original stand. At the same time that these White Mountain areas were approved, the commission also approved the purchase of the Pisgah Forest in North Carolina, from the George W. Vanderbilt estate. These tracts bring the total eastern forests up to 1,077,000 acres.

THE production of anthracite coal again broke the record in 1913, exceeding the highest previous output by nearly 1,000,000 tons, according to figures compiled by E. W. Parker, coal statistician of the United States Geological Survey. Including the coal recovered from old culm banks and a small quantity dredged from Susquehanna River, the production of anthracite for the year was 81,718,680 long tons, valued at \$195,181,127, compared with 75,322,855 tons valued at \$177,622,626 for 1912. This is an increase of over 6,000,000 tons in quantity and more than \$17,500,000 in value. The previous highest record was 80,-771,488 long tons, in 1910. Anthracite miners and operators are now working under an agreement extending over a period of four years from April 1, 1912; there were consequently no serious interruptions to mining operations by labor troubles in 1913 and industrial peace is assured in the anthracite region until 1916. As the use of anthracite coal as a manufacturing fuel has been practically eliminated, its production is not affected by trade conditions to the same extent as that of bituminous coal. The increase in the use of artificial gas and of coke for domestic purposes will, in Mr. Parker's estimation, probably keep pace with the increase of population in the markets supplied by anthracite, and there is little probability that anthracite production will show any marked increase in the future. Another record in addition to that of tonnage was established in the anthracite region in 1913. The average working time for men, 257 days, exceeded anything in the history of the industry, the nearest approach being in 1911, when an average of 246 working days was recorded. In 1912 the average was 231 working days. The average number of men employed in 1913 was 175,745. Reports to the Bureau of Mines show that there were 618 fatal accidents.

## UNIVERSITY AND EDUCATIONAL NEWS

THE East London College (University of London) has received from the Drapers' Company about \$75,000 to defray the cost of the erection and equipment of the new chemical laboratories of the college.

DR. HERBERT STANLEY BIRKETT, a specialist in diseases of the nose, throat and ear, has been appointed dean of the medical school of McGill University.

AT Vassar College the following appointments have been made: Aaron L. Treadwell, title changed from professor of biology to professor of zoology; Cora J. Beckwith, Ph.D. (Columbia, '14), promoted from instructor to assistant professor of zoology; Emmeline Moore, Ph.D. (Cornell, '14), instructor in botany, vice Assistant Professor W. J. Robinson, who becomes dean of the Women's Affiliated Colleges of Delaware; Elizabeth Cutter (Vassar, '11), Hazel Schmall (Colorado, '13), and Celia Jordan (Vassar, '14), have been appointed assistants in biology.

DR. H. E. EWING, Ph.D. (Cornell, '11), and Assistant Professor V. I. Safro, B.S.A. and postgraduate (Cornell, '09), have resigned from the Oregon Agricultural College, department of entomology. The present organization of the department is as follows: H. F. Wilson, M.S. (Oregon Agr. Col., '13), entomologist; A. L, Lovett, B.S. (Okla. Agr. Col., '10) and G. F. Moznette, B.S. (Oregon Agr. Col., '14), assistant entomologists.

DR. F. R. MILLER, of the department of physiology, McGill University, has been appointed professor of physiology in the Western University, London, Canada.

MR. IELSON C. DALE, of the graduate college of Princeton University, has been appointed associate professor of geology at Hamilton College.

FOLLOWING the retirement of Professor J. M. Thomson, Professor H. Jackson has been appointed head of the chemical department at King's College, with the title of Daniel professor of chemistry in the University of London. PROFESSOR A. W. CROSSLEY has been appointed to a university chair of chemistry, tenable at King's College.

## DISCUSSION AND CORRESPONDENCE THE CONFERRING OF THE BACHELOR'S DEGREE UPON NON-GRADUATES

THE question of giving degrees to nongraduates who for various reasons have failed to obtain them while resident students is one that faculties of colleges and technical schools are frequently called upon to decide. Every year students leave college because of illness, financial embarrassment, lack of interest, defective scholarship and sometimes misconduct.

Some of them enter other institutions or subsequently return to their own college, and, after fulfilling all requirements, receive their degrees. Others enter business or professions in which they become so occupied that they find it impossible to take the time necessary for the completion of their collegiate residence and training.

Such men often attain distinction in their professions or prominence in other ways, and apply for degrees, being urged thereto by some admiring former classmate, or at the solicitation of some member of the faculty, who is enthusiastically appreciative of their continued interest, financial or otherwise, in the college. It is not easy to understand why one who has attained distinction in his profession should seek an undergraduate degree when such degree signifies nothing beyond the fact that the possessor, prior to his entering his profession, has completed a prescribed course of study in preparation therefor.

The applying for and the granting of a degree on any other basis than its being earned puts an abnormal importance on the degree itself and stamps the recipient with a misleading trade-mark.

Investigation shows a wide variation in this practise among prominent universities, colleges and technical schools. Some grant no degrees except for the completion of a prescribed course in residence; others accept a certificate for the performance at another institution of such part of the work or its equivalent as the candidate may lack; and then there are some which grant degrees on a minimum residence of two years with "fair" standing, honorable dismissal and a "creditable" record varying from ten to twenty-five years subsequent to leaving college.

During the past two years this question of granting degrees to non-graduates has been repeatedly brought to the attention of the faculty of the Worcester Polytechnic Institute and a committee was appointed to investigate the matter. In order to ascertain the practise in other institutions a circular letter asking for information was sent to all universities, colleges and technical schools on the accredited list of the Carnegie Foundation. Also a letter was sent to most of the graduates of the Worcester Polytechnic Institute who have been or are now engaged in teaching, to ascertain their views on the question. This committee after careful consideration of all the information which had been assembled brought in a report which was unanimously adopted by the faculty. Since a number of institutions with which the committee corresponded expressed the desire to be informed as to the conclusions reached, it has seemed best to publish the whole report.

## REPORT SUBMITTED TO THE FACULTY OF THE WORCESTER POLYTECHNIC INSTITUTE

The committee to which was referred the question of providing some means whereby degrees may be conferred upon non-graduate students submits the following report:

1st. That the committee recommend that the degree of Bachelor of Science be conferred only on those who have completed one of the courses of study prescribed at this institute as leading to that degree.

2d. That in the opinion of the committee it is not wise to grant any honorary degree to a nongraduate; but in the opinion of the committee the names of all former students should be printed in some official publication of the institute.

The general reasons which have influenced the