

maps. The educational value of these maps will alone repay the people of Massachusetts over and over again for their share in the cost of making them.

WHENCE COME RACE CHARACTERS?

ONE is often led to speculate as to the origin of national peculiarities; and soon such speculations take one to the conclusion that a great deal of what characterizes a nation in the way of mental traits is not an intrinsic quality of the race, but akin rather to folk-lore, as to its origin at least. There are modes of the mind, and fashions of thought, which spread by propinquity. Such modes may give currency to superstitious tales of witchcraft, to foolish prejudices, or to great intellectual impulses. Every man's mind is a country inhabited by ideas, very few of which are autochthonous. His opinions are an immigrant populace; and, when a sturdy thought goes forth from the mind of its birth, it breeds abundant exact reproductions of itself in many other minds. Indeed, most thinking is repetitive. So, when a strong man appears, his example establishes a tendency in those about him; and, if he is highly endowed, he founds a school perhaps, of politics, art, or science, as the case may be. If many such men come in one epoch and in one nation, it may well happen that their conjoint impulses may lead a whole nation in a certain developmental direction, without the qualities which become prominent really being intrinsic race characters.

It is a legitimate question, and one possessed of deep meaning, Are the Germans more musical inherently than other peoples, or has the succession of splendid musical geniuses among them at once guided and accelerated the musical culture of the nation? The same alternative query arises concerning the pre-eminence of Italian painting or of English literature. Or we may make the complementary inquiry. Does the lack of certain qualities in a nation depend on the lack of the right leaders? To go back to the Germans, at whom indeed we are aiming all the while, do they lack American inventiveness because it is no-wise in them, or merely because they have never been rightly impelled into the habit of invention by example-giving inventors? Probably for the latter reason, for German scientific men have done their share in inventing scientific apparatus, and the Germans who come to America learn to invent. The final interest of these considerations resides in the decision as to whether national defects of certain kinds cannot be remedied by tuition and right leadership. It must be left, however,

for some powerful investigator to definitely solve these problems by rigid historical research. Let us, however, by an act of cheerful faith, accept the belief in possible betterment even unto thinking that the German people may acquire the literary instinct.

I have referred on several occasions in the columns of *Science* to the absence of the literary sense in German scientific men. It is one of the most flagrant arguments against the classical education, with its supposed results of literary culture, that the Germans, who have school doses of classics much larger and more concentrated than are administered in the rest of the world, themselves write more barbarously than any other civilized western people. German scientific articles are full of sentences like this, which refers to the bristles serving among arthropods as organs of touch: "Man darf für wahrscheinlich halten, dass die so sehr wechselnde gestalt und ausbildung der 'Tastborsten' nach der art des thieres und den körpergegenden noch bestimmten nebenzwecken zu dienen hat, ohne dass wir uns davon rechenschaft zu geben vermögen."¹ Now, the author of this sentence is one of the most distinguished and justly distinguished of German zoölogists, but his manner of writing is similar in quality to that of most scientific writers in Germany. The sentence is neither better nor worse than thousands upon thousands of others, perpetrated by his countrymen equally without literary feeling. The Germans need literary conscience to reprove them for all their awkward and involved phrases, that their souls may know how guilty they are in ignoring their readers' rights. The quoted sentence was evidently written without attention to the forms of expression. It never occurred to the author that aught was due the reader. His meaning cannot be had except by an effort. It is ill-mannered to give others so much trouble, when a little pains on one's own part might save it. A cultivated Frenchman would be incapable of such a rudeness. The pith of the evil is the indifference of the German author as to how he writes: he feels no inward necessity of having a good style, and is inclined to despise the French qualities of grace and lucidity.

Perhaps reiterated complaints will stimulate improvement. May it be brought about that the few good writers among German *savants* will have soon many imitators. It is, to be sure, more trouble to write well than to write ill. We all have facilities for bad logic, bungling rhetoric, and poor composition; but these undesirable gifts ought not to excuse us from striving after their

¹ *Zoologischer anzeiger*, ix. 288.

opposites. We cannot admit, therefore, that Germans are to be pardoned for not trying to present their many and valuable discoveries in articles well arranged and in language well chosen. It may be, however, that this will not come about until a set of leaders shall have established the 'folk-mode' of good writing. M.

