named. General Palmer is one of the principal founders of Colorado Springs, and has probably had more to do with the upbuilding of Colorado than any other one man. He has during many years aided the college in innumerable ways, and is one of its trustees.

Colorado College does not pretend to be a university, and in fact always has insisted on the college ideal as distinguished from that of the university proper. Nevertheless Dr. Jordan, in his address, spoke the following significant words:

"I am told that Colorado College is one of those which aspires to be only a college, a thoroughly good college of course, but that she has no thought of becoming a university. I do not learn this from my friend, Dr. Slocum, and I know that his ambition is bound-But whether it be true or not, I am going to oppose the idea. She will be a university before you know it. This Palmer Hall may be offered in evidence that the college period is past. Colorado College has already become a university. A university in embryo, perhaps, if you like, but still with all the marks by which the university is known as certain to become a university in fact as a pine seedling on your royal hills is sure some day to become a pine tree.

"A university in America is a place where men think lofty thoughts, and where men test for themselves that which seems to be true, where men go up to the edge of things and look outward into the great unknown, where men find their life work."

And, it may be added, it appears to be universally expected and desired by those who insist upon the word college that the opening of Palmer Hall shall mark the beginning of a period of scientific research, the extent of which is only to be limited by the men and materials available.

T. D. A. C.

THE STUDY OF SCIENCE.

The secretaries of the Royal Society have submitted to the universities of the United Kingdom the following 'Statement regarding Scientific Education in Schools, drawn up by a Committee of the Royal Society':

"Notwithstanding efforts extending over more than half a century, it still remains substantially true that the public schools have devised for themselves no adequate way of assimilating into their system of education the principles and methods of science. experience of 'modern sides' and other arrangements shows that it can hardly be expected that, without external stimulus and assistance, a type of public-school education can be evolved which, whilst retaining literary culture, will at the same time broaden it by scientific interests. On the other hand, it is admitted that many students trained in the recent foundations for technical scientific instruction have remained ignorant of essential subjects of general education.

"The bodies which can do most to promote and encourage improvement in these matters are the universities, through the influence which they are in a position to exert on secondary education. This improvement will not, however, be brought about by making the avenues to degrees in scientific or other subjects easier than at present. Rather, the test of preliminary general education is too slight already, with the result that a wide gap is often established between scientific students careless of literary form and other students ignorant of scientific method.

"It may be suggested that the universities might expand and improve their general tests, so as to make them correspond with the education, both literary and scientific, which a student, matriculating at the age of nineteen years, should be expected to have acquired; and that they should themselves make provision, in cases where this test is not satisfied, for ensuring the completion of the general education of their students, before close specialization is allowed.

"In particular, it appears desirable that some means should be found for giving a wider range of attainment to students preparing for the profession of teaching. The result of the existing system is usually to place the supreme control of a public school in the hands of a head master who has little knowledge of the scientific side of education; while the instructors in many colleges have to deal

with students who have had no training in the exact and orderly expression of their ideas.

"Our main intention is not, however, to offer detailed suggestions, but to express our belief that this question of the adaptation of secondary education to modern conditions involves problems that should not be left to individual effort, or even to public legislative control; that it is rather a subject in which the universities of the United Kingdom might be expected to lead the way and exert their powerful influence for the benefit of the nation."

SCIENTIFIC NOTES AND NEWS.

By order of its council the next meeting of the Astronomical and Astrophysical Society of America will be held in affiliation with the American Association for the Advancement of Science, at Philadelphia, during convocation week, 1904–05.

Dr. ALEXANDER AGASSIZ, director of the Harvard University Museum and president of the National Academy of Sciences, has been advanced to a foreign associate of the Paris Academy of Sciences, to fill the vacancy caused by the death of Sir George Gabriel Stokes.

McGill University has conferred the degree of LLD. on Dr. Edward L. Trudeau of Saranac Lake, N. Y., in recognition of his work on the open-air treatment of tuberculosis, and on Mr. Edward Weston, of Newark, N. J., the investigator and inventor in electrical science.

Professor W. Ostwald, of Leipzig, has been elected an honorary member of the Society of Scientific Men at Moscow.

THE University of Utrecht has conferred an honorary doctorate of medicine on Professor J. H. van't Hoff, of Berlin.

Professor G. H. Darwin, of Cambridge, has been elected a foreign associate of the Belgian Academy of Sciences.

LORD KELVIN is one of three nominees for the chancelorship of the University of Glasgow.

PRESIDENT JORDAN, of Stanford University, is expected to join the *Albatross* on about

April 10 to make a biological examination of Monterey Bay. Professor W. E. Ritter, of the University of California, is at present carrying on a survey of the coast between San Diego and Catalina Island, under the general direction of President Jordan.

REAR ADMIRAL GEORGE W. MELVILLE, U.S.N. (retired), and Mr. George Westinghouse arrived in Paris at the beginning of March after an extended European trip. The former is making an investigation of the extent to which turbine engines are being applied in naval construction.

Professor H. C. Ernst, of the Harvard Medical School, has recently appeared before a committee of the Massachusetts legislature in opposition to the bill to restrict animal experimentation in the state.

During the summer Assistant Professor J. O. Snyder, of Stanford University, will undertake for the government an examination of the rivers and streams of northwestern California, Nevada and Oregon.

Dr. W. R. Brinckerhoff and Dr. E. E. Tozzer, of the Harvard Medical School, members of the expedition to the Philippines sent out under the direction of Dr. Councilman, have arrived in Manila.

Professor Frederic S. Lee, who has recently been promoted to a full professorship of physiology at Columbia University, has been granted leave of absence for the academic year of 1904–5, and will spend the time in European laboratories.

SIR DAVID GILL, director of the Royal Observatory at the Cape of Good Hope, is on a visit to Great Britain.

It is stated in the newspapers that Professor E. P. Lewis, of the University of California, has received a grant of \$500 from the Carnegie Institution to purchase prisms and lenses for the study of the spectra of gases under different physical conditions.

SIR WILLIAM HUGGINS, president of the Royal Society, celebrated his eightieth birthday on February 7.

Dr. August Döring, titular professor of philosophy at Berlin, has celebrated his seventieth birthday.