

History, in fact, has repeated itself many times in such matters. When Napoleon had freed Piedmont from the Austrians, he invited to Pavia in 1805, at the advice of a scholarly nobleman of Milan, a number of eminent professors, of whom Alessandro Volta, a founder of electrical science, was the greatest; but in doing so he only did for Pavia in his day what the Emperor Lothair, whose throne and title Napoleon claimed, had done by his famous proclamation, or *Capitulare* as he called it, in the year 825; for in that year Lothair established the well-known Irish monk Dungall in Pavia and bade all the chief cities of the western half of North Italy, including Genoa, Turin, and Milan, to send their students and teachers to Pavia. The curious may read of Dungall and his far-seeing letter in answer to Charlemagne's question about certain eclipses of the sun, in the "Dictionary of National Biography"; and that Pavia has worthily maintained the tradition of liberal and progressive study which he there set up, cannot be questioned.

The debt which Pavia owed to Ireland, she repaid to England in the person of the great divine and lawyer Lanfranc, who, beginning as a student and teacher of Pavia, became head of an abbacy in Normandy and was chosen by the Conqueror as his chief adviser in England, and made the first Archbishop of Canterbury under Norman rule. His work there reflected, we learn, the conspicuous service which Pavia itself rendered to European progress, in combining and harmonising the established principles of Roman and Canon Law with the comparatively barbarous but deeply rooted customs of northern Europe; a fusion of which the Feudal system had been itself a product. The central ceremony of this "eleventh centenary" of the University of Pavia was the unveiling by the King of Italy of a monument to the memory of Lanfranc in one of the courts of the University. This is a seated bronze figure of a robust and shrewd-looking but also beautiful damsel holding a scroll labelled *LEX*, personifying Lanfranc's contribution to the civilisation of Europe.

This spirit of conciliation and harmony between friends, neutrals, and even former enemies, from without and from within, was conspicuous in the recent festival. Germany, Hungary, and Turkey, no less than Switzerland, Spain, Holland, and Scandinavia, sent representa-

tives to join those from the allied countries, Czecho-Slovakia, Poland, France, Belgium, Esthonia, the United States, and a particularly numerous contingent from the British Empire (among them Sir Martin Conway, Prof. Edmund Gardner, Prof. Alfred Parr, and Prof. Moffat of Madras). But from the Italian point of view the harmony of different sections of Italian feeling was new and most remarkable. A new university banner presented by ladies of the town was blessed by an archbishop and a cardinal who conducted a special Mass; a proceeding which could scarcely have happened in any Italian university since Napoleon's time. This same cardinal is a rugged and noteworthy personality, Archbishop Maffi of Pisa, whose general support of the present government has been varied by his courageous and dignified protests against ill deeds like the murder of Signor Matteotti, for which it is generally assumed that some section of the Fascisti was responsible. Yet he appears on the same platform with the Minister of Education who bore Mussolini's express good wishes, and expressed a lively interest in the record of the University, the work of jurists like Buonfiglio and Bagelard, Latinists like Lorenzo Valla, and men of science from Volta to the venerable physiologist, the Nobel prizeman, Prof. Golgi, who was present at the ceremony.

The admirable address of the Rector was a model of precision and enthusiasm, tracing in the work of Pavia the combination of "Scienza" and "l' Idealità," scientific method and humane ideals. Only one detail must be here added, significant of the many-sided activity of the University. Practically all the wine of the district, wine of many qualities and colours, but all (by common consent of the visitors) excellent in their kind, is produced by a co-operative union of some 3000 cultivators; and the chairman of the union is the professor of botany. He was also until recently an anti-Fascist member of the Italian parliament; and some of his supporters expressed to the present writer a pleased surprise that he was allowed to continue unmolested both his professorial and his agricultural work. It may be foretold with some confidence that the immediate future of Italy has many such pleasant surprises in store; for the spirit of the now renescent Italy is precisely that which has governed and inspired the celebrations at Pavia.

Obituary.

SIR WILLIAM FLETCHER BARRETT, F.R.S.

THE death of Sir William Barrett, F.R.S., on May 26, at eighty-one years of age, removes one who dates back to a period in physics long antecedent to all the recent advances—the period of Wheatstone and Balfour Stewart and Tyndall. He never pretended to follow the recondite mathematical and dynamical investigations of last century, typified by the great names of Stokes and Thomson and Tait. The original discoveries in physics which he himself made concerned such things as—sensitive flames, which he first observed while working in the 'sixties on sound in Tyndall's laboratory at the Royal Institution; some alloys of iron, especially a useful one called stalloy, which he claimed to have announced in 1899; and the odd behaviour of iron at or near the magnetic

critical point. In this last phenomenon, a hot iron wire under longitudinal strain not only suddenly expands but also rises in temperature, giving a momentary glow which he called calorescence, since he regarded it as an example of a rise in the refrangibility of emitted radiation—presumably by molecular or atomic rearrangement—in contrast to the lowering of refrangibility (or what we now call frequency) so well elaborated by Sir G. G. Stokes under the name fluorescence.

As a popular lecturer and teacher in the experimental phenomena of physics Barrett was very successful, and he must have often contributed welcome information at meetings of the Royal Dublin Society.

