pool and is kept in suspension by the constant agitation of the rising water.

The formation of one of the minerals associated with ore deposits under conditions that may be observed is of more than passing interest and a closer study is in progress.

J Claude Jones
Mackay School of Mines,
Reno, Nevada

CERIUM

If any mineral collection contains specimens of cerium ochre or yttrocerite from Bolton or any other Massachusetts locality, I should be obliged to the curator of such collection if he would inform me of the fact and give me briefly the history and description of the specimen.

B. K. Emerson
Amherst, Mass.

POPULARIZING SCIENCES

Thirty years ago the incorporated city of San Diego, California, possessed a population of perhaps two thousand. Clergymen, lawyers, teachers, business men, working men, were alike members of the Society of Natural History, and its president, a physician, kept up the interest in the monthly meetings. Everybody came, bringing a rock or a shell or a bird or some object curious or rare, contributing to the little museum, and arousing discussion.

To-day a six-story concrete building is being erected on a lot given to the society for a home, one floor to be used for its museum and library, the other floors forming part of a hotel. With a present population of near 50,000, annual meetings are held by the society, which are generally attended by barely enough members for the election of officers. The library and museum are at a standstill. The meteorological records, begun by the society's president, are continued by a fully equipped station of the weather bureau of the U. S. Department of Agriculture—of which we sometimes hear boastful but seldom instructive remarks.

A marine biological station has been established, under control of the state university, and given $50,000 for a building—but the public rarely hears of any results, except of the occasional visit of some noted scientist, as heralded in the dailies.

A floral society now exists, and a botanical garden is proposed, to which nurserymen will sometime be invited to contribute from their commercial stock, but no strictly botanical work is in progress in the community, and the only attempt in fifteen years met with failure for lack of appreciation.

The city contains three private collections of shells, one of insects, one of birds, one or two of minerals, two botanists without herbaria, one meteorologist (in government employ), and a few others interested inactively in some phase of science, or about one naturalist to each five thousand people, which I have seen stated to be about the average number in the United States.

I recently visited one of the nearby grand ocean beaches, where the sea still breaks in spray over the rocks, as it did thirty years ago—but the pools that formerly concealed a wealth of beautiful wonders in animal and plant life have been scraped clean of their former treasures. Now and then a crab scuttles to safety. A hook and line sometimes brings one of the finny tribe from the deep—but boys and girls can hunt in vain for the many nature treasures that formerly lined the shores of ocean and nearby bay.

Children may still reap a treasure in wild flowers in springtime—by taking generous car rides and then walking—but they will look in vain in our paved streets for the trap-door spider's nest that I formerly watched, or for the miniature plants like the lichens that formerly freely decorated barren spots of earth.

With the increased cost of living, with leaps and bounds in the growth of our commercial life, with a corner lot that cost $5,000 ten years ago now yielding an annual rental of $6,000 to its purchaser, can you expect to find nature study gaining ground!

Science as a study is becoming too complicated for a layman to take part in the active

fashion of former times, and it is becoming yearly more expensive and difficult for one in private life to keep abreast of the times even by specializing in a restricted field.

And opportunities for one to do good scientific work with any chance of earning expense money are exceeding rare—unless a salaried position is secured in advance.

The increased number of scientific and educational institutions apparently fail to give equal facilities with the past to the independent youthful student. And the increase in volume of literature renders it impossible for any one not connected with some wealthy institution, or with large private means, to keep posted on proposed changes in nomenclature —to say nothing of the new discoveries being made.

There is no decrease in the interest of the general public in scientific work, but the existing state of affairs is probably due chiefly to expansion and greatly increased activity, resulting in a mass of unassimilated data and museums bursting beyond the bounds set by their founders.

C. R. ORCUTT

SCIENTIFIC BOOKS

A Cyclopedia of American Medical Biography, Comprising the Lives of Eminent Deceased Physicians and Surgeons from 1610 to 1910. By HOWARD A. KELLY, M.D. Illustrated with Portraits. Two Volumes. Philadelphia and London, W. B. Saunders Company. 1912.

This work, handsome in typography and execution, and containing over twelve hundred biographies of prominent deceased American physicians, written, for the most part, in clean-cut style by various competent hands, marks a distinct advance upon any of its predecessors in the same kind. Of the earlier dictionaries of American medical biography, those of Thacher (1828) and of the eminent surgeon S. D. Gross (1861) have a definite historic value, but the separate lives are usually too long, Thacher's, in particular, being surcharged with that florid, stilted spirit which, as Dr. Holmes wittily said, "has chewed the juice out of all the superlatives in the language in Fourth of July orations"; while the generous-minded Gross, incapable of saying anything unkind about his colleagues, was perhaps lacking in a right critical sense for that very reason. On the other hand, the later works—those of Atkinson (1878), Stone (1894) and Watson (1896) —abound in shorter biographies, but are, in the main, only directories of contemporary names. Dr. Kelly's Cyclopedia strikes a happy balance between the extremes of florid encomium and mediocre choice, consisting, in the main, of compact sketches of the lives of medical men who have "done things," and is thus a genuine contribution to medical history. Some of these worthies have described new diseases, have introduced new drugs, new operations or therapeutic procedures, or have otherwise contributed to the elevation of American medicine as chemists, botanists, zoologists, bibliophiles, military and naval surgeons or leaders in hygienic and social movements. The editor's plan in getting up this work was two-fold: one group of his coworkers took up the physicians who were of local importance as practitioners; the other group took care of those who are of scientific importance in relation to the specialties which they helped to advance. Some of the former class might seem at first sight of little consequence, yet it will appear that as teachers, organizers of schools and hospitals, pioneers in hygiene, whether in Canada, Mississippi or the far west, they have their place in the development of earlier American medicine, even though unknown in Berlin, St. Petersburg or Vienna. Professor Horatio C. Wood, the well-known therapeutist, relates that he was once asked by an eminent European authority for a list of the professors of his specialty in America. Upon receiving some forty or fifty names, the astounded savant replied: "In God's name who are these people? I never heard of more than one or two of them."[1] Identical sensations are experienced in looking over the pages of Hirsch's "Biographisches Lexikon der Aerzte," that monument of

[1] *Therap. Gaz.*, Detroit, 1911, XXXV., 92.