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.

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## 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

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## POPULARIZING SCIENCES

Thrity 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 estab-

lished, 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