

name the Nova Scotia animal, and I propose to call it *Vulpes pennsylvanica rubricosa* (Type No. 116, Bangs Coll., described under above reference as *Vulpes pennsylvanica vafra*).

OUTRAM BANGS.

JANUARY, 1898.

---

THE AMERICAN CHEMICAL SOCIETY.

THE sixteenth general meeting of the American Chemical Society was held with the Washington Section on December 29th and 30th. No place could have been more favorable for the meeting, as, outside of New York, Washington has the largest and strongest local section of the Society. As a result, this was the most largely attended meeting in the history of the Society. Every preparation had been made by the local committee and no meeting has been more successful or enjoyable. The sessions were held at the Columbian University and were opened by an address of welcome by President B. L. Whitman. The forenoons and Wednesday evening were devoted to the reading and discussion of papers. Among the papers read were the following:

Professor L. P. Kinnicutt, of Worcester, gave an interesting account of recent developments in the new methods of sewage purification, including the method by which a very considerable amount of the purification is due to giving the anærobic bacteria an opportunity to develop to the greatest extent.

An account was given, with illustrations, of Professor W. O. Atwater's respiration calorimeter, by means of which the total income and expenditure of heat and energy of the human body can be measured for periods of several days at a time.

C. A. Crampton, of the Treasury Department, read a paper on glucose in butter, illustrated by samples. Glucose is largely used as a preservative for butter to be shipped to tropical climates. The peculiar

taste of some peoples was well illustrated by a sample of butter prepared for the island of Martinique, which was a bright orange-red color. Mr. J. P. Geisler, of New York, showed that the azo dyes which are used for coloring butter are very readily detected by absorbing with fuller's earth.

In the field of analytical chemistry Professor Francis C. Phillips read a paper on the determination of sulfur in gas-mixtures, giving description and illustration of an apparatus in which any desired amount of a gas (as natural gas) can be burned and the sulfur estimated as barium sulfate.

There was but one paper on didactic chemistry, by Professor Wm. P. Mason, of the Troy Polytechnic. In the very earnest discussion which followed the paper this question was raised: Is it wiser for a teacher to state scientific theories to his class dogmatically, thus giving them something tangible for a foundation, but knowing that, as they progress, they will have much to unlearn and modify; or should he confine himself strictly to statement of known truth, discussing conflicting theories with their arguments, pro and con, and, as a result, leave the mind of the student in a very hazy condition? It is not in chemistry alone that this difficulty arises.

Of papers devoted to pure chemistry, mention may be made of a series of papers on physical chemistry from the Cornell University laboratory; a discussion of the compounds of the higher haloids of elements of the Group IV., by J. F. X. Harold, of the University of Pennsylvania; a paper on the atomic weight of zirconium, by Professor F. P. Venable, of the University of North Carolina, and one on the chemistry and crystallography of some new rutheno-cyanids, by Jas. Lewis Howe and Professor H. D. Campbell, of Washington and Lee University.

President Charles B. Dudley's address on

Wednesday night was on the Dignity of Analytical Chemistry, and was a strong plea for this field from the standpoint of pure chemistry and has already been printed in this JOURNAL.

The election of Dr. Charles E. Monroe, of Washington, as President of the Society for the ensuing year was announced.

Thursday night was devoted to a banquet given by the local section at Maison Rauscher's, which was attended by nearly three hundred. President W. D. Bigelow, of the local section, presided, and Dr. H. Carrington Bolton acted as toastmaster. Among many notable speeches, a poetical effusion by Dr. H. W. Wiley, of the Agricultural Department, was perhaps the best appreciated.

Washington is so full of places of interest to the American citizen as well as to the chemist that considerable time was given to sight-seeing. The members were received by President McKinley at the White House; the various department laboratories were visited, as well as many other government buildings; a special excursion was given to Mt. Vernon, Friday morning, returning to Fort Meyer to witness the Cosack drill in the afternoon; and, perhaps not least in the estimation of many of the chemists, the great Heurich brewery was fully inspected and a bountiful collation in German style was partaken of. Finally, the courtesies of the Cosmos Club, which was made almost a rendezvous for the Society, added much to the enjoyment of the meeting.

J. L. H.

#### CURRENT NOTES ON PHYSIOGRAPHY.

##### SPECIAL FEATURES OF DISSECTED PLATEAUS.

PLATEAUS of horizontal strata, maturely dissected, offer a great number of variations upon simple types of hills and valleys; no two hills being alike, yet all having a strong family resemblance. The student

soon passes from these widely prevalent forms to local examples of special features, which then receive an amount of attention quite out of proportion to the area that they occupy, but highly appropriate to their peculiar evolution.

C. F. Marbut describes some local forms of this exceptional kind in Missouri (Cote Sans Dessein and Grand Tower, *Amer. Geol.*, XXI., 1898, 86-90). A short distance upstream from the fork of two streams the widening of their graded valley floors occasionally results in the lateral abstraction of the smaller stream by the larger one. An isolated hill or group of hills is then left between the forked valleys below the new cut-off. An example that bids fair to become typical for this country occurs in Benton County, Mo., where the town of Warsaw lies on the margin of one of these hill-groups, in the (former) fork of the Osage and the Grand River valleys. Three miles above the former junction of these streams the outward cutting of their meanders has worn through the dividing ridge, and has thus tempted the Grand to enter the Osage and desert its lower course.

'Cote Sans Dessein' is described as the narrow remnant of a hill-group of this kind, once included in the fork of the Missouri and Osage, but now reduced to a narrow isolated ridge a mile long and 200 feet wide, rising above the Missouri flood-plain. The name given to this ridge by the early *voyageurs* reminds one of the early naturalists and their 'queer fish,' now the treasure of the zoological evolutionist.

##### ARTESIAN WELLS OF COASTAL PLAINS.

THE artesian well should take high rank as a characteristic of the normal coastal plain. Simple structure consisting of discrete or of slightly indurated strata; decreasing relief and variety of form from the old shore line to the new; low-grade rivers extended from the old land, often deltaless