MEDICAL AND OTHER SCIENCES

AN INQUIRY OF WHAT IS SCIENCE WHEN IS IT TAUGHT SCIENTIFICALLY

By Dr. A. J. Goldforb

PROFESSOR OF BIOLOGY, COLLEGE OF THE CITY OF NEW YORK

Science to-day plays an intricate, permeating and dominant rôle in our lives. It is not my intention to weary you with evidence in support of this thesis, to list the names of the various agencies engaged in science or the numbers of men and women so engaged or the ever-increasing millions of dollars expended, or to name the institutions, industries, occupations, mental attitudes and thoughts profoundly modified by science. Nor will I cite the figures of the ever-increasing numbers of "students" or numbers of hours or increasing budgets for science teaching from kindergarten to university. Nor is it necessary to list the amazing increase in the number of journals of science or the bewildering increase in the number of published manuscripts, the despair of the librarian as well as of the scientist. There is to-day probably no field of human endeavor which is not affected by the advances in science. Truly may it be said that science plays a dominant rôle in our lives.

It might then be assumed that the meaning of science, its essential characteristics, the tests by which it may be distinguished from pseudoscience or non-science, the methods of teaching science scientifically would be widely and clearly understood. The startling fact, however, is that science is probably more widely not understood or misunderstood than in any previous period of history. Misunderstood not only by the armies of schooled (so-called educated) masses, but by the teachers and practitioners of science. The extent to which unscientific science is taught in our schools is amazing.

1 Address of the retiring vice-president and chairman of Section N—Medical Sciences, American Association for the Advancement of Science, Des Moines, Iowa, December, 1929.