the rays the refracting body has been in the form of a prism. This involves the inconvenience that the absorption of the rays is so much greater toward the thicker portion of the prism as to cause imperfect or unequal definition in the image of the slit or wire used for the test. This has sometimes given rise to the appearance of a deflection of the rays away from the base of the prism instead of towards it, a negative action, implying a refractive index less than unity.

In the present experiments this was avoided by employing for the refracting bodies thick pieces of glass and Iceland spar with parallel sides, which were inclined at an angle of 45° to the path of the rays. The distances traversed by the rays in the two media were about 10 and 14 mm. respectively. The displacement of the image for ordinary light is about 1.5 mm. for the glass, and for the Iceland spar about 1.0 mm. and 1.8 mm. respectively, for the two images due to double refraction. A small platinum wire, stretched so as to be quite straight, rested upon the upper surfaces of the plates, and the rays from the tube were passed through a narrow slit in a copper plate. The slit was parallel with the wire and at a considerable distance from it. A strong and very clearly defined image of the wire was formed upon the photographic plate, showing no displacement by the glass plate or the Iceland spar, and no trace of widening or duplication by the latter, or, in other words, no perceptible effect of refraction, or double refraction.

Other experiments were described, in which very sharply defined images of fine platinum wires produced by the rays upon a photographic plate showed a faint central band, dark in the negative but light in the positive, corresponding to the familiar bright central band behind an opaque wire in the case of luminous rays. The converse effect of a dark central band in the positive from a narrow slit was also observed, but less distinctly. These results offer some support to the idea of true diffraction and the periodic character of the rays, but the matter must be regarded as somewhat uncertain until secondary maxima and mimima are obtained, which would settle the question of diffraction and permit the definite determination of wavelengths.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

A meeting of the Council of the American Association for the Advancement of Science was held at Washington, D. C., on April 12th. Owing to the lamented death of Professor Edward D. Cope, the late President of the Association, Professor Theodore Gill presided as Senior Vice-President. A number of members were elected, and several matters of importance relating to the Detroit meeting were discussed and arranged at this meeting.

Professor Leland O. Howard, of the Department of Agriculture, Washington, D. C., was nominated as Vice-President and Chairman of Section F, to fill the vacancy caused by the death of Professor G. Brown Goode. Professor Howard was requested to prepare an address to be delivered before the Section at the Detroit meeting.

Professor I. C. White, Vice-President and Chairman of Section E, will go to St. Petersburg this summer as one of the delegates to the International Congress of Geologists. He will, however, prepare his Vice-Presidential address to be read before the Section at the Detroit meeting.

On Monday evening, August 9th, at the Detroit meeting, Professor Theodore Gill will deliver a memorial address on the life and work of Professor Cope, at the time and place appointed for the Presidential address, which was to have been given by Professor Cope. In this address Professor Gill will

give an account of the development of vertebrate paleontology, with which Professor Cope was so intimately connected.

Dr. Seth C. Chandler, of Cambridge, was elected Auditor of the Association, to fill the vacancy caused by the death of Dr. B. A. Gould.

The Permanent Secretary read the letters received from the British Association for the Advancement of Science in which it was stated that the General Committee of the British Association had voted to make the officers of the Detroit meeting of the A. A. A. S. honorary members of the B. A. A. S. for the Toronto Meeting, and to receive all fellows and members of the American Association as members of the British Associatian for the Toronto meeting by the payment of the regular annual assessment. It was voted that the Permanent Secretary should acknowledge the courtesy of the British Association and at the same time should express the hope that members of the British Association would be present at the Detroit meeting, calling attention to the provision in the constitution of the American Association relating to members of foreign associations.

Considerable discussion followed as to the proper method of extending courtesies to such members of the British Association as might take part in the Detroit meeting. It was voted that members of the British Association at Detroit should be invited to register as members of the several sections of the American Association, and that special attention should be paid by the officers of the respective sections to all foreigners thus registering.

The Permanent Secretary was instructed to arrange for the delivery of the Vice-Presidential addresses at the Detroit meeting in the afternoon as at former meetings.

F. W. PUTNAM,
Permanent Secretary, A. A. A. S.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

THE fourth triennial session of the Congress was held at Washington on May 4th, 5th and 6th. The meeting was well attended, as it deserved to be, the proceedings of the Congress as a whole and of the separate societies being interesting and profitable. Washington, especially in the spring, is the best possible place for such meetings, and this was recognized by deciding to hold the triennial meetings hereafter in that city. The only drawback is the lack of an adequate auditorium, which may be provided in the interval.

The proceedings of the Congress, as a whole, included several joint discussions. On Wednesday afternoon the Association of American Physicians, the American Physiological Society and the American Pediatric Society, united in discussing 'Internal Secretions considered in their Physiological, Pathological and Clinical Aspects.' The other subjects taken into consideration in the general sessions were 'The Gouty and Rheumatic Diatheses and their Relation to Diseases of the Eye,' Otology in its Relations to General Medicine,' 'Deformities of the Hip-Joint, especially Congenital Dislocations,' and 'The Classification of Acute General Peritonitis: The Prognosis and Treatment of the Different Varieties.'

The address by the President, Professor William H. Welch, on Thursday evening, was entitled, 'Compensatory and Protective Pathological Processes,' and was an admirable presentation of the subject, equally interesting to the practitioner and to the man of science concerned with the study of adaptations and evolution. The attendance at the meeting was large, although it and the subsequent reception were unfortunately simultaneous with a lecture by Sir Archibald Geikie and a reception to him in the rooms of the Geological Survey. Other ar-