d'Alechamps recognized eighteen classes of plants according to their medicinal properties. As knowledge increased, the classification of plants took its proper form in the hands of De Candolle and Linnaeus, and as a result of their work it has now reached its present high standard. It is still a matter of dispute as to the perfect system of classification and the best method of describing the plant. The idea, held until comparatively recently, that systematics consisted of a specialized and rather narrow branch of biology, empirical in character and without general application to other branches of science, is now recognized as out of date. Recent investigations of workers devoting their attention to morphology, ecology, anatomy, genetics, cytology and plant breeding can now be utilized correctly to stabilize the systematic position of a particular plant. In other words modern thought tends to the opinion that systematics must now be studied in relation to general biology.

As has already been mentioned, Dr. Biswas has covered a very wide field dealing with many different aspects. Possibly it would have been better if he had confined his discussions to a more limited field so as to bring home to the public his main point, which is the special need for more botanical research. No one can cavil at his plea for more development in this direction. India now has her destiny in her own hands. In the past most of the systematic work in botany was carried out by Europeans who have well and truly pointed the way, but now the "mantle of Elijah" has fallen on Dr. Biswas and his associates, and they are naturally anxious that progress should not be delayed.

The scope for systematic botany in India, as he has pointed out, is enormous. Many unknown or little-known plants await discovery, and many of them are doubtless of commercial, medicinal or agricultural importance. The part that systematic botany may well play in the economic side of development has been mentioned in the address, but might well have been reviewed even more fully as it plays an important part in deciding the actions of Governments. It has also proved its value during the present War when so many new products and so many substitutes have had to be found to cope with wartime shortages and demands. Let us hope that botany, and in particular systematics, will take a more leading part in the life of the Indian universities than apparently has been the case in the past, and also that private citizens may be found who will undertake work of this kind as a matter of choice. In Great Britain much work has been carried out by individuals in a private capacity. It has supplemented the organized work of the universities and the scientific departments of State, and has resulted in valuable accumulations of our knowledge of plants. This is a line of work that might with advantage be followed in India in the future.

papers by foreign journals denotes a quite definite recognition of a man's status by his colleagues abroad. But it is when members of learned societies in other countries have become so interested in a man's work that they desire to see him in person, and hear him for themselves, that it may most truly be said that he has achieved an international reputation in his subject.

Warrington Yorke had attained that degree of eminence. This is evident from the number of his lecture engagements abroad, of which the following may be mentioned. In the year 1933 he lectured on chemotherapy to the members of the Medical Academy in Düsseldorf; in 1934, at the International Malaria Congress in Rome, he read a paper entitled "A Contribution to the Biological Side of Chemotherapy"; in 1939, at the Third International Congress for Microbiology in New York, he gave an address on "Recent Work on the Chemotherapy of Protozoal Infections". During the same period he was also greatly in demand as a lecturer at home. He addressed the Medical Society for the Study of Venereal Disease on "Drug Resistance" in 1933, the Royal Society of Tropical Medicine and Hygiene on "Chemotherapy in Protozoal Infections" in the same year, and also in 1935; the Chemical Society of Liverpool on "Chemotherapy" in 1940, and the Biochemical Society of London on the "Diamidines" in 1941.

A perusal of the above titles might lead the reader to suppose that Yorke had always specialized in the application of drugs to the treatment of disease, and certainly the high standing which he enjoyed as an exponent of chemotherapy would justify this supposition. But in fact his enthusiasm for this subject was a comparatively late development. It originated when, in 1929, he discovered a method by which the pathogenic trypanosomes which affect man and animals could be kept alive outside the animal body. This discovery placed in his hands a ready means by which he could study the effects of drugs on some of those protozoal parasites which cause disease in man. The fact that parasites treated with doses of certain drugs, insufficient to kill them, might develop a remarkable resistance against the effects of further and larger doses of the same drugs, was of fundamental importance in the drug therapy of such diseases as sleeping sickness. Of even greater biological significance, and of no less practical importance, was the discovery that such drug resistance, once acquired by the parasite, might persist even while the parasite was passing through its curious development in the vector. For example, an arsenic-fast strain of trypanosome would still possess its acquired arsenic-fast character even after the trypanosomes had completed their cycle in the body of the tsetse fly. But the discovery of the technical device mentioned would never in itself have enabled a man to advance his subject in such a notable manner as Yorke succeeded in doing. It was on account of the great knowledge and wide experience of tropical diseases he possessed, which he had acquired during many foregoing years of arduous work, that he found himself in a position to take the fullest advantage of this discovery.

Warrington Yorke was the son of the late Rev. H. Lefroy Yorke, and was born at Lancaster in 1883. He attended University School, Southport, and Epworth College, Rhyl, and was a student at the University of Liverpool, where he took his medical degree in 1905. He went out to Nyasaland in 1907

OBITUARIES

Prof. Warrington Yorke, F.R.S.

