences thirty years ago. During this long service as a teacher and investigator, the question became a glowing one, but has been so far settled as to give to many of the essays of the little volume before us an historical rather than a current interest.

Nevertheless, the general reader who may care nothing for the Greek question will read these essays with pleasure. He will admire the earnestness and candor of the writer. He will follow with delight the limpid stream of argument and exposition. To the citation drawn from the literature of physics, to the effect that "such men as Davy, Dalton, and Faraday were as truly learned, as highly cultivated, and as capable of expressing their thoughts in appropriate language as the most eminent of their literary compeers," might be added the name of the author.

The most important statements which are made in these essays are quite independent of the

subject-title. They should be printed after the manner of certain biblical texts, and displayed on the walls of every collegiate hall in the land.

We append a few of these paragraphs:—

"There is no nobler service than the life of a true teacher; but the mere taskmaster has no right to the teacher's name, and can never attain the teacher's reward" (p. 85).

"The teaching which a professorship implies, instead of being a hindrance, ought to be a great stimulus, to scientific investigation. Of course, this influence is greatly impaired, if, as in many of our colleges, the available energies of the teacher are exhausted by the daily routine of instruction, or by outside work required to supplement his meagre salary; but if the teaching is only moderate in amount, and in the direction of the professor's own work, there is no stimulus so great as that which the association with a class of earnest students supplies" (p. 280).

"Men of affairs should resign the endowments intended for the maintenance of scholars to those whose zeal is sufficient to induce them to make gladly the sacrifices which the advancement of knowledge usually entails" (p. 277).

#### AROUND AFRICA.

THE activity which the Germans have shown during the past few years in colonial and commercial enterprises has produced some good results, and has given occasion for a few good books, notably those of Schweinfurth and Nachtigal. Dr. Joest, instead of following those explorers into equatorial Africa, circumnavigated the Dark Continent, visiting only a few inland towns in the extreme south-east. He described his travels in a series of letters to the Cologne *Zeitung*, which form the basis of the present work. Schweinfurth and Nachtigal performed their tasks well, and gave us good common-sense accounts of the people they visited, and the countries they saw. So has Dr. Joest. His first stopping-places were Madeira and St. Helena, which have been so often described that he was able to add little of interest. From St. Helena he went to Capetown, or Kapstadt, as he in true German fashion insists upon calling it. And this is a good place to utter a protest against the habit which the Germans have of translating proper names; for, really, 'Kapstadt,' 'Tafelbai,' and 'Kapland' do not represent the places described. Indeed, either this fact seems to have struck

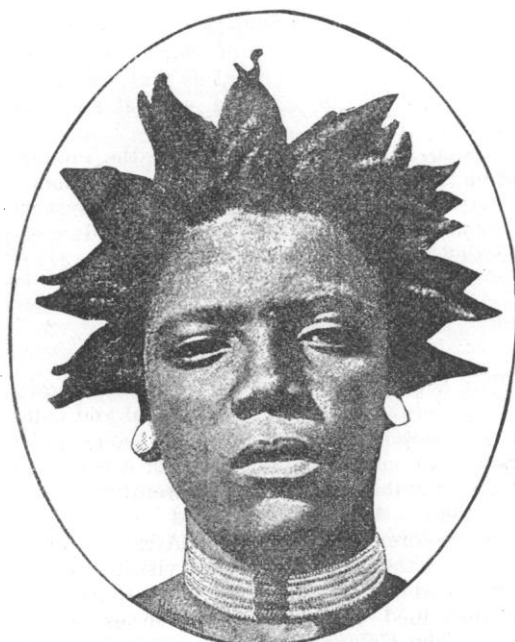
*Scientific culture and other essays.* By JOSIAH PARSONS COOKE, LL.D., professor of chemistry and mineralogy in Harvard college. Second edition, with additions. New York, D. Appleton & Co., 1885.

*Um Afrika.* Von WILHELM JOEST. Mit 14 lichtdrucken und zahlreichen illustrationen. Köln, 1885. 8°.

our author, or a longer sojourn among English-speaking people (he was obliged to travel almost entirely on English steamers) may have made the English words less displeasing to him; for further on he writes of Port Elizabeth and Steamer Point without any compunctions. From Port Elizabeth he travelled inland to Kimberly, and Orange Free State, reaching the coast again at East London; thence to Port Natal, where he again left the coast, and proceeded to Durban and Zululand. He writes Zulu, Zambesi, and Zanzibar, 'Sulu,' 'Sambesi,' and 'Sansibar,' on the ground that *s* represents the sound better than *z*. So, too, he spells Cetewayo, 'Ketschwayo,' and

making such allowances, his account of the English South-African colonies is sufficiently full and accurate for the general reader.

The illustrations are a feature of the work. But while the full-page *lichtdrucken* ('heliotypes') are excellent, a few smaller portraits of negro men and women have much more interest for the student of African ethnology. Indeed, Africa should be visited by a good photographer, — one who would be willing to devote a portion of his energies to taking pictures of individuals, and not, as has generally been the case, confine himself to groups of badly scared natives artistically arranged in rather suspicious-looking 'market-places,' 'main streets,'



NATAL CAFFRE.



SULU MAIDEN.

probably is right in all four cases. Returning to Port Natal, he once more took steamer, and, after touching at ten or eleven places, returned home *via* Aden and the Suez Canal. He visited neither Angra Pequena nor any other port on the coast now claimed by Germany in south-western Africa, nor Madagascar, concerning which there is need of fresh and reliable information. With these exceptions, he did all that could be expected of him; and we know of no better account of the growth, economic conditions, and ethnographic relations of the countries visited. Some allowance, of course, must be made for his sympathy with the boers as against England; but,

and the like. The volume is further illustrated by a very good map — as maps of Africa go — from the establishment of Justus Perthes, showing our author's route, and the portions of the coast-line claimed by the English, French, Spaniards, Portuguese, and Germans. One noticeable feature is that the Welle of Schweinfurth is given as probably identical with Stanley's Aruwimi, which would seem to be a rather premature statement. Then, too, the courses of rivers are laid down altogether too positively. Still, one should not quarrel with this map on that account, as it is a failing of nearly all maps of Africa, and, indeed, of maps of all partially explored countries.