of fifty, with his abilities fully tested and his scientific reputation fully established, should be treated on the same footing as a clerk who might never have done anything but copy documents and perhaps post a ledger. In this country there used to be a way of mitigating the absurdity of the system. The treasury could in such cases add twenty-one years to the service for pension purposes, thereby enabling a man joining late in life on some special ground to be put in a position not much worse than that of an undistinguished copyist joining early. But in recent years the treasury has curtailed its own powers and can not now add more than seven years. Were another Newton to-day made master of the mint, and were he to be dismissed or to become incapable of performing his duties five years afterwards, he would receive at the most a pension calculated on twelve years' service. That is how this nation enlists knowledge and ability for the carrying on of its affairs. But that is not by any means the worst it can do. A man may serve it like Lord Milner for a long term of years in difficult and arduous positions, but if he is not technically in the civil service he may be dismissed into private life at an age when other remunerative employment is unattainable, without any compensation at all.

No explanation has been vouchsafed to Dr. Lankester for the cavalier treatment he has received. His eminence in his own scientific field is unquestionable, and has been abundantly recognized by those most competent to judge both abroad and at home. Nor is he one of the unpractical students who do not know how to handle business. On the contrary, he has all the qualities required in an efficient administrator. We are thrown back, therefore, upon reasons of a more personal kind. He was appointed by the three principal trustees in whom power of appointment and dismissal is vested by statute. But the appointment was resented by some active members of the standing committee, which has taken the first opportunity to reverse it. It may be presumed that he has not succeeded in conciliating those who were opposed to his

appointment, and as he holds his own views rather strongly and is not too patient with what presents itself to him as stupidity, it is even possible that he has not tried very hard to conciliate them. In most situations in life it is necessary to reckon with these personal factors, which indeed may be raised to the dignity of impersonal factors in circumstances where harmonious cooperation among many becomes as important as the most commanding ability in one man. If the difficulty in the present case is of this order, it may now be regarded as insuperable. Dr. Lankester himself would probably recognize that, whatever the causes, his usefulness at the museum and his own comfort in remaining there are alike at an end. But, though this may be a good reason for the severance of his connection with the museum, it is no reason at all for turning him adrift at the age of sixty with a derisory compensation calculated upon rules intended for a totally different purpose. If he does not 'get on' with the other people in the museum probably there are faults on both sides, and too much zeal for science may have been one of his. In any case failure to get on with somebody else is not by a very long way misconduct of the kind that forfeits a position. He gave up a secure position at Oxford to take the directorship, trusting to a general but not well-founded impression that the state may be relied upon to treat its servants with generosity. There are not many things open to a man of sixty; and there are few suitable to the student of biology. The museum may manage its affairs in its own way, but it is a disgrace to the nation to treat a distinguished man of science, entering its service in exceptional circumstances, as if he were an ordinary clerk, merely because an absurd technicality places both in the same category.

### SUMMER MEETING AND COLLOQUIUM OF THE AMERICAN MATHEMATICAL SOCIETY.

THE thirteenth summer meeting of the society will be held at Yale University, New Haven, Conn., on Monday and Tuesday, Septemper 3 and 4.

A colloquium will open on Wednesday, Sep-

tember 5, and close on the following Saturday morning. One course of five lectures will be given by Professor E. H. Moore, of the University of Chicago, and two courses of four lectures each by Professor Max Mason, of Yale University, and Professor E. J. Wilczynski, of the University of California. Titles and outlines of the courses are as follows:

### On the Theory of Bilinear Functional Operations: Professor E. H. MOORE.

In the light of the general theory of distributive functional operations and with emphasis on various analogies between algebraic and transcendental theories, the course is to consider bilinear functional operations, in particular the theory and applications of linear integral equations, as recently developed by Volterra, Fredholm, Hilbert and others. The general point of view with references is to be found in the article on functional operations by Pincherle in the Encyclopedia, II A <sub>m</sub>.

# Selected Topics in the Theory of Boundary Value Problems of Differential Equations: Professor MAX MASON.

The course will deal with the real solutions of partial and ordinary linear differential equations of the second order. The analytical character of the solutions of partial differential equations of elliptic, parabolic and hyperbolic types will be discussed. Boundary value problems for equations of these types and for ordinary differential equations will be treated, with special reference to the applications of definite and indefinite integral equations and of Green's functions. The relation between boundary value problems and corresponding problems in the calculus of variations will be Special reference will be made considered. to writings of Hilbert, Picard, Hadamard and Bernstein, and to recent Göttingen dissertations. The lectures will not assume a knowledge of the theory of boundary value problems or of calculus of variations.

## Projective Differential Geometry: Professor E. J. WILCZYNSKI.

Differential geometry has, heretofore, been almost exclusively treated from the point of view of the group of motions. In the present course, which is confined to plane and space curves, and ruled surfaces, those properties are investigated which depend upon the infinitesimal elements of the configuration considered but which are invariant under all projective transformations. The references will be principally to the work of Halphen and that of the lecturer, which has been collected in a treatise soon to be published by B. G. Teubner under the same title as this course. Some knowledge of the theory of linear differential equations and of the theory of continuous groups will be assumed.

The morning lectures will begin at 10, the afternoon lectures at 2:30. Each lecture will occupy an hour, and consecutive lectures will be separated by an intermission. Two lectures will be given on each morning, Wednesday to Saturday, inclusive, and on each of two afternoons, and one lecture will be given on Wednesday evening at 8. One afternoon will be devoted to an outing. A charge of three dollars will be made to those attending any or all of these lectures.

JAMES PIERPONT, PERCY F. SMITH, HEINRICH MASCHKE, H. S. WHITE, F. N. COLE, Committee on Summer Meeting.

## SAMUEL LEWIS PENFIELD.

SAMUEL LEWIS PENFIELD, professor of mineralogy in the Sheffield Scientific School of Yale University, died at South Woodstock, Conn., on August 12, 1906, at the age of fifty years. He has been continuously connected with the Sheffield School since his graduation from that institution in 1877.

Professor Penfield, as a student, made a specialty of analytical chemistry, and developed wonderful ability in that line of work. Soon after graduation he made many difficult analyses of minerals, particularly of phosphates from Branchville. He studied organic chemistry at Strasburg University in 1880– 81, but immediately afterwards he became instructor in mineralogy at New Haven, and thenceforward devoted his whole attention to