As proof that any man of science enjoys fame extending beyond the limits of his own country, we have at our disposal one rather delicate test. The printed word has, of course, great value in this respect, and there is no doubt that publication of

to study blackwater fever and was there for two years. In 1911-12 he was again in Africa, this time on a sleeping sickness commission in Northern Rhodesia; in 1914 he was on a similar commission in West Africa. During 1914-29 he held the chair of parasitology at Liverpool, and he was then appointed to the chair of tropical medicine which he occupied until the time of his death on April 24. In 1925 he was awarded the Chalmers Memorial Gold Medal of the Royal Society of Tropical Medicine and Hygiene, and in 1932 he was elected a fellow of the Royal Society.

He married in 1916 Elizabeth Annie Greening and they had two children. He is survived by his wife, a son, now unfortunately a prisoner in Japanese hands, and a daughter. D. B. BLACKLOCK.

PROF. WARRINGTON YORKE knew before the end of last year that he had an inoperable cancer which would be fatal within a few months. Despite this knowledge, he undertook a mission to the United States on behalf of the Medical Research Council and returned with valuable information. Also he undertook to give the Croonian Lecture at the Royal Society on July 15 in the hope that he would live long enough to accomplish it. The title of the Lecture was to be: "Recent Developments in Chemotherapy with Special Reference to Tropical Medicine".

Personally I class his untimely death in the same category as deaths of men 'killed in action', and I recall to myself the brave words written by Robert Louis Stevenson in "An Apology for Idlers"—I believe they were:

"Even if the doctor does not give you a year, even if he hesitates about a month, make one brave push and see what can be accomplished in a week."

S. P. JAMES.

Mr. W. Trevor Watson, K.C.

WILLIAM TREVOR WATSON, who died in his fifty-seventh year on March 24, graduated in the honour school of physics at Oxford in 1909, holding a senior mathematical postmastership at Merton College. In 1911 he was called to the Bar by Gray's Inn, taking a first in the final examinations, and all the prizes that were to be had. He became a pupil and, later, 'devil' of J. Hunter Gray, who at that time was the busiest junior specializing in patent law. During the War of 1914-18 his scientific capabilities were quickly realized and he was transferred from the Worcester Regiment to the R.F.C., where he played a large part in carrying the infant art of wireless telephony to the operational stage between aircraft and ground. A crash suffered in this work undoubtedly had some ill effect upon his health in later life, for he was never physically robust.

On his return to chambers, Watson at once found himself very busy, as he appeared day by day to represent the Treasury in claims before the Royal Commission on Awards to Inventors; in addition, his services were in constant demand in patent litigation in the High Court and in opposition proceedings before the Comptroller of Patents; moreover, he made a reputation as an expert in trade mark and copyright law. He took silk in 1930.

The characteristics which made for his great

success were a clear and exceedingly alert mind, keen judgment of the relevant, the gift of explaining difficult scientific matters to those who knew less than he did, and often nothing, while avoiding an air of pedagogy, together with a dignified courtesy to Court and to opponents. He had also a very retentive and accurate memory and the Court accepted without question any statement of the law which he propounded, knowing that he could give chapter and verse without hesitation.

A brief outline only can be given of the scientific detail Watson had to master in the cases he fought, and even this must be incomplete, since no reference can be made to the many problems brought in consultation to his chambers and solved without recourse to litigation. Most of the important inventions of the last twenty years were brought to him for advice at some stage or other. It must be remembered that the understanding of a particular invention is only a minor part of counsel's scientific equipment; he must appreciate so much of the 'common general knowledge' of those skilled in the particular industry that he can evaluate the inventive step which has been made.

The breadth of his knowledge is, perhaps, exemplified by the many inventions brought to the Royal Commission on Awards to Inventors; for example, various radio problems, aeroplanes, mustard gas manufacture, torpedos, paravanes, machine-gun-propeller synchronizing, bomb sights, mortars, grenades, tanks, gyroscopic controls of various kinds. Of his patent cases, mention may be made of the electric lamp cases, the leading-in wire, the coiled-coil filament and the internally frosted globe patents; of the wireless cases, the grid bias and the pentode patents; of the sound-film cases. In the chemical industry, he was concerned in all the rayon litigation, in the hexyl resorcinol case, in the azo-dyestuff case (which established that there may be invention in 'selecting' from a known group for an exceptionally useful purpose) and in the only biochemical case which has come before the Court, the fermentation process for the manufacture of acetone. He also helped to decide whether calcium carbide is legally a synthetic organic chemical or not. Whatever the scientific subject, experts who were cross-examined by him sighed with relief when the battle of wits was concluded and he sat down.

Watson was also a specialist in trade mark and copyright law and was a member of the commission on the advice of which the present trade mark law is founded—though in several respects he disagreed profoundly with the drafting of the present Act.

He remained at all times modest, a delightful companion and interesting talker on many subjects. All who knew him at all well referred to him affectionately as 'Trevor', so that clients have even been known to think he was Mr. Trevor. In later years he took to golf with that thoroughness and competence which he gave to all he undertook. The War made it necessary for him to leave his country house adjoining the North Foreland links, and lack of exercise, the destruction of his chambers in the Temple and the grievous strain of heavy mental work under war conditions impaired his health to the detriment of his accustomed forensic power. It was a great joy to his many friends that in his last case in the House of Lords he recovered all his brilliance, to which the Lord Chancellor, in giving his judgment delivered after Watson's death, made a generous reference. G. S. W. MARLOW.