

tional institutions from one another is by no means an innovation, and its legality seems out of serious question. At any rate, the function of the new association is merely, through its secretary, to *inform* members as to where they can *borrow* (if they like) urgently needed research chemicals while waiting for them to arrive from Germany. I have received a number of letters prophesying usefulness for the undertaking.

M. A. ROSANOFF,
Secretary

CLARK UNIVERSITY,
WORCESTER, MASS.,
November 20, 1909

THE CIVILIZATION OF BOHEMIA

TO THE EDITOR OF SCIENCE: In the first paragraph of the address by Dr. M. Toch, on the first page of SCIENCE, of November 19, there occurs a certain generalization on the effects of illiteracy in several European countries. The writer says: "In many of the countries of Europe illiteracy is universal"—which, of course, is not correct itself. And this is followed further on, as in illustration of the effects of the illiteracy, by the sentence: "What have those countries like Roumania, Bulgaria, *Bohemia* (italics my own), Hungary, Russia and dozens of others, ever amounted to, and what are their commercial relations with the rest of the world, compared with Germany, France, England or the United States?" Now all I desire is to say a word regarding Bohemia, which is the land of my birth. The inclusion of that country in the above sentence is extremely unjustifiable, for as any statistics on that question, including the data of the U. S. Bureau of Immigration, will show, Bohemia leads all the countries of Europe, including the greater part of Germany, in the lowness of the percentage of the illiterate, these being practically reduced to the defectives. And as to whether that country ever amounted or now amounts to anything in the sciences, arts, industries, etc., it is sufficient to refer to history and to the commercial and tax statistics of the Austrian empire. In view of these facts the above statement must be characterized as a very

loose one and it is regrettable that it found place in this esteemed journal.

ALEŠ HRDLÍČKA

WASHINGTON, D. C.,

November 19, 1909

MARS AS THE ABODE OF LIFE

TO THE EDITOR OF SCIENCE: On page 339 of SCIENCE I notice "2" has been printed for "r" in the denominator of the right side of the formula in the middle of the page. It reads correctly in my copy of the proof. The thing is evident as a misprint to any mathematician from the deductions—but it may as well be stated.

PERCIVAL LOWELL

QUOTATIONS

THE U. S. NAVAL OBSERVATORY

THE President's recommendation concerning the Naval Observatory is eminently sound. He urges that the official head of that great astronomical establishment should be an eminent astronomer, and not a naval officer detailed for service for a shorter or longer term. This mode of filling the post of head of the observatory could not have survived so long as it has were it not for the entirely false notion conveyed in the name of the institution. As the President truly says, all the uses of the observatory specifically related to the needs of the navy might be subserved at a small fraction of the cost involved in the maintenance of the Naval Observatory. The part it really plays is that of a great national observatory, and its material equipment is of a character befitting such a part. The President calls it "the most magnificent and expensive astronomical establishment in the world." Alongside its important observational work is carried on the Nautical Almanac, in connection with which the labors of Simon Newcomb and of George W. Hill have made American mathematical astronomy illustrious the world over. The whole of this activity should, as a matter of course, be presided over by an astronomer of the first rank, under a permanent tenure, and not by a man who, in the nature of the case, must be comparatively an amateur, and who is likely to look upon the post as a pleasant berth

rather than as a great scientific responsibility.
—New York *Evening Post*.

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

THE report of President Maclaurin, of the Institute of Technology, derives rather unusual interest as a fresh contemplation of old problems. These include the annual equation of making receipts equal expenditures, and the new questions of better salaries for instructors and a new location for the institute. Difficulty appears in keeping some of the best of the teaching force in the face of larger professional opportunities. The margin is frequently too great to be offset by the teacher's enthusiasm, and an appeal is made to the state to deal more generously with this institution. The present plant is criticized because of the noise, dirt and electrical disturbance to which it is subjected. The buildings are scattered and inconvenient and lack dignity. If a removal to some more favorable location is not soon made in ten years it will be inevitable, in the president's opinion, and the longer it is delayed the more difficult will it be to find a suitable situation.
—The Boston *Evening Transcript*.

SCIENTIFIC BOOKS

Consciousness. By HENRY RUTGERS MARSHALL, M.A., L.H.D. New York, The Macmillan Co. 1909.

The intending reader will take this book in hand with a certain feeling of satisfaction due to first impressions. As a piece of book-making it is exceedingly well put together; and the analytic table of contents shows that it is the intention of the author to treat the various problems which he chooses to include under its title in an orderly and systematic way. The promise made by these first impressions is in the main well fulfilled. Moreover, the style of the book, although it is not always clear and is in spots positively obscure, is uniformly dignified and appropriate—recognizing obligations and differing with self-restraint and sobriety, and without resort to those kaleidoscopic turns and twists of argument and tricks of rhetoric which have cost the would-be science of psychology so dearly in this country.

The author announces in the preface (p. vii) such a "restatement of psychological doctrine" as shall "bring all related psychic facts into harmony with the theory" which he has defended in some of his previous writings. With the expert student of these facts, such a statement as this is certain to create grave misgivings. For at this somewhat late day in the history of psychology, as of any other of the so-called sciences, the temptations connected with the attempt at restatement of all its facts are almost irresistible. Of these temptations the following two are chief: first, the temptation to think that one is saying something new, because one is telling the same old story in a different and not infrequently a more uncouth language; and second, the temptation to force the facts into harmony with the new theory, under cover of a difference in the language used to describe them. Let us not forget, then, that in the development of any science, *restatement* can not create any new facts or justify any new interpretation of facts already known. At best, it is only a matter of convenience in the method of arrangement and exposition. Of late in psychology, in our judgment, most similar attempts have hindered quite as much as they have helped the discovery and the elucidation of its more fundamental truths.

Mr. Marshall divides the treatment of his theme into three separate books. Of these, Book I. treats of Consciousness in General; Book II., of The General Nature of Human Presentations, and Book III., of The Self. Each of these books is again divided into parts, divisions, subdivisions, chapters and numerous short paragraphs—giving an appearance to the whole not unlike that of Spinoza's "Ethica." Thus the form of presentation is made to accord quite strictly with the plan which, as we have seen, proposes to restate all the psychic facts in terms of a new theory that shall embrace and explain them all. At this point, the devoted psychologist can scarcely refrain from the prayer: Would to heaven that the attempt might be successful!

Before examining any of the particular problems dealt with by the author, it is de-