sorbed more than half of my time since I became interested in geology—the French edition of Eduard Suess's masterpiece: "The Face of the Earth"—I enjoyed the efficient help of twelve among the most active of French geologists and geographers.

Finally, when I was obliged to act alone, may I state that I have always had before my eyes the desire to do full justice to my predecessors in the very field where I was working? The perhaps too bulky volume on the "Structure of the Jura Mountains," which has just been published by the Geological Survey of France, and which is only the introduction to a monograph of a more original character, is, in fact, a continuous appeal to the rights of writers of past generations to get our full esteem for what they achieved, often under very unfavorable circumstances.

I fear I have expanded perhaps too much on my own psychology; and, still, I feel compelled to add something more: the great inspiration I have found, since more than forty years, in perusing the magnificent documents with which America has enriched, during that time, geological science in all its various branches. Never shall I forget the deep impression which some of your great men made upon my youthful mind when I first met them in Paris in the year 1878, on the occasion of the inaugural meeting of the International Congress of Geologists. Again, in 1891, at the fifth session of the same body, what a joy it was for me to greet so many eminent teachers and to exchange ideas with such men as James Hall, Dana, Emmons, Gilbert, King, Lesley, Newberry, Powell, Shaler, Whitney, the two Williamses and many others who, alas, have now passed away, but who have still left to us here the benefit of their wide learning!

To conclude, let me tell you how proud I feel to have received as an acknowledgement of my life-work this beautiful medal; let me thank you for your generosity which I am sure, will be felt very deeply by my colleagues in the French Academy and by French scientists at large; and—last, but not least—let me express my very cordial gratitude and affection to Dr. Clarke for his kind and sympathetic appreciation of my humble efforts.

SCIENTIFIC EVENTS

EDWARD WILLIAMS MORLEY

THE following resolutions were passed at the New Haven meeting of the American Chemical Society in memory of Edward Williams Morley, an honorary member of the society:

The American Chemical Society in this memorial wishes to express its appreciation of the great loss it has sustained by the death of Professor Edward W. Morley, who was to have been the honorary chairman of this meeting.

Born in 1838, graduated from Williams College in 1860, he entered the Congregational ministry and was called from it to be professor of natural history and chemistry in Western Reserve College in 1869. He was actively connected with this institution for 37 years and since his retirement has made his home near Hartford, Connecticut, in which city he died on February 24 of this year, shortly after his eighty-fifth birthday.

Although Western Reserve College was but little known at that time, Professor Morley soon brought it into prominence and raised himself by his own genius to be one of the foremost scientists of his time. He was as much a physicist as a chemist, and most of his published papers, curiously enough, lie in the domain of physics, although he allied himself primarily with the chemists.

With remarkable characteristics for precision and thoroughness, he possessed also an unusually clear and resourceful mind and a wonderful mechanical skill, so that he was not only a great investigator, but also an inventor of many new devices for fine and exact measurement. Among these were a precision eudiometer for the rapid determination of oxygen, two types of differential manometers, by which differences of gaseous pressure can be measured to the 1/10000 mm. of mercury and many mechanical features of a minor sort used in the manipulation of gases. Together with Professor Michelson he developed the interferometer, an apparatus for measuring lengths in terms of the wave-length of light, and employed it in measuring the expansion of metals, the relative motion of the earth and the ether, and the velocity of light in a magnetic field.

The work, however, for which he is best known among chemists is that on the densities of oxygen and hydrogen and the ratio in which they combine, published as Smithsonian Contribution to Knowledge, No. 980. This research, finished in 1895 and on which he was engaged for eleven

years, brought him world-wide recognition as a scientist of the first rank.

Professor Morley was of a very modest and retiring nature, never pushing himself forward, and for this reason he was not known intimately to many. But those few who enjoyed the privilege of knowing him well were impressed by the sweetness of his nature, the broadness of his culture and knowledge, the nobleness of his spirit and the wisdom of his counsel.

By making him its president in 1899 and electing him to honorary membership in 1900 this society honored not so much him as itself.

REGISTRATION IN GERMAN UNIVERSITIES

FOREIGN exchanges publish particulars as to the number of students in German universities. The total number had increased to 60,000 at the outbreak of war. At the end of the war the number was 90,000, and in the summer of 1921 it was 87,147. At present it is 82,668. The Technischen Hochschulen had 12,000 students before the war, in 1920 they had 22,976, and last winter 25,556. The division into faculties has undergone changes; the warnings of overcrowding in some faculties have had some effect, but the stream of students has been diverted into other faculties, which are also now hopelessly overcrowded. The following comparison is given with pre-war conditions:

Faculty	1914	1922
Evangelical theology	4,370	2,974
Catholic theology	2,050	1,795
Legal science	9,840	16,834
Medicine	16,048	15,110
Dentistry	976	4,167
Philosophy and philology	14,400	12,823
Mathematics and natural sciences	8,132	9,257
Pharmacy	1,100	1,112
National economy	3,836	17,714
Forestry	.....	490

The following refer to technical students:

Faculty	1914	1922
Architecture	2,193	1,811
Constructional engineering	2,767	3,311
Mechanical engineering	3,118	8,306
Electrotechnics	1,307	5,129
Mathematics and natural sciences	1,544	3,735
Mining and metallurgy	576	1,234
Naval engineering	234	365
General	493	1,483

It is stated that the present day student does not tend to the same extent as before the war to study in the large cities.

THE KENTUCKY ACADEMY OF SCIENCE

DR. WILLARD ROUSE JILLSON, director and state geologist of the Kentucky Geological Survey, was elected president of the Kentucky Academy of Science at its tenth annual meeting, which was held at the University of Kentucky on May 12. Dr. Austin R. Middleton, of the University of Louisville, was elected vice-president; Dr. Alfred M. Peter, of the Kentucky Agricultural Experiment Station, secretary, and Professor W. S. Anderson, of the University of Kentucky, treasurer.

The academy voted the authority to its president to make arrangements for the publication of its transactions, which up to the present have never been printed. It also voted to sustain the recent resolutions of the council of the American Association for the Advancement of Science with respect to the facts of organic evolution and the freedom of teaching it and science generally in the public schools. Resolutions covering these points were drafted and approved, and have been forwarded to the secretary of the American Association for the Advancement of Science.

Dr. Jillson outlined a proposed symposium on "Evolution" to be presented during the year as an educational feature under the auspices of the Kentucky Academy of Science in the city of Louisville, and this proposal was heartily endorsed by a unanimous vote. Preparations are now under way for this special meeting, which will be open to the public, and will be held in Louisville probably during the spring of 1924. The regular meeting of the Kentucky Academy of Science for the presentation of scientific papers and the transaction of business will be held at about the usual time in Lexington.

APPOINTMENTS AT THE BUREAU OF MINES

DURING the absence in Europe of George S. Rice, chief mining engineer of the Bureau of Mines, and until further notice, James W. Paul will be acting chief mining engineer, with headquarters at Washington.

C. A. Herbert is detailed to Pittsburgh to serve as acting chief coal mining engineer, beginning on June 1 for a period of five months, and will report through the superintendent of the Pittsburgh Station to Mr. Paul. He will have immediate charge of the experimental