

The plants used for this determination were tomato, tobacco, fuchsia and carrots.

The studies made to date indicate that certain vitamins, particularly B₂ or riboflavin, are present in the soil and that some plants take up vitamins from this source as they absorb essential mineral elements.

If any of our crop plants supplement their synthesized vitamins with vitamins from the soil at different growth stages the presence or absence of vitamins in the soil immediately becomes a vital factor in crop production and soils management.

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APPARENT TIME ACCELERATION WITH AGE OF THE INDIVIDUAL

THE apparent acceleration of time as one grows older seems a rather universal experience. All of us can recall what a long time a year used to seem when we were young children and how, as we grew older, the years seemed to pass faster. Even then, a year during our twenties was apparently a much longer space of time than a year in our forties, and as we approach sixty, a year seems much shorter still.

I have often heard questions raised as to the cause of this apparent acceleration of time with age. At one such discussion many years ago, I suggested that the

reason might lie in that elapsed time as measured by the recollection of an individual seemed long or short according to what relationship it had to the individual's total time experience. For instance, at the age of eight, when our memory might go back over four years, a year would represent 25 per cent. of our total remembered time experience and hence seem like a very long time; at the age of twelve, memory may go back over eight years and one year would represent 12½ per cent. of total remembered time experience and could therefore appear to be only half as long as a year did at the age of eight. Similarly, at the age of fifteen, a year would be likely to represent only about 10 per cent. of remembered time and seem still shorter. At the age of 25 it would represent only about 5 per cent. of remembered time and hence seem only half as long as at the age of 15 and possibly one fifth as long as at the age of eight. At the age of 45 to 50, it would represent about 2½ per cent. of remembered time and at the age of 60 only 2 per cent. or less. Thus, as the years roll by, time would seem to be accelerating in speed. Off and on, since then, when such a matter would come up in conversation, I have offered this theory as a possible explanation of this experience, which I believe is quite general. Its reception by scientific friends has encouraged me finally to submit it for wider consideration.

F. W. NITARDY

SCIENTIFIC BOOKS

STRATIGRAPHY

Stratigraphy of the Eastern and Central United States. By CHARLES SCHUCHERT. xvii + 1,013 pp. 4 plates. 123 figs. 78 correlation charts. New York: John Wiley and Sons, Inc. 1943. \$15.00.

THIS encyclopedic work by the late Professor Charles Schuchert, of Yale University, is the second volume of three in the series bearing the general title, "Historical Geology of North America." The first volume, "Historical Geology of the Antillean-Caribbean Region, or the Lands Bordering the Gulf of Mexico and the Caribbean Sea," was published in 1935. The third volume, dealing with the stratigraphy of Greater Acadia, eastern, central and Arctic Canada, the Arctic Archipelago and Greenland, was in essentially complete typescript at the time of Professor Schuchert's death and will be published in due time.

Together, the three volumes are designed to document an "Atlas of American Paleogeography," which is to be issued as a part of volume three in the series. They are the product of almost forty years of painstaking examination and correlation of published geo-

logical studies supplemented by years of careful field work, particularly within the areas involved in the present volume.

Following a concise and valuable introductory chapter on "Stratigraphic and Time Terms and their Grouping," this volume is divided into eight parts, as follows:

"Part I. The New York Standard." This discussion includes the Paleozoic formations of the State except the "much deformed and much metamorphosed Cambro-Ordovician area of the Taconic Mountains of the Hudson-Champlain valleys." This region is considered to be "in reality . . . but the western margin of Greater Acadia" and will be described in volume III.

"Part II. The States Athwart the Appalachian Geosyncline." Following an introductory statement on the Appalachian geosyncline, the discussion includes the Paleozoic and, generally, the Lower Mesozoic sequences of Pennsylvania, New Jersey, Maryland, Virginia, West Virginia, eastern Tennessee, North and South Carolina, Georgia, Alabama and Mississippi.

"Part III. The Atlantic Coastal Plain." Complet-