

mentioned decimal fraction. This factor multiplied by the product of the square of the diameter of the tank and the length represents the volume content of material in the tank regarding the same as a true cylinder. Thus, from a knowledge of the height of material in the tank and the tank dimensions, the volume content of the material can be obtained with fair accuracy and by means of a very simple calculation. While this method is inaccurate in so far as it fails to take account of the bumped heads of the tank, yet it does not require a long or laborious calculation of the volume contents of each inch of the tank.

In conclusion, the writer feels that there remains a very real and present need for a method of gauging these storage tanks which will be more accurate and less laborious than Mr. Ogden's method and which will, at the same time, take account of the material contained in the bumped heads.

THE BARRETT CO., 17 BATTERY PLACE  
NEW YORK, January 19, 1916

K. B. HOWELL

#### U. S. DYESTUFF SITUATION AT CLOSE OF 1915— CORRECTION

In my article under the above title, THIS JOURNAL 8 (1915), 166, the following corrections should be made:

Page 167, Col. 2: monthly output of naphthalene should read "1,000;" phenol, "830 tons."

Page 168, the following additions should be made:

##### MANUFACTURERS OF COAL-TAR CRUDES

"The United Gas Improvement Co., Philadelphia.  
"The Semet-Solvay Co., Pittsburgh.  
"A number of firms engaged in the manufacture of high explosives, or organized for the special purpose, are engaged in the production of synthetic phenol."

##### MANUFACTURERS OF COAL-TAR INTERMEDIATES

"In addition to the above, mention may well be made of the following companies, which have put up large plants for the manufacture of aniline, but which consume the bulk of the output in their own works:

Millville Manufacturing Co., Millville, N.  
B. F. Goodrich Co., Akron, Ohio.  
Goodyear Chemical Co., Akron, Ohio.  
Lyman G. Bourne, Inc., Auburn, Ind.  
Naugatuck Rubber Goods Manufacturing Co., Naugatuck, Ct.  
Merck & Co., Rahway, N. J.  
The du Pont de Nemours Co., Wilmington, Del.  
The Aetna Explosives Co., Pittsburgh, Pa."

##### MANUFACTURERS OF ARTIFICIAL DYESTUFFS

"The United States Coal-Tar Products Co., New York City.  
"The Sherwin-Williams Co., New York City."

WASHINGTON, February 9, 1916

THOMAS H. NORTON

#### ALUMINA IN ALUMINUM SALTS—CORRECTION

The factor weight to be taken in the analysis of aluminum salts by my rapid method should be "3.4067" and not 3.4038 as given in my paper printed in THIS JOURNAL 7 (1915), 1059.

This factor is based on titration with  $N/2$  acid. When acids are prepared without reference to normality strengths, this factor weight is derived as follows: the value of 100 cc. of the acid, in terms of  $H_2SO_4$ , is multiplied by four times the factor that gives the equivalent  $Al_2O_3$ ; i. e., if the standard acid used has a strength of 0.02 g.  $H_2SO_4$  per cc. the factor would be:  $2 \times 0.3473 \times 4 = 2.7784$ .

LAUREL HILL, LONG ISLAND  
NEW YORK, January 3, 1916

WILFRED W. SCOTT

#### RADIUM, ETC., FROM CARNOTITE—CORRECTION

In my article in THIS JOURNAL, 8 (1916), 51 will be found the statement: "Three or four crystallizations only are necessary to bring the major part of the radium to a concentration of 60 to 80 per cent radium bromide." This should read: "Twelve to twenty crystallizations only are necessary."

January 22, 1916

C. L. PARSONS

## SCIENTIFIC SOCIETIES

### FIFTY-SECOND MEETING OF THE AMERICAN CHEMICAL SOCIETY—UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN—APRIL 18 TO 21, 1916

The Fifty-Second meeting of the American Chemical Society will be held at the University of Illinois, Urbana-Champaign, from Tuesday, April 18th, to Friday, April 21st, inclusive. The Beardsley Hotel, Champaign, has been chosen as headquarters. Additional accommodations can be obtained at the Hotel Inman, located on University Avenue, one block from the Illinois Central station and on the car line to the University. All meetings will be held at the University of Illinois which can be reached by car from the corner of Main and Neil Streets, one block south of the Beardsley Hotel.

