

Administering Two Observatories

FROM THE DAY back in 1928 when the International Education Board granted to the California Institute of Technology \$6,000,000 of Rockefeller funds with which to build the Palomar observatory and its 200-inch telescope, Southern California was destined to become the center of the greatest cooperative astronomical undertaking in all history. With the Mt. Wilson Observatory and its 100-inch and other telescopes already located here, it was the intention of the donors as well as the California Institute and the Carnegie Institution of Washington, D. C., which built and has always operated the Mt. Wilson Observatory, that these two observatories were to become essentially one in operation. Thus the Palomar project began as a cooperative one and continues as such.

In the beginning and throughout the construction period there was not only the greatest of cooperation between the two institutions, but they in turn received the same kind of cooperation from engineers, industries, manufacturers and others who played a vital part in bringing the new observatory into being.

With the funds assured in 1928, the first step taken by Dr. George Ellery Hale, father of both the Mt. Wilson and Palomar Observatories and member of the California Institute Board of Trustees, was that of setting up an Observatory Council. It was this Council, composed of representatives from Caltech and the Carnegie Institution, that has guided the mammoth undertaking to its present stage.

Following agreements reached some time ago between the two institutions, a unified plan of operation involving cooperation between the Carnegie Institution and the California Institute has now been put into effect. This plan is one which calls for operation of the world's two greatest observatories by a single director aided by an Observatory Committee composed of representatives of the two institutions.

Director of the combined observatories is Dr. Ira S. Bowen who has been director of Mt. Wilson since 1946. Caltech's representatives on this committee are Dr. Max Mason who replaced Dr. Hale upon the latter's death in 1938 as head of the Observatory Council; Dr. H. P. Robertson who has long been a member of the Observatory Committee; and Professor E. C. Watson, chairman of the Caltech division of physics, astrophysics, mathematics, and electrical engineering.

Carnegie Institution members of the committee are Dr. Ira S. Bowen, director of both the observatories, who will serve ex officio as committee chairman; Dr. Walter S. Adams, director of Mt. Wilson from 1923 to 1946, who served on the Observatory Council from its inception; and Dr. Edwin P. Hubble, Mt. Wilson astronomer, who has long been a member of the Policy Committee.

To these men then falls the responsibility for guiding the operation of this great combine for astronomical research. As they take over as an operating group, they face new problems that come to the fore only as Palomar goes into operation. They will plan a comprehensive research program that will utilize to the best advantage the facilities of both observatories—Mt. Wilson with its 100-inch and 60-inch telescopes, its solar instruments and other facilities, and Palomar

with the new 200-inch telescope and the 18-inch and 48-inch Schmidt cameras.

To every astronomer and astrophysicist on the staffs of both institutions all of these facilities will be available.

The responsibility for financing of the two observatories will be shared by the two cooperating institutions with the Carnegie Institution retaining primary responsibility for Mt. Wilson operation and Caltech assuming Palomar expenses. An additional endowment of \$4,000,000 to supplement the \$1,000,000 already on hand is being sought by the Institute for this purpose. Until additional funds are available for enlarging the staff, present members of the Mt. Wilson and Caltech staffs will operate both observatories.

Max Mason



Max Mason is chairman of the Observatory Council and a member of the Institute's Board of Trustees. With a B. Litt. degree from the University of Wisconsin and Ph.D. from the University of Gottingen, Mason served as president of the University of Chicago from 1925-1928. He then became director of Natural Sciences for the Rockefeller Foundation and was Foundation president from 1929-1936.

During the last war Mason did work on water ballistics at Morris Dam, and was adviser on Army and Navy Air Corps research. Next year he will be in Claremont as Professor of Sciences at Claremont Men's College and Pomona College.

Vannevar Bush



Vannevar Bush, president of the Carnegie Institution of Washington, has combined administration and engineering successfully. Dr. Bush took his B.S. and M.S. degrees at Tufts, then continued electrical engineering studies at M.I.T. and Harvard, receiving the Eng.D. degree from the latter in 1916. Until joining the M.I.T. faculty in 1919, Bush worked for General Electric, the Navy, and taught at Tufts, during his graduate work and subsequently.

He remained at M.I.T. until 1938, serving as vice-president and dean of engineering during his last six years. In 1939 he was named president of the Carnegie Institution. During the war Dr. Bush served as director of the O.S.R.D.

Raymond B. Fosdick



Raymond B. Fosdick, president of the Rockefeller Foundation and the General Education Board, is a lawyer turned administrator. A graduate of Princeton ('05), and the New York Law School ('08), Fosdick served in several administrative positions for New York City until 1913. He continued administrative and advisory work for the Government, the Rockefeller Foundation, and the League of Nations for seven years, then practiced law with Curtis,

Fosdick, and Belknap until 1936. Fosdick, a member of the joint Army and Navy Committee on Welfare and Recreation, is holder of the DSM (U.S.), and a Commander of the Legion of Honor (France).