

## D. H. NAGEL.

By the death of D. H. Nagel, of Trinity College, Oxford, science has lost an advocate who did much to remove the prejudice keenly felt in Oxford thirty years ago, and the University has lost a teacher remarkable for the thoroughness, the understanding, and the sympathy which endeared him to many generations of undergraduates.

In the examination for the open Millard Scholarship in Natural Science in 1882 Nagel was the only candidate who gained distinction both in the science subjects and in the optional classical paper. Elected Millard scholar, he worked under the writer (then Millard lecturer at Trinity) in the newly equipped laboratory in Balliol, between which and Trinity a doorway had been opened in 1879—a novelty in inter-college communications which was guarded with some anxiety by the college deans on each side, and usually referred to as “the scientific frontier.”

As an undergraduate Nagel was distinguished by the width of his scientific interests; he was one of the few who attended professorial lectures outside their own subjects, and his enthusiasm may be said to have resuscitated and kept alive some of the courses in geology and mineralogy which did not form part of the usual honours schools. In addition to science he studied languages and gained a University exhibition in German.

Nagel took a first class in chemistry in 1886, and in the following Michaelmas term became demonstrator in the laboratory, and succeeded the writer as Millard lecturer in 1888.

The Balliol laboratory was soon extended into adjacent cellars to meet the needs of the two colleges, and in 1904 a considerable addition was made on the Trinity side of the “frontier,” when the two colleges undertook to give practical training in physical chemistry as part of a general scheme for honours men in the University. In planning and supervising this course Nagel’s knowledge and judgment found full scope.

At the opening of his Oxford career Nagel was one of the founders of the Junior Scientific Club, an institution which has been particularly successful in bringing together men engaged on different lines of scientific work, and of its members none were better equipped than Nagel by study and sympathy to understand and elucidate the relations of one branch of science to another. It was this faculty that gave him his unique position in Oxford when he settled down as fellow and tutor of his college.

It has been said of Nagel that he was too busy to do original work. This is partly true, but not the whole truth; on one side there were diffidence, some lack of the fighting spirit, and, perhaps, a fear lest the road he chose to pursue might lead nowhere; on the other, there were his keen delight in and critical appreciation of many lines of work, and the consciousness that his life would be more complete in unselfish devotion to

others than in seeking fame for himself. Such being his nature, he was inevitably drawn into administrative work, and perhaps he found himself most completely as chairman of the board of the Faculty of Natural Science. In this position his wide knowledge, sound judgment, and kindly tact were invaluable, and it was largely under his guidance that the Department of Forestry was successfully instituted in the University.

As a delegate for local examinations and for the inspection and examination of schools Nagel exerted great influence on the study of science in schools, and his judgment and experience of school work have been largely utilised by the Board of Education.

To old Trinity men Nagel had become almost an institution; his pupils scarcely regarded him as a “don,” for there was a wonderful *camaraderie* between them and their tutor. But they all came to him for help and counsel. His friends and colleagues did likewise, and we are all the poorer for his loss.

H. B. DIXON.

DR. ADOLF BERBERICH, who was on the staff of the *Berliner Jahrbuch* for thirty-five years, and for some time its director, died at Berlin last April after a long illness. Berberich was born in Baden in 1861; his family was for many years in serious financial difficulties; nevertheless, he secured a good education, first at the Gymnasium at Rastatt, then at Strassburg University, where he studied astronomy under Winnecke and Schur. He suffered from extreme short-sight, which made astronomical observing difficult, so he turned his energies to the computational side of the science, in which he showed such energy and skill that his name was already known as an orbit computer in 1884, in which year he obtained a post on the staff of the Rechen-Institut. Berberich was soon led to take a special interest in reducing the computation of orbits and ephemerides of the minor planets to an orderly system, his work being invaluable in identifying and following the immense number of new planets that were discovered by photography. He was on terms of intimate friendship with Prof. Max Wolf and Dr. Johann Palisa, who were indefatigable on the observational side; he frequently received the observed places of a new planet at breakfast, and sent back its orbit and ephemeris before lunch. He had a marvellous memory, enabling him to keep the elements of many planets in his head, thus greatly facilitating their identification. The task of keeping the immense array of planets under sufficient observation is a Herculean one, only to be accomplished by systematic division of labour. International arrangements had been made in this direction before the war, largely under the initiative of the Rechen-Institut. Unfortunately, unnecessary duplication of work now prevails again. Berberich was much esteemed by a wide circle of friends as an earnest, religious, and benevolent man. He married not long