eminently fitted for the important office, but one who, though personally quite irreproachable, was totally ignorant of the operations of the great organization which he was called upon to direct and whose previous training and experience are such as to leave little hope that he will ever be able to acquire more than a very superficial knowledge of these operations.

The incident, with others of a similar character recently brought into public notice, serves to illustrate the folly of making appointments to places in the government demanding special qualifications for either personal or political reasons. Happily the practise is becoming more infrequent as administrations come and go and the more the people realize its costly and disastrous consequences the sooner it will disappear entirely.

R.

THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING

In view of the critical importance of the issues pending before the Carnegie Foundation for the Advancement of Teaching, it is important that a general expression of views by college and university professors be available. The issues relate to the privileges of retirement and the proposed provisions for insurance and annuities which the foundation has offered in their place. The report of the Committee on Pensions of the American Association of University Professors will soon be available. A group of influential universities have published replies to the proposals of the foundation. The undersigned has published in *School and Society* (October 7, 1916) a general review of the ten years of activity of the foundation with special reference to the pending issues. These several expressions indicate a general and emphatic opposition to the steps proposed by the foundation; they enter into detailed consideration of the grounds upon which such opposition is based. Upon the basis of these documents individual opinions are desired indicating how far and in what respects the contentions are approved. Statements of general approval and disapproval as well as of specific positions approved or disapproved will be helpful in reaching a fair indication of the judgment of those interested. Communications should be made promptly.

Joseph Jastrow

Madison, Wis.

QUOTATIONS

THE BRITISH COMMITTEE FOR SCIENTIFIC AND INDUSTRIAL RESEARCH

The report of the Committee of the Privy Council for Scientific and Industrial Research for the year 1915–16 has recently been issued. The sum at its disposal for the financial year 1915–16 was £25,000, out of which £4,250 was granted to the Royal Society. For the current financial year 1916–17 the vote was £40,000, and at the close of the academic year a sum not exceeding £6,000 will have been granted to a number of individual research workers, students and others. In an appendix is the first annual report of the advisory council. It consists of Sir William S. McCormick (chairman), Lord Rayleigh, Sir George T. Beilby, Mr. W. Duddell, Professor J. A. McClelland, the Hon. Sir Charles A. Parsons, Professor J. F. Thorpe and Mr. Richard Threlfall. There are three standing committees—on engineering, metallurgy, and mining, respectively. A sketch is given of government action in the present century previous to May, 1915, when the presidents of the boards of trade and education received a deputation from the royal and other learned societies, urging the need for government assistance for scientific research for industrial purposes, and the establishment of closer relations between the manufacturers and scientific workers and teachers. The government scheme was issued a couple of months later, and the special committee of the privy council and the advisory council itself were thereupon set up. The object of both committee and council was to be the establishment of "a permanent organization for the promotion of industrial scientific research." Thus was recognized the necessity for organizing the national brain power in the interests of the nation at peace. War has remained as much an art as ever, but its instruments are now not only forged by the man of science, but they need a scientific training for their effect-

ive use. This, the report says, is equally true of the weapons of industry. The brains, even the very processes, that to-day are necessary to the output of munitions were yesterday needed, and will be needed again to-morrow, for the arts of peace. The council was faced from the first with the fact that the war had greatly reduced the number of workers available for research, and it found that certain researches conducted or directed by professional associations in the period preceding the war stood in grave jeopardy of enforced abandonment. The first act of the council, therefore, was to save as many derelict researches as possible; its second was to confer with professional and other societies concerned, especially with chemical and electrical industries; its third to form a register of researches; its fourth to aid research in educational institutions, and its fifth to form the standing committees already mentioned. The appointment of other standing committees is in contemplation. The sphere of universities and technical colleges in relation to the work with which the council is concerned is discussed, and finally certain general conclusions are drawn. The first is that a largely increased supply of competent researches must be found, and the second, that there must be a hearty spirit of cooperation among all concerned, men of science and of business, working men, professional and scientific societies, universities and technical colleges, local authorities, and government departments. It was found that the output of the universities before the war was altogether insufficient to meet even a moderate expansion in the demand for research. It is hinted that hitherto the scientific army in Great Britain has consisted of a brilliant group of staff officers, and it is bluntly said that we have not yet learnt how to make the most of mediocre ability, though without scientific rank and file it will be as impossible to staff the industrial research laboratories that are coming as to fight a European war with seven divisions. The council expects to be able to encourage a longer period of training by the offer of research studentships, but "it is useless to offer scholarships if competent candidates are not forthcoming, and they cannot be forthcoming in sufficient numbers until a larger number of well-educated students enter the universities. That is the problem which the education departments have to solve, and on the solution of which the success of the present movement in our opinion largely depends." The council considers that the organization of research in the interest of various industries must be coordinate. "It must be continuous in its operation, and its ramifications will spread as knowledge grows. It will inevitably tend to bring industries into intimate relation which are at present independent of each other; to transform what have hitherto been crafts into scientific industries; and to require cooperation, not only between different firms in the same industry, but between groups of industries in a continuously widening series of interrelated trades. The forces which are at work in this direction have elsewhere found their expression in connection with the trust and the combine; but we believe, if the real nature of these forces is clearly grasped, that it will be possible to organize them for the benefit, not only of the industries, but of the nation as a whole."—*The British Medical Journal.*

SCIENTIFIC BOOKS

Annals of the Dearborn Observatory, Northwestern University. Volume I., Historical and Descriptive Introduction, Measures of Double Stars. By PHILIP FOX, director of the observatory. Published at Evanston, Illinois, 1915. 4to. Pp. 229.

Science often moves along paths that soon become obscure to the eye of the historian. He can always trace the course of the highways, marked as they are by published contributions. But he may easily miss the almost equally important though less conspicuous byways through the quiet places—the influence of a great teacher, or the silent force of an example of devotion. He who seeks to account for the great activity in America along the lines of observational astronomy must not overlook or underestimate the part that Burn-