#### CHAIRMEN LOCAL SECTION COMMITTEES

EDWARD BARTOW, *General Committee*.  
W. A. NOYES, *Finance*.  
C. W. BALKE, *Reception and Registration*.  
C. G. DERICK, *Entertainment and Program*.  
D. M. MCFARLAND, *Transportation and Excursions*.  
E. W. WASHBURN, *Smoker*.  
S. W. PARR, *Banquet*.  
G. D. BEAL, *Press and Publicity*.  
H. L. OLIN, *Exhibits*.  
MISS ISABEL BEVIER, *Entertainment of Ladies*.

#### PROVISIONAL PROGRAM

MONDAY, April 17th, *Evening*, Council Dinner followed by Business Meeting.  
TUESDAY, April 18th, *Morning*, General session.  
*Afternoon*, Excursions to University buildings and grounds, including exhibition of live stock, floral display, and a visit to the plant-breeding laboratories. Review of University brigade.  
*Evening*, Concert by the University Military Band. Smoker.  
WEDNESDAY, April 19th, *Morning*, Sectional meetings.  
*Afternoon*, Dedication of the new Chemistry Building. Governor Edward J. Dunne, of Illinois, will preside. Addresses will be given by President Edmund J. James, W. R. Whitney, of the General Electric Company, and member of the U. S. Naval Board, and Professor Alexander Smith, of Columbia University. Reception and inspection of Chemistry Building.  
*Evening*, Subscription dinner.  
THURSDAY, April 20th, *Morning*, Sectional meetings.  
*Afternoon*, Excursions on University campus, including laboratories of mechanical, mining, hydraulic, electrical and railway engineering. Sectional meetings.  
*Evening*, PUBLIC LECTURES: "Production of Radium," by C. L. Parsons, Bureau of Mines, Washington.

"Use of Radium in the Cure of Cancer," by C. F. Burnham, M.D. Baltimore.

FRIDAY, April 21st, Excursion to Danville, Illinois, for the purpose of visiting:  
Hegeler Brothers' Zinc Smelter and Sulfuric Acid Plant;  
Western Brick Company's Kilns;  
Three Rivers Coal Company's Strip Coal Mine.

Especial attention is called to the excursion by special train to Danville on Friday, April 21st. The smelter of the Hegeler Zinc Company was built in 1908, and is one of the most modern and best arranged in the country; the capacity has recently been trebled; the smelter utilizes the fumes from roasting the zinc ore. The brick and tile plant of the Western Brick Company is one of the largest in the country. Of unusual interest are the open-pit shale and coal mines furnishing material and fuel; the strip-pit coal mine gives a splendid illustration of the location of coal; usually a bed of coal a quarter to a half-mile long and fifty to one hundred feet wide is exposed. Arrangements are being made for optional visits to other plants.

All titles of papers should be in the Secretary's hands on or before April 7th or in the hands of the secretaries of divisions by April 5th in order to be placed on the final program. By vote of the Council no papers can be presented at the meeting the titles of which are not printed on the final program.

#### ADDRESSES OF DIVISIONAL SECRETARIES

*Agricultural and Food Chemistry*, G. F. Mason, H. J. Heinz Company, Pittsburgh, Pa.  
*Biological Chemistry*, I. J. Phelps, Bureau of Chemistry, Washington.  
*Fertilizer Chemistry*, F. B. Carpenter, Virginia-Carolina Chemical Company, Richmond, Va.  
*Industrial Chemists and Chemical Engineers*, S. H. Salisbury, Jr., Lehigh University, So. Bethlehem, Pa.  
*Organic Chemistry*, H. L. Fisher, Columbia University, New York City.  
*Pharmaceutical Chemistry*, Dr. George D. Beal, University of Illinois, Urbana, Ill.  
*Physical and Inorganic Chemistry*, James Kendall, Columbia University, New York City.  
*Water, Sewage and Sanitation*, Dr. H. P. Corson, U. S. Public Health Service, Grove City, Pa.

C. L. PARSONS, *Secretary*