SCIENCE.

8. Further Study on the Influence of Heat-Treatment and Carbon upon the Solubility of Phosphorus in Steel. By E. D. Campbell and S. C. Babcock.

9. The Action of Certain Bodies on the Digestive Ferments. By Frank D. Simons.

10. The Decomposition of Heptane and Octane at High Temperatures. By A. W. Burwell.

11. Calculation of Calorimetric Values from Analytical Data. By H. W. Wiley.

12. The Chemical Composition of Cement Plaster. By E. H. S. Bailey.

13. Bacterial Products of Hog Cholera and Swine Plague. By E. A. de Schweinitz.

14. Detection of Foreign Fats in Butter and Lard. By C. B. Cochran.

15. Distillation in General. By Leon Labonde.

16. Apparatus for Photometric Determination of Lime and Sulphuric Acid. By J. I. D. Hinds.

17. The Composition of Humus. By Harry Snyder.

18. An Electrical Laboratory Stove. By M. D. Sohon.

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SECTION D.—MECHANICAL SCIENCE AND ENGINEERING.

Address of the Vice-President: The Groundwork of Dynamics. By Professor John Galbraith, School of Practical Science, Toronto.

1. Development of Engineering Industries by Scientific Research. By Professor W. S. Aldrich, W. Va. University, Morgantown, W. Va.

2. The Cement Laboratory as a Field for Investigation. By Professor F. P. Spalding, Cornell University, Ithaca, N. Y.

3. The Effect of Spark Losses on the Efficiency of Locomotives. By Professor W. F. M. Goss, Purdue University, Lafayette, Ind.

4. A New Apparatus for Testing Indicator Springs. By Professor M. E. Cooley, University of Michigan, Ann Arbor, Mich.

5. Flue Gas Analysis in Boiler Tests. By Professor D. S. Jacobus, Stevens Institute, Hoboken, N. J. 6. Effect of Temperature on the Strength of Steel. By Professor R. C. Carpenter, Cornell University, Ithaca, N. Y.

7. The Properties of Aluminum Alloys. By Professor R. C. Carpenter, Ithaca, N. Y.

8. Analysis of Composite, Concrete and Iron Beams. By Professor J. B. Johnson, Washington University, St. Louis, Mo.

9. Definition of Elastic Limit for Practical Purposes. By Professor J. B. Johnson, St. Louis, Mo.

10. Theories of some Planimeters without the aid of Calculus. By Professor Forest R. Jones, University of Wisconsin, Madison, Wis.

11. The Production of X-Rays by Means of the Planté Accumulator, in which voltage is chiefly concerned, the effect of current being largely eliminated (Illustrated by Stereopticon.) By Professor W. A. Rogers, Colby University, Waterville, Me.

12. A Universal Alternator for Laboratory Purposes. By Professor Henry S. Carhart, University of Michigan, Ann Arbor, Mich.

13. Calculation of the Energy Loss in Armature Cores. By Professor W. E. Goldsborough, Purdue University, Lafayette, Ind.

14. A New Formula for Determining the Width of Leather Belting. By Professor John J. Flather, Purdue University, Lafayette, Ind.

15. A Graphical Solution of Belting Problems. By Professor John J. Flather, Lafayette, Ind.

16. On Engineering Conditions connected with the Mounting of Instruments used on Eclipse Expeditions. By Professor David P. Todd, Amherst College, Amherst, Mass.

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SECTION E.-GEOLOGY AND GEOGRAPHY.

Address of the Vice President: The Pittsburg Coal Bed. By Professor I. C. White, University of West Virginia, Morgantown, West Va.

1. Stylolites. By Professor T. C. Hopkins, State College, Centre Co., Pa.

2. A Suggestion in Regard to the Theory of Volcanoes. By Professor William North Rice, Wesleyan Univ., Middletown, Ct.