should unlearn, while, on the other hand, he had failed to acquire knowledge of which he stood badly in need. Yet this was a far too frequent experience with boys entering technical colleges from the public schools. The remedial changes which had so far been made in this direction were limited in extent compared with those really required, and there was still left to be done at the technical college much educational work which ought to have been done at school, the result being a waste of valuable time. The matter was one which merited the most careful attention of all interested in technical education. There came a time when every engineer must specialize if he really wanted to attain anything more than a subordinate position. This specialization should be at least commenced during the college career rather than subsequently, the student devoting the latter part of his course at college to the acquirement of a knowledge of the special principles which underlay practice in the particular branch of the profession to which he was about to devote himself. This meant that the college authorities must take a wider view of their responsibilities than many of them did at present. It would also probably mean in the future that certain colleges would acquire a reputation for certain branches of work. One of the chief aims of technical college training should be to develop independent thought and action in a student. It could not be too thoroughly appreciated that the vast development of mechanical engineering work which had been going on in the past half-century, and which was still going on at an ever-increasing rate, was producing a most important change in the conditions which secured both professional and commercial success. In the old days the leading firms of mechanical engineers had comparatively few customers, and they had, as a rule, to meet the great variety of requirements of those customers to the best of their ability. Repetition work was comparatively rare, and success depended largely on resourcefulness and the power of entering thoroughly into the conditions to be fulfilled. Nowadays the successful mechanical engineer was not he who made a great variety of things for the few, but a small variety of things for the many, at the same time producing those few things in the most perfect way. Experience showed clearly that mere lowness of price was not in itself an inducement to purchasers, and the maker of an engine of exceptional economy or of a machine too, which excelled its competitors in the quantity or quality of the work it turned out would never find difficulty in obtaining proportionately good prices for his productions.

UNIVERSITY AND EDUCATIONAL NEWS.

Berea College, Ky., receives $50,000 by the will of Stephen Ballard, of Brooklyn.

The Department of Agriculture has received a communication from the University of California announcing that a dairy school is to be established at that institution and requesting that a butter and cheese expert of the department be permitted to go to California to assist in establishing the school. Mr. W. E. Griffith, one of the experts of the department, will be assigned to this work August 20.

President James Whitford Bashford, of Ohio Wesleyan University, has been offered the presidency of Northwestern University.

Dr. T. D. Wood, professor of hygiene and organic training at Stanford University, has accepted a similar position at Teachers College, Columbia University.

Elliot R. Downing, Ph.D. (Chicago), who has been during the summer assistant in zoology at Chicago University, will in the autumn take charge of the biological department at the Northern State Normal School at Marquette, Mich.

Dr. Charles F. Hottes has been appointed instructor in botany in the University of Illinois. Mr. Hottes was formerly assistant in the botanical laboratory of the University, but has spent the last three years at the University at Bonn, studying plant physiology and cytology. Mr. H. Hasselbring, of the New York Agricultural Experiment Station at Geneva, has been appointed assistant in the Agricultural Experiment Station of the same University.

Dr. Florence M. Lyon, of Smith College, has been appointed associate in botany in the University of Chicago and dean of Beecher Hall.