His first and only academic chair was at the Royal College of Science in St. Stephen's Square, Dublin, which he assumed in 1873 and vacated in 1910, during

which period it may be safely said that the College which he faithfully and effectively served underwent several threatenings, if not vicissitudes, thereby causing him anxiety which he did not hesitate to express.

The main interest of Barrett's middle and later life lay in the exploration of obscure human faculties, such as were not receiving attention from the majority of scientific men and were often cold-shouldered as mere surviving superstitions. He felt that in this unlikely milieu there lay hidden a grain of truth, which he set himself pertinaciously to find and enthusiastically to exhibit to others. He was in frequent touch with such other explorers in unpopular regions as Alfred Russel Wallace and William Crookes, and he never doubted that between them they had unearthed some genuine phenomena, which, though sometimes bizarre and apparently incredible, would ultimately be accepted by science, and might, he hoped, prove of moment to mankind. It was in this faith that he worked, and stimulated work in others. How far he was justified, posterity will know better than we. It must be made quite clear that many men of science deny all these asserted phenomena, and apparently do not consider them worthy of serious examination. That care and caution is necessary in such a region is well known, but even now there are several who have little or no doubt that a faculty of communion or communication between individuals exists which is independent of the recognised organs of sense; and of this faculty Barrett considered that he might hereafter be regarded as perhaps the chief discoverer. So far as I know he had no theory on the subject; he was content with observing and recording the facts, observed under what he considered adequate precautions against deception. He read a paper to the British Association at Glasgow in 1876 on what was later called telepathy, but the feeling of improbability about the reality of such a faculty was so strong that its publication was suppressed. He did, however, get a letter published in *NATURE* for July 1881, shortly before the foundation of the Society for Psychical Research.

Another inquiry, which he carried out in Dublin, related to the asserted Reichenbach phenomena, *e.g.* the sensitiveness of certain people to magnets. These experiments, though carefully conducted, led to no conclusive result, when all opportunity for suggestion and all normal clues were eliminated.

On yet another faculty he became quite an authority, namely, the faculty for finding water or other things by means of an unconscious physiological reaction, demonstrated usually by the twisting of a rod held in the hand. The possession of such a faculty can be pretended or imagined, but Barrett came to the definite conclusion that in certain persons it was real, and could be utilised.

Finally, Barrett enlisted the interest of many distinguished scholars, both in the British Isles and in the United States, in the search for unrecognised but traditional human faculties; and he had a stimulating hand in founding the Society for Psychical Research in London, with a branch in Dublin; and also a somewhat similar society in America, the latter being at one time presided over, no doubt in a reasonably incredulous spirit, by no less a person than Simon Newcomb; who probably held the opinion that

everything might legitimately be explored, and if necessary condemned, in the interests of truth.

On the personal side it must be admitted that some people found Barrett's quick eager manner unrestful, but every one recognised the transparent honesty and simplicity of his character, and could not help admiring the keenness with which, right up to the end, he was ready to undertake any labour to get phenomena properly observed and recorded. Correspondents from all over the world must have sent him tales of extraordinary happenings, and a winnowed selection of these he contributed from time to time to the Proceedings of his special Society. With its slow and cautious methods he was often impatient, urging greater enterprise and activity, but he accepted its presidency for a year, and continued on its Council to the end.

Barrett's domestic life was of the simplest. Through most of the years his sister kept house for him, until 1916, when, to his extreme happiness and content, he married the distinguished surgeon and gynæcologist Mrs. Florence Willey, M.D. It was at her house that he died, through heart failure, in full possession of his faculties except his sense of hearing. He loved life, but, as his books show, he regarded the continuance of existence, in some still personal form, as almost if not finally demonstrated. Death did not seem to him an interrupter of mental continuity.

So has passed over one who served truth to the utmost of his ability, whose researches brought him into personal contact with all sorts and conditions of men, one who was not deterred by ridicule or opprobrium from following such clues as he could find; yes, and if his chief interest is ever universally recognised as well founded, one who will be hailed and respected by posterity as a pioneer. OLIVER LODGE.

FATHER A. L. CORTIE, S.J.

FATHER ALOYSIUS LAURENCE CORTIE, S.J., who died on May 16, was born in London on April 22, 1859. He had thus attained the age of sixty-six years. His cheery genial ways left the impression of his being a much younger man, and he will be mourned by a wide circle of friends who enjoyed his companionship in his merry moods and valued it in his more serious moments. He was educated at Stonyhurst, and having joined the Society of Jesus at Roehampton in 1878, he was ordained priest in 1892. For thirty years, with but little intermission, he was on the staff of Stonyhurst College teaching physics and mathematics, and he was also director of music for nineteen years. He was a very popular teacher, and the hold which he gained on the affection of the boys was maintained throughout his life, for he continued by correspondence in touch with his old pupils in all parts of the world. No Stonyhurst gathering was considered complete without Father Cortie. His songs and his quaint stories were equally welcome. His quick sense of humour enabled him to pick out many a local episode, which he would recount in the Lancashire dialect to the great amusement of his hearers. He was in great demand as a popular lecturer on astronomical subjects, and as his humorous touches seemed to give almost as much amusement to himself as to his audience, his call on their interest and sympathy was irresistible and met with immediate response.