SCIENCE.

FRIDAY, JANUARY 25, 1884.

COMMENT AND CRITICISM.

MR. A. GRAHAM BELL'S recent communication to the Washington philosophical society, discussing various common fallacies as to the dumbness of deaf children, is a clear and convincing presentation of the arguments for teaching deaf children with no defects in their vocal organs to speak, though they cannot learn as other children do, being unable to hear. To teach lip-reading is certainly practicable in many such cases, if not in all; and therefore it would seem that the attempt ought to be made in every case, to the exclusion of a purely conventional language of signs. Mr. Bell points out the real nature of the problem and its difficulties, indicating, among other things, the importance of the context to the deaf lip-reader in distinguishing words which look alike to his eye, such as *pat*, *bat*, *mat*, because he cannot see the workings of all the organs of speech, and laying emphasis on the fact that even very imperfect speech, if intelligible, is far better than no speech at all.

After reading his communication and the discussion which followed, especially his answer to objections and to arguments for the use of signs in teaching the deaf, we must give full assent to all the essentials of his arguments. Any student of linguistic science realizing the importance of a clear conception of the nature of language, and the value of careful phonetic analysis, will find this paper of interest, and must hope for the spread of such views as those here expressed, in the interest of his own studies as well as of the deaf-mutes, who may yet be taught to speak.

THERE is an entertaining field for some linguistic geographer to cultivate in this country by mapping out the distribution of the various kinds of town, county, river, and other names according to their origin and derivation. The great bulk of newer names has no significance in this regard, being purely local, personal, and commonplace; but places of older date often give an interesting clew to the former homes of their first settlers. Distinctively English names have but a slight penetration beyond the Atlantic coast, except in Canada. The French follow a well-marked line up the St. Lawrence and down the Mississippi. Dutch and German names give local color to the Hudson valley and parts of eastern Pennsylvania; and the Spanish have a broad occurrence in the far south-west. Indian names occur everywhere, from the euphonious Minnesota to the doubtful Tuscaloosa and the abrupt Oshkosh. The proper sorting-out of these last would require a rarer knowledge, as it would give more valuable results than the rest of the work; but all might be graphically shown with great clearness.

THE hydrographic office of the U. S. navy department has issued the Pilot chart of the North Atlantic for January, on which are given the latest reported positions of floating wrecks. The number of such wrecks which were reported as seen from Nov. 22 to Dec. 25, and of which the positions are charted, is twenty-two. Nine of them were along the eastern coast of the United States, from Maine to Cape Hatteras; seven were on the Atlantic, in the track of vessels going from the United States to England; two were near the West Indies; and three off the coast of Spain. Some months ago the more or less impracticable suggestion was made, of employing naval vessels to chase these dangerous obstructions, and blow them to pieces. The navy department has done good work in locating their positions; but, on account of the winds and ocean-currents, the results can only have value for a short time. It is desirable that some

way should be invented of doing away with this additional danger of ocean travel.

It is not uncommon to hear complaints of the methods of teaching geography in our lower schools. The faults most frequently mentioned are, that the beginning is not made properly; that there are too many lists of places committed to memory; and that the teaching is too lifeless, and is not made real enough by illustration and description apart from the text-book. The first error can be easily corrected by adopting the German method of instruction, where, instead of beginning with the definitions of meridians and parallels, that are so often found misplaced on the opening pages of our text-books, the pupils first study the arrangement of the schoolroom, then of the play-ground, next the geography of the town and of the surrounding country, and thus learn the meaning of the maps from which they afterwards study about the more distant parts of the world.

But this does not go very far. After laying the proper foundation, is there any way of learning geography, except by committing to memory the names and relative positions of the many mountains, rivers, capes, bays, lakes, cities, and towns, that give features to the earth? Detail may, of course, be carried too far, if a precise knowledge of distant, and to us unimportant, countries be required; but for the average scholar of this country, who should become well acquainted with the geography of North America and Europe, there is no easy path, no royal road, over the broad, rough field of fact that he must cross. We fancy, therefore, that the second criticism touches, not a fault, but a difficulty inherent in the study. Names and positions of places must be learned; but, as books of moderate cost can give very little more than the barest mention of them, the study is apt to become lifeless, and to degenerate into the learning of dull words from a dead map, unless the teacher averts this unfortunately common result, and enlivens the work by instruction beyond the text-book. This, however, is more than we have a right to expect from the overworked and underpaid teachers in the lower schools, for it is no easy task. It demands much reading in many books; it requires illustration by numerous maps, photographs, and diagrams, far beyond the reach not only of the teacher, but of the school board as well. In short, the desirable, the ideal teaching of even so commonplace a subject as elementary geography is an expensive art, requiring much study, high skill, and an extensive outfit.

It is now recognized that the successful teaching of chemistry, physics, and natural science, needs that the teachers of these branches shall know them by practical, experimental, observational work. A fair application of the same principle would require that the teacher of geography should have travelled; but how far are we now from so desirable an end! It is safe to say, that, of all the teachers of our common schools, not one-quarter have seen an ocean, a harbor, or a high mountain, and not one-twentieth of them have had any personal acquaintance with the foreign countries that they have to describe. Under these conditions, it is certainly no wonder that the study of geography becomes so often a tiresome exercise of unintelligent memory; and it cannot be otherwise, without a cost that few school boards can allow.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

Naval officers and the coast-survey.

In your issue of the 11th you refer editorially to the proposition contained in the report of the secretary of the navy for 1883, to transfer all national work connected with the ocean, and conducted by other departments, to the control of the navy department; and in a subsequent paragraph you make some criticisms upon the character of the work performed by navy officers in the coast-survey. The question as to whether the navy or the treasury department shall control the work, I do not propose to discuss; but I must enter my protest against the assertion in a journal like *Science*, which goes forth to the world as authority, that the "work which these [navy] officers perform is routine, the plans and methods for which have been devised and developed by civilian experts," and to the assertion contained in the phrase, "the present method of employing our superfluous navy, under the intelligent supervision of