obituary

D. H. Menzel

PROFESSOR Donald Howard Menzel, past director of Harvard Observatory, who died in Boston, Mass. at the age of 75 years on December 14, 1976, was born on April 11, 1901 in Florence, Colorado, and educated at the Universities of Denver and Princeton where he received his doctorate in 1924. After several junior appointments of short duration he joined, in 1932, the staff of the Harvard University which remained his academic home until his retirement in 1971. Within his lifetime he took an active part in the transformation of the American scientific scene from its grass-roots stage to the "big science" which it has become—for better or worse—today.

When Menzel left Princeton in 1924, he was a young theoretical astrophysicist—of whom there were not many in the United States at that time—bent on applications of atomic physics to astrophysical situations, and his first interests centred on the physical processes in gaseous nebulae. In collaboration with several students of his who have since attained a renown of their own (and among whom L. H. Aller and J. G. Baker should particularly be mentioned) throughout the 1930s Menzel made important contributions to the subject which are still well-remembered today.

Another field to which Menzel then turned his professional attention, and to which he remained faithful for a major part of his life, was the Sun. The excitement which Bernard Lyot created in the late 1930s with his observations at Pic-du-Midi of the solar corona outside total eclipses, and his films of the activity of solar prominences, is still a vivid memory among the survivors of that heroic epoch. Menzel was the first to transplant these techniques across the Atlantic, and his efforts led to the foundation in 1939 of the High-Altitude Observatory in the Colorado Rockies near Climax, Colorado, at an altitude of over eleven thousand feet—first as an offshoot of Harvard, and later as an independent institution, which only recently closed its doors because of increasing pollution of its environment (caused by nearby mining activities).

Unlike Lyot, who was a genius at improvisation and preferred to perform experiments with his own hands (to the extent of carrying the crucial parts of his coronograph to the top of Pic-du-Midi on his back!), Menzel was a theoretician of managerial type, who worked through other people's hands. His field executive in the Climax operation was mainly Walter Orr Roberts, another student of Menzel's who retired only recently from the directorship of the National Centre for Atmospheric Research in Boulder, of which the High-Altitude Observatory eventually became a part.

Then war came (in which Menzel served his country in the uniform of a reserve naval officer) and with it changes in academic and scientific life which were fully reflected also in Menzel's subsequent career. Like many others, after 1945 Menzel never returned properly to resume the career of a scholar, and his activities veered increasingly towards those of an administrator and promoter of science. These latter abilities, which were at a premium during the years of post-war inflation, eventually led to Menzel's appointment in 1954 as Director of the (then) Harvard College Observatory—a position in which he succeeded Harlow Shapley and which he held for the next 12 years.

His illustrious predecessor possessed, among his many talents, an uncanny gift (perfected during his apprenticeship with G. E. Hale) to extract money for astronomy from rich Americans, with which to augment his observatory's current income. In postwar years this goal proved doubly desirable, but no longer attainable in the old ways; for fewer Carnegies were left in the world (income tax saw to that) and, instead, most available funds were to be found in the hands of the Federal Government in Washington. As a result, Shapley's successor had to seek additional support for his institution, no longer by waiting on the rich, but by lobbying in the "corridors of power" in Washington for grants or contracts from different branches of the Government through their many agencies.

This was an ominous turn of events for the further development of American science; for while rich Americans were (sometimes) willing to make gifts for a good cause with no strings attached and very little paperwork, the new dispensers of Government largesse knew exactly what they wanted and saw to it that they got it. As a result, the Harvard Observatory during Menzel's regime got often involved in work in new fields, such as geophysics, in which it had neither tradition nor sufficient expertise. At times, the Observatory seemed to differ only in location, but not in spirit, from the many research laboratories which sprang up during the "roaring sixties" along Route 128 around Boston as offshoots of Harvard or M.I.T. to serve the customer rather than science—at a time when men were heading for the Moon, and when nothing seemed impossible on Earth.

It is remarkable that, in this atmosphere and with so many administrative preoccupations, Menzel found also time to write or edit a considerable number of books (by himself, or in collaboration with others), ranging from collections of mathematical formulae to polemics about UFOs. Some, like his popular book on the Sun, enjoyed a well-earned popularity in their time, but none seems to have left any deeper mark on contemporary science.

Needless to say, a life so busy has its drawbacks for institutions as well as the individuals directing them, and Menzel was no exception. His health suffered a serious setback in 1965 from which he never fully recovered. He retired from directorship in 1966, and although he continued to teach students until 1971, as a scientist Menzel was essentially on the side-lines—occupying his mind with problems of such gravity as lunar nomenclature, and leaving it to his successors to pick up the more important pieces of the game. Death claimed him last December at the age of 75 years, after a prolonged illness; he was survived by his wife (née Florence Kreager), two daughters and six grandchildren.

Zdeněk Kopal