THE HEALTH OF NEW YORK DURING NOVEMBER.

THE total number of deaths which occurred in New York City during the month was 3,076, an increase of 99 over the previous month: 1,290 of these deaths were of children under five years of age. The decline in the mortality due to diarrhoeal diseases is very marked, being but 87 as compared with 234 in October. The deadly influence of the oppressive heat of our midsummers is nowhere better illustrated than when we compare the deaths from these diseases in July and in November. In the former month no less than 1,882 persons are recorded as having died from this cause, while in the latter but 87 succumbed to affections of the bowels. From consumption 459 persons died, an increase of 27 over October. Diphtheria, which began in October to figure more prominently as a mortality factor, has not yet relaxed its hold, and is chargeable with 188 deaths, 23 more than in the previous month. The deaths from scarlet-fever were only 23, practically the same as in October, the difference being but 5. Measles is now very prevalent in New York, and is assuming such proportions as a cause of death, that we shall in the future include it in our chart. Small-pox is still absent from the city, — a fact which reflects great credit upon the health department, for, with its prevalence in Brooklyn, it seemed almost impossible for New York to escape without becoming infected to a slight degree at least.

The meteorology of the month has not been characterized by any great variations from the normal or average, either as to temperature or rainfall. The maximum temperature was 71° F., at 3 P.M. of the 2d, the average for ten years being 67.9° F.: the minimum was 27° F., at 5 A.M. of the 27th, somewhat above the average of the past decade, which was 22.2° F. The rainfall for the month was 4.42 inches, 0.25 of an inch more than in October. The November average for ten years is 3.19 inches.

THE *Fortnightly review* is to begin in its January issue the publication of a series of unsigned articles on 'The present political situation in Europe.' It is expected that these articles will be very important, and attract much attention.

A SKETCH OF THE GREAT SERPENT MOUND.

ACCEPTING an invitation from Dr. Cyrus Thomas to accompany him on a visit to a number of the ancient monuments of southern Ohio, I had the long-wished-for opportunity of examining the great Serpent Mound. This work is situated in the northern part of Adams county, somewhat remote from frequented routes of travel, and hence rarely visited by people from a distance. Several accounts have been published, however, the first in the classic work of Squier and Davis, and subsequent ones by McLean, Putnam, Allen, and others. The map given in the first-mentioned work conveys, as far as it goes, a fair idea of the extraordinary structure, but is characterized by remarkable omissions. Some of the more decided shortcomings have been pointed out by recent writers, who have, in their turn, fallen into the opposite error of over-elaboration. I venture to present a few notes and observations which will assist in enabling those who cannot visit the locality, in gaining a clear conception of the work and its surroundings. The valley of Brush Creek is bordered by an extremely rugged country, abounding in high hills which reach an elevation of perhaps six hundred feet above the bed of the creek. Entering from the north, we skirt the eastern rim of the valley, and descend at Lovett's farm upon the subordinate levels that border the stream. Leaving the road and crossing the fields, with the Lovett dwelling on the right and a small circular mound on the left, we reach the brink of a steep cliff which descends about one hundred feet to the stream bed. Turning our faces up stream, we find ourselves at the insertion of a long, narrow spur, described as 'crescent-shaped,' which holds its level to the extreme point, and slopes abruptly to the brink of the cliffs at the left, and rounds off more gently into the deep gulch at the right. This spur narrows up farther on, and terminates in an abrupt promontory, around the base of which a small branch from the gulch at the right turns, and crosses the strip of alluvial bottom to the creek. Along the rounded grassy crest of this ridge we can detect the obscure serpentine coils of the earthwork, and descending a little to the left, and almost to the brink of the cliff, we reach the tail of the serpent. Beginning with a small pit at the terminal point, we follow the unfolding coil for two full turns, and then advance along the body to its highest point upon the ridge. The curves are strong and even, and the body increases gradually in height and width as we advance. Upon the crest of the ridge we find ourselves at the beginning of three great double folds. Following these, we descend