

Twenty-Five Years of Research

General Science

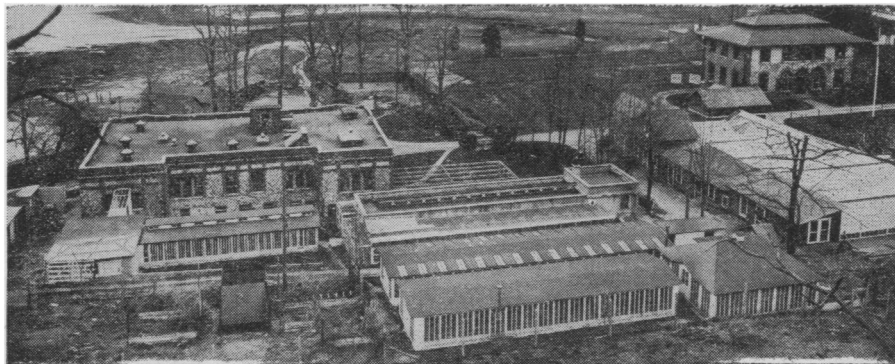
When the completion of twenty-five years of research by the Carnegie Institution of Washington was celebrated by an exhibition at Cold Spring Harbor, Long Island, N. Y., where the Department of Genetics carries on some of its operations, Dr. John C. Merriam, president of the institution, summarized the history and plans of the great research effort:

"Initiation of the activities now incorporated in the Carnegie Institution of Washington, dates from January, 1902, when Andrew Carnegie dedicated an endowment of ten million dollars to the purposes of research. The agency made responsible for this plan was described as the Carnegie Institution. The designation Carnegie Institution of Washington was first used in the re-incorporation of April, 1904.

"The founding of this institution was of peculiar significance as an influence turning attention toward advancement of knowledge, as contrasted with its restatement or transmission. The establishing of an agency for this specific purpose did not indicate that such activities were considered either more or less important than educational work. It presented rather a coordinate or supplementary program, which would naturally gear itself closely to that of institutions designed initially for the work of education, or for other special applications of knowledge....

"With intensive study of opportunities for constructive work it was apparent that, in addition to the discovery of genius, advance of knowledge depends in some measure upon the possibility of bringing into research a degree of cooperation comparable to that which has been characteristic of human relations in the general advance of civilization. Out of this idea arose a type of department not only making possible concentration of effort upon a major problem, but opening the way also to effective advance of genius working in relation to other coordinate interests.

"From the earlier trend of the Institution toward extreme, and sometimes isolated specialization, the more fully appreciated unity of knowledge in present-day thinking has brought again full recognition of the interdependence of all scientific groups. Cooperative researches, including the most widely separated departments



DEPARTMENT OF GENETICS of the Carnegie Institution of Washington, located at Cold Spring Harbor

and investigators, have developed a unity of interest and operation within the Institution. They have brought into close relationship many elements which seemed wide apart in objectives and geographic location. In general the community of interest developed is as intimate as that which may obtain within the spatially narrow limits of a campus. We see the geophysicist and astronomer make plans for joint spectroscopic study of gases flaming from the inner earth; we find physicist, chemist, and astronomer turning concentrated interest upon the crucible of the sunspot or the spectra of remote nebulae; in biology the physicist and geneticist unite to wrest the secrets from the chromosome; in another region the plant physiologist, the mathematical astronomer, the palaeobotanist, the archaeologist, and the meteorologist enter together upon study of varying patterns of a fossil tree, in order to learn the habits of the sun in radiation of its energy in a remote geological period.

"So we find the Institution of today utilizing all the major types of activity that have arisen in the quarter century experiment of its organization. There are still widely ranging special grants. Great departmental activities still represent concentrated effort in specific fields. The increasing mutual interest among research groups has not diminished initiative of the individual. With the passing of time the element of broader cooperation within the Institution has made more effective both the special concentration on particular projects and the development of that wider view so essential in long-continued research operations.

"As the Institution developed and the research production attained con-

siderable volume, it became clear that one of the greatest responsibilities relates to the making of results available for others. Whether this concern the investigator, the general student, or the intelligent citizen, there is increasing realization that if the treasures obtained are hidden in labyrinths bounded by unmeasured walls of printed pages, they may bring relatively small contribution to the community which makes possible the joy of this work.

"In activities concerned with the field of the unknown, it will always be difficult to devise arrangements by which information secured can be disseminated directly to those for whom they have largest use. But it is at least true that in the work of the Institution, each year sees real increase in effectiveness of statement, interpretation, and distribution of materials. This applies not only to means used in reaching other specialists of the same field. It concerns as well the extremely important opportunity for communicating the results to students of related subjects, as also to the engineer or applier of knowledge, and to those with interest in knowledge for its own sake."

Science News-Letter, June 8, 1929

As Cayley Saw It

Aviation

SIR GEORGE CAYLEY in *Nicholson's Journal*, 1854, as quoted by Department of Commerce Domestic Air News.

I feel perfectly confident . . . that this noble art will soon be brought home to man's general convenience, and that we shall be able to transport ourselves and families, and their goods and chattels, more securely by air than by water, and with a velocity of from 20 to 100 miles per hour.

Science News-Letter, June 8, 1929