The "simple explanation" is that these are not conflicting statements. Each dollar invested in raw rock phosphate paid back $2.29; and, when the dollar invested is subtracted from this amount, the profit is found to be $1.29.

In this article Professor Mooers bases his opinions in part upon "observations" and "hay data . . . not given in Bulletin 90," states that in his conclusions he "was governed chiefly by a consideration of the soil conditions and the results of the individual series"; and he criticizes my use of a summary table which he prepared and which he also used in his bulletin[1] and in his former SCIENCE article.[2] His present opinion is that this summary table is not fairly representative of the results secured, and I must bear his criticism for having used it.

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QUOTATIONS

COLUMBIA UNIVERSITY AND PROFESSOR CATTELL

IT is contrary to the academic traditions of six hundred years to dismiss a university professor on account of his opinions expressed in a proper way to experts in the subject. It is illegal to dismiss a professor in the middle of the academic year on false and libelous charges, without payment for the year and without the pension which he had earned by twenty-six years of service.

I am opposed to war and to this war, but I have undertaken no agitation against the government nor against its conduct of the war. I have written nothing against the draft law or against sending armies to Europe, although I regard both measures as subversive of the national welfare.

It is because I care for my country that I deplore its entry into a war of aggression and the government's policy of strangling democratic principles at home. For the same reason I have in the journals which I edit done what I could to promote national efficiency. I am a member of the Psychology Committee of the National Research Council and spent a large part of last week drawing up for the War Department plans for the scientific selection of aviators.

In August, 1914, when President Wilson was telling us to be neutral in thought as well as in speech and in act, and Mr. Roosevelt and Dr. Nicholas Murray Butler were "pussy-footing," I wrote in one of the journals that I edit:

> The official German justification of the mad and wanton European war is that it is in defense of the Teutonic culture and people against the semi-Asiatic and barbaric Slav hordes. The verdict of history will probably be that it was a war of calculation for caste and national aggrandizement, and a war of miscalculation. The German emperor and his bureaucratic military entourage probably held that the time was ripe for an extension of German influence in the Balkans and towards Asia Minor with an increase of its African possessions at the expense of France. But it is not clear why, if the serpent was prepared to use its fangs, it did not show its alleged wisdom. . . . We may look for a second Napoleon the little rather than for a second Napoleon the great.

In June, 1917, I began a letter to the New York *Evening Post* with the words:

> An emperor, driven by the militaristic and capitalistic classes of his people and "by God demented," must accept responsibility for the great crime.

The letter that I wrote on August 23 to members of the Congress, on account of which I have been dismissed from the chair of psychology at Columbia University, asked support for a measure then before the Senate and the House to prohibit sending conscripts "to fight in Europe against their will." There is no law requiring or permitting the President to send "conscientious objectors" to fight in Europe. To do this would be contrary to the intent of the constitution and to the uniform policy of the nation. It would provide a less efficient army and might cause disorder and possible revolution at home. Surely this should not be done without careful consideration by the Congress after efforts to learn the

[1] Bulletin No. 90, Tennessee Agricultural Experiment Station.

[2] SCIENCE, January 5, 1917.

will of the people. I have only exercised the constitutional right and fulfilled the duty of a citizen in petitioning the government to enact legislation which I believe to be in the interest of the nation. For this I am dismissed from the division of philosophy, psychology and anthropology, which I have made the strongest in the world. Professors in every university are terrorized, so that they dare not exert their influence for peace and good will.

The people of all the European nations long for peace, but are kept at war by the kleptocratic classes. In spite of the institutions and the instincts which we have inherited from a barbarous past, I believe that our people have no heart for this war into which they have been driven. But even if the nation should become a mob mad for war, it is none the less the business of each of us to do what he can for righteousness as he sees it. If that is forbid by force, then indeed we need a new national anthem, such as Shelley once wrote for England:

> God prosper, speed and save,
> God raise from England's grave
> Her murdered Queen!
> Pave with swift victory
> The steps of Liberty,
> Whom Britons own to be
> Immortal Queen.

—J. McKeen Cattell *in a statement printed in the daily press.*

SCIENTIFIC BOOKS

Chemistry in the Service of Man. By Alexander Findlay, M.A., D.Sc., F.I.C. Longmans, Green & Co., London, New York. 1916. Pp. xiv + 255. Price $1.60.

This book is the outgrowth of a series of lectures—the Thomson Lectures—delivered by the author before the United Free Church College at Aberdeen, near the close of the year 1915. It represents the attempt to lay before a group of college men, who made no claim to chemical knowledge, some account of what chemistry has accomplished for the well-being and uplift of mankind, and also some glimpse of the relation of chemistry to the war. The book is in England especially timely, from the fact that among the educated classes, as well as among the business men and industrialists, an appreciation of chemistry has been sadly wanting. The case is somewhat different in this country, since for many years chemistry in a large share of our colleges and universities has been either a required study or a widely chosen elective, and has become a part of the curriculum of most of our high schools. Probably on account of this our manufacturers have shown far less reluctance than those of England to abandon their "rule of thumb" methods.

Such books as the one before us are always timely, never more so than to-day, provided the author is a master of his subject and at the same time capable of expressing his thought in language that can be understood by the man with little or no previous knowledge of chemistry. Dr. Findlay well fulfils both of these conditions. His work in physical chemistry is well known; his success in opening up difficult fields in chemistry to the comprehension of the ordinary chemist is evidenced by the clearness of his "Phase rule and its applications" and his "Physical chemistry and its applications in medical and biological science." This latter book, by the way, should be read by every medical student.

The aim of "Chemistry in the service of man" is best set forth in a sentence in the introductory lecture: "In attempting a brief and necessarily incomplete survey of chemistry in the service of man, I shall endeavor not merely to recount some of the manifold ways in which chemistry has revolutionized life and has contributed, on the material side, to a civilized existence; but I shall try, also, to indicate, if I can not do more, some of the principles which underlie chemical change, and some part of the contribution which chemistry has made to our knowledge of the constitution of matter." The latter is rather an ambitious program for a *popular* book, intended for readers without previous knowledge of chemistry. The chapters entitled "Velocity of reaction and catalysis," "Electricity and chemistry," "The colloidal state," and "Molecular structure" would