The 700th Anniversary of the University of Padua.

By Prof. E. W. SCRIPTURE.

THE university of Padua was founded by professors who migrated from Bologna in 1222 owing to oppressive regulations. It very rapidly became great and famous. For nearly 500 years it was one of the leading universities of Europe.

The development of English culture and religion was strongly influenced by the earlier English students of Padua, comprising Linacre, Latimer, Tunstall, and Pace. English science received a splendid glory by Harvey's discovery of the circulation of the blood, in the anatomical theatre of Padua, and it was the inspiration of great thinkers, like his professors Galileo, Acquapendente and Casserio, that stimulated his active mind to a new thought. Evelyn, one of the founders of the Royal Society, was a student here; at his house many of the influential figures of England appeared. Sherard, who founded the chair of botany at Oxford, laid out the Oxford Botanical Gardens on the model of those of Padua, the oldest in Europe. Dr. Caius, the founder of Caius College, was also a student at Padua.

Viewed as a national university Padua is a brilliant success. Its medical school is excellently equipped. Its faculty includes Luccatelo (medicine), Bassini and Donati (surgery), Belmondo (psychiatry), and Casagrande (hygiene). It has a special school of hydraulics, a subject of such importance that Italy has established a special Ministry for it. Its equipment in geology and palæontology is in some departments unequalled anywhere else. In law it is almost, perhaps quite, the first place in Italy. In history the name of Manfroni at once comes to mind. When it is considered that all the students are post-graduate and professional (no undergraduate), Padua ranks certainly with the best universities of England and America.

The glory of Padua lies in the great men who once taught here, and in the splendid students it produced. It is worth while to inquire concerning some of the causes that produced not only its past greatness, but also that of Paris and Prag.

In the first place, the students of Europe were free to attend any university and to migrate from one university to another. Of course they went wherever they were attracted. At Padua the vast number—at one time 6000—was divided into partially self-ruling divisions according to nations. Padua, like Paris, Prag, Oxford, or Leyden, was a world-university.

The success of a university in attracting students depended on the quality of learning to be found. The best of professors were sought out by Padua; its roll of teachers included men of the rank of Galileo and Vesalius. The faculty, like the body of students, was international. The great mathematician Belmondi was followed in succession by Peurbach, Müller (Regiomontanus), and Paul of Middelburg.

To-day Padua is a purely Italian university. The 3220 students are all Italians, except for 47 foreigners (of whom 9 are Austrians). The Dutch universities ceased to be more than national affairs because Latin ceased to be the international language of learning, and no one would learn Dutch in order to study in Holland. This cannot be the case with Padua, because Italian, like German or French, is a language worth learning. That students will learn a language in order to study in a foreign country is shown by the great numbers of foreigners who studied in Germany before the war. The cause must be sought elsewhere.

Careful inquiry fails to find a single professor of the highest international fame now here, whatever the national reputation may be. This is one of the reasons for the change in Padua.

Students may attend a university on account of itself, regardless of the professors. This is the main force for most universities to-day except in Germany. A man goes to Oxford or Harvard because it is Oxford or Harvard, and not because there may be a famous man in his particular line. This determines successfully the large body of undergraduates as in English universities, but there is no undergraduate instruction at Padua. The principle becomes unfavourable when applied to a *graduate* university, as seen most strikingly in Padua. Its students, mainly from the north of Italy, attend in order to get their degrees, and afterwards their places and appointments. They become good lawyers, doctors, engineers, etc., but they do not receive the training in research and the inspiration toward originality of the olden days. The reflex on the university as an institution of research is unfavourable; Padua to-day does not hold the highest rank as one of the producers of modern thought.

The history of Padua shows clearly the faults of a system that attempts to build on any other principles than those of free migration of students and the appointment of distinguished professors of creative minds.

This condition may be illustrated by an impression received in London. Although Padua has been specially famous for its medical teaching—Vesalius, Fallopius, Morgagni—and its distinguished student Harvey, it was impossible to find in any medical library in London an account of Padua, except Sir George Newman's interesting address to the students of St. Bartholomew's. This lack of interest corresponds to—or produces?—a reciprocal feeling on the part of the Italians. Most noticeable is the fact that most of the students can speak German, while very few know anything of English.

A most striking feature of the celebration was the large attendance of foreign delegates. The British delegation comprised Sir Archibald Garrod (Oxford) the chairman, Lord Dawson of Penn (Royal College of Physicians), Sir Humphrey Rolleston (Royal College of Surgeons), the Astronomer Royal, Sir Frank Dyson, (Royal Society), Prof. Conway (British Academy), Prof. Okey (Cambridge), Prof. Caton (Liverpool), Mr. D. G. Hogarth (London), Prof. H. H. Turner (London), Sir William Smith (London), Mr. Chaston Chapman (London), G. M. Trevelyan (London), Father Cortie (Stonyhurst), Dr. Seton (London), Dr. Scripture (Philological Society), Prof. Burnet (St. Andrews), Dr. Baird (Glasgow), Prof. Barger and Dr. H. R. F. Brown (Edinburgh), Sir George Smith, Prof.

