The record of the seismograph work indicated that on the forenoon of October 17, two shots were fired on Section 15, Block 36, T.4 S. At midnight shooting was resumed at this locality and eight shots were fired between 12:20 and 8:15 A. M., October 18. Charges of dynamite were used in the following order: 50, 300, 300, 900, 1,500 pounds, and 50, 300, 300, 900 and 1,800 pounds. The 1,500-pound shot fired at 3 A. M. on October 18 made the tremor which caused one person at Big Springs to think that an automobile had bumped his house and another to think that some one was rattling the door; the 1,800-pound shot fired at 6:15 A. M. coincides with the reports as to the strongest tremor felt. The shooting on the following night, October 18–19, was as follows. On Section 39, Block 36, T.3 S. from 9:25 to 11:30 P. M.: 50, 300, 300, 900, 1,500 pounds; from 12:50 to 3 A. M.: 50, 300, 300, 900, 1,500 pounds, and on Section 31, Block 35, T.3 S. from 3:50 to 5:55 A. M.: 50, 300, 300, 900, 1,500 pounds.

The 1,500-pound shot at 3 A. M. on October 19 seems to have been less generally felt than was the same charge at the same time on the previous night. All the shots were similarly placed, being covered by about five feet of earth. The temperature at 3 A. M. on October 18 was 14° C.; the wind velocity, 11.2; the direction of the wind, from 10 degrees east of north; the sky cloudy. On the next night the temperature at 3 A. M. was 18° C.; the wind velocity, 8; the wind direction, from 10 degrees east of south; the sky cloudy. The ground conditions at the locality of the shot which are not recorded in detail may account for the seemingly different intensity of the tremors. One or two observers at Knott report that the tremors of the second night were greater than those of the first. However, for the region as a whole those of the second night were not so generally felt or reported upon.

The shots of October 17 and 18 were made fourteen miles west of Garden City in Glasscock County. The tremors were felt at Sterling City forty-four miles east; at Big Springs thirty-two miles northeast; at Knott forty miles north; at Stanton twenty miles north, and at Midland twenty-one miles northwest. Inquiry among farmers and ranchmen indicated that even beyond the towns mentioned the tremors were more or less distinctly felt. Apparently the tremors were readily detected within a distance of forty or fifty miles east and north from the locality at which the dynamite was discharged, this being true at least for the larger shots of 1,500 and 1,800 pounds. The distance the tremors were felt west and south is less well known from lack of records. The surface formation at the locality where the dynamite was exploded and of much, but not all, of the country affected is Cretaceous limestone. Where the limestone is absent the surface formations consist of either Cretaceous sands or Triassic or Permian red sands and clays. The limestone is apparently an effective medium for the transfer of earth tremors.

E. H. SELLARDS

UNIVERSITY OF TEXAS

IN AID OF AMERICAN MEDICAL BIOGRAPHY

DR. I. FISCHER, of Vienna, is engaged in the preparation of supplementary volumes to the second edition of Hirsch's "Biographisches Lexikon der hervorragenden Aertze aller Zeiten und Völker" (Berlin and Wien, 1884–6), which is the only international dictionary of medical biography in existence. The supplement will contain biographies of recent and living physicians, and Dr. Fischer is particularly anxious to obtain American material, the conditions for inclusion being original laboratory and clinical work, important discoveries and inventions, publications, editorial work and such like. Any help which may be given him by the donation of "Who's Who," volumes of biographical sketches, clippings of important obituaries from medical periodicals, etc., will be much appreciated. Such material may be transmitted directly to Dr. Fischer himself (address: Biberstrasse 15, Vienna, I, Austria).

F. H. GARRISON

ARMY MEDICAL MUSEUM

SCIENTIFIC BOOKS

Outlines of Biochemistry (The Organic Chemistry and the Physicochemical Reactions of Biologically Important Compounds and Systems.) By ROSS AIKEN GORTNER. John Wiley and Sons, New York, 1929.

THE success of the application of physics and chemistry to biology depends upon two conditions: first, the ability of the biologist to master physics and chemistry and yet remain a biologist, and second, the willingness of the physicist and the chemist to cooperate sympathetically with the biologist. Professor Ross Aiken Gortner is an outstanding example of the fulfilment of the first condition. In reading his "Outlines of Biochemistry," it would be difficult to say whether Professor Gortner is biologist or