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 Cossack 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

and open-mouthed by slight submergence; off-shore sand reefs, with inlets and off-sets; agriculture and forestry, rather than mining and manufacturing, as industries—to all these a good artesian supply of water is an important additional feature, especially to the towns on the low and smooth littoral plain and to cities on the shore or on the off-shore sand-reefs.

'Artesian well prospects in the Atlantic coastal plain region' is a timely summary, by N. H. Darton (Bull. 138, U. S. Geol. Surv.), of our present knowledge on this subject. It gives much encouragement for the future. A number of colored maps and corresponding sections make the report easily understood. The location of successful and unsuccessful wells is conspicuously shown. Repeating the curious example, already described by Darton, of wells in eastern Maryland supplied by water-bearing strata (aquifers) that pass under Chesapeake bay, we here find wells about Norfolk fed by aquifers that pass beneath the saline estuaries of southeastern Virginia. The greater amount of detailed knowledge concerning the well prospects in New Jersey than in the Southern States is a tribute deservedly earned by the New Jersey Geological Survey.

DRUMLINS IN NORTH GERMANY.

K. Keilhack, of Berlin, describes a 'Drumlinlandschaft in Norddeutschland' (Jahrb. k. preuss. geol. Landesamt, 1896 [1897], 163–198), from which it appears that an extensive group of well defined drumlins lies east of the lower Oder, between the Baltic sea and one of the terminal moraines of that glaciated region. The hills, illustrated by a number of detailed maps, are of moderate height, with ratio of $2\frac{1}{2}$ or 3 between length and breadth; some of them being elongated ridges, three or four kilometers in length. Their distribution, indicated by diagram and map, is of especial value in a region where glacial striæ are rarely seen; for their axes show as ympathetic parallelism in a curving arrangement that strongly indicates a glacial flow toward the free morainic border near by. Now that drumlins have been found on the northern piedmont of the Alps by Sieger and Früh, in Sweden by de Geer, and south of the Baltic by Doss and Keilhack, they need not be regarded as such rarities in continental Europe as they were thought to be fifteen years ago.

THE VERNAGT GLACIER.

The Vernagt glacier in the eastern Alps, famous for its flood-like advances into the Rofen valley (1599, 1680, 1773, 1845), and for the disasters caused by the outbreaks of the impounded valley stream, is made the subject of accurate measurement and description by Dr. S. Finsterwalder, of Munich; his monograph forming the first 'scientific supplement' to the Zeitschrift of the most flourishing of all Alpine clubs, the German and Austrian Alpenverein (Graz, 1897). The history of the glacier and the earlier maps of its form are carefully reviewed. A detailed account is given of the author's survey, the result being presented on a most beautiful map in several colors, on a scale of 1 : 10,000, with contours every ten meters. Then follows a discussion of the conditions of glacial motion, as here exemplified, and finally a consideration of the outbreaks of this remarkable glacier; their cause being ascribed to variations of snow and névé supply in the irregular upper reservoir. A special study follows on the end of the glacier in 1891, '93 and '95, by Blümcke and Hess.

W. M. Davis.

CURRENT NOTES ON ANTHROPOLOGY.

QUIPU READING.

In the *Bulletin* of the Free Museum of Science and Art, Philadelphia, for December, 1897, Dr. Max Uhle has an article on