MacWilliam and Prof. A. C. Baird (Aberdeen), Prof. Martin (Glasgow), Prof. Fitzgerald (Belfast), Prof. O'Rahilly and Prof. J. F. D'Alton (Cork), Sir Robert Woods and Mr. E. H. Alton (Dublin).

The Canadian delegation included Prof. Bieler (Montreal), Sir George Parkin (Fredericton), Mr. R. C. Archibald (Sackville), Dr. O. Klotz and Mr. E. Deville (Toronto), Dr. H. Ami (Ottawa). The university of Sydney sent Mr. C. MacLaurin. India was represented by Prof. Chatterji and Prof. Mallik of Calcutta.

At the solemn ceremony on May 15 the delegates were classified in groups. England, Scotland, Wales, Ireland, Canada, and Australia formed one group. France, Spain, and the South American States formed another group. Strange new States also appeared. One group comprised Esthonia, Latvia, Finland, Poland, etc. Germany had its independent place, while the countries of Asia were ably represented by Prof. Chatterji of Calcutta, who made a charming speech in English and Sanskrit.

Current Topics and Events.

FIVE fellows of the Royal Society are included in the list of honours conferred on the occasion of the King's birthday, namely, Dr. H. K. Anderson, master of Gonville and Caius College, Cambridge, Prof. W. M. Bayliss, professor of general physiology, University College, London, Prof. F. W. Keeble, Sherardian professor of botany, University of Oxford, Dr. T. R. Lyle, formerly professor of natural philosophy in the University of Melbourne, and Dr. E. J. Russell, director of the Rothamsted Experimental Station. Among other names we notice those of Sir B. G. A. Moynihan, professor of clinical surgery, University of Leeds, who has been made a baronet, Dr. J. Macpherson, professor of psychiatry, University of Sydney, and Dr. W. Thomson, lately registrar of the University of South Africa, who have received the honour of knighthood, and Mr. A. E. Kitson, director of Geological Survey, Gold Coast Colony, who has been made a Companion of the Order of St. Michael and St. George (C.M.G.).

REPORTS have appeared in the daily press of plagues of caterpillars defoliating oaks, particularly on the borders of Surrey and Hampshire. They have also been observed in the wooded country near St. Albans. Large numbers of the caterpillars, suspended by silken threads from the branches of the oaks, are a common feature of such infestations, and are often an annoyance to people walking along woodland roads. The insect primarily concerned is *Tortrix viridana*: the moth of this species is a small insect with pea-green fore-wings and smoky brownish hind-wings. During the end of this month it will appear in myriads throughout the countryside wherever the caterpillars have been abundant. Fortunately there is only one generation in the year and, once the moths appear, there will be no recurrence of the caterpillars during the same season, and the trees commence to shoot out fresh leaves. The effect of the defoliation naturally checks the growth of the trees to some extent for the time being, but is rarely more serious, and infestations of this kind are very common during hot dry weather.

WE notice with deep regret the announcement that Dr. W. H. R. Rivers, distinguished by his brilliant work in anthropology and psychology, died on June 4, at fifty-eight years of age.

IT is announced that Mr. C. T. Heycock, Goldsmiths' Reader in metallurgy at the University of Cambridge, has been appointed Prime Warden of the Goldsmiths' Company.

THE centenary of the death of René Just Haüy, "the father of crystallography," occurred on June 3. Haüy, who was of humble parentage, was born at Saint-Just-en-Chaussée, Oise, February 28, 1743. After great privations and extraordinary exertions, at the age of twenty-one he became a teacher in the College of Navarre in Paris. Here he began the study of botany. An accident, however, with a crystal of calcareous spar attracted him to the examination of minerals and led him to the discovery of the law of crystallisation. The happy issue of this was that he gained the favourable opinion of Daubenton and Laplace, and in 1783 was elected a member of the Academy of Sciences. Though as an ecclesiast he stood in some danger at the Revolution and was indeed committed to prison, his numerous friendships and the esteem in which he was held secured him from serious trouble. He afterwards became one of the first members of the National Institute, was secretary to the commission on weights and measures, lectured at the Ecole Normale, and held a chair at the Jardin des Plantes. Edward Stanley, the well-known Bishop of Norwich, when visiting the Jardin des Plantes in 1814, wrote: "Here as everywhere else the utmost liberality is shown to all, but to Englishmen particularly, your country is your passport. . . . Haüy, you know, is the first mineralogist in Europe and I never looked upon a more interesting being. When he entered the lecture room everyone rose out of respect, and well they might. He is 80 years of age apparently, with a most heavenly patriarchal countenance and silver hair . . . he looked like a man picked out of a crystal, and when he dies he ought to be reincarnated and placed in his own museum." Haüy's brother, Valentin, was the inventor of raised type for the blind, and in 1903 a monument to both of them was unveiled at Saint-Just. There is also a monument to the Abbé Haüy in Paris.

IN his presidential address at the anniversary meeting of the Royal Geographical Society on May 29, Sir F. Younghusband, the retiring president, dwelt briefly on the need for more intensive geographical examination of the homeland. The spade-work of this form of exploration has of course been completed in topographical and geological surveys, faunas and floras and so forth, but the true geographical description is still far from complete. The