

## GEOGRAPHY IN SCHOOLS: A REPLY.

By B. C. WALLIS.

I SHOULD like to preface this reply to the review of my book, *The Teaching of Geography*, by Mr. G. G. Chisholm<sup>1</sup> by thanking the editor for the courteous invitation to make this reply, and by acknowledging the sympathetic spirit in which Mr. Chisholm makes his comments. A book on the teaching of geography may be criticised from the three following points of view: *firstly*, that of the practical teacher who asks for guidance in teaching geography; *secondly*, that of the expert geographer, who examines what may be called the geographical content of the book; and, *thirdly*, that of the scientist, who is on the lookout for contributions to the theory of geography regarded as a science. Mr. Chisholm writes from all these points of view, and his remarks may be taken in the order which has been set out above.

From the practical point of view Mr. Chisholm lays stress upon my omission to give suggestions on the teaching of *hachures* (p. 411), and upon the inclusion of map-reading tests from printed copies of portions of Ordnance Survey maps in examination papers. In my experience, the difficulty of hachures never arises, the principles of hachuring require no teaching, the pupils who work through the course use hill-shading naturally when they need that vehicle of expression. It is not possible to draw a sketch, such as fig. 10 in my book, from a contour map without appreciating the points which hachures illustrate. To them, hachures need no emphasis, the examination of a model of North Wales, made by their school-fellows, and the simultaneous examination of an Ordnance map, such as fig. 39 in my *Junior Geography of the World*, is sufficient. Mr. Chisholm's experience regarding the use of portions of Ordnance maps in examinations simply justifies my implied criticism; one examiner may do very little, but many examiners, by creating a demand for such maps, will soon bring into existence arrangements for adequate supplies. I fancy the matter could be managed much more cheaply than Mr. Chisholm found.

From the point of view of the content of school geography, I made, deliberately, frequent reference to the question of mineral deposits. In atlases, map-makers indicate, usually by blobs of colour, the presence *in situ* of certain ores. Presumably they rely upon the investigations of field geologists. Text-books sometimes state loosely, "mineral A is found in the neighbourhood." The pupil gleans nothing more from these helps than the knowledge that the mineral occurs there; he does not know whether it is worked, whether it is likely to be worked, or whether it may never be worked. Geography is related to human activity, yet the pupil is not told now this deposit is related to men's efforts. Some improvement is required, and I suggest that the school pupil should not be told of the presence of mineral

<sup>1</sup> *Scottish Geographical Magazine*, August 1915, pp. 406-411.

deposits unless there are miners actually at work at the place. Mr. Chisholm's remarks about the potential value of unworked deposits are excellent for the student of geography who has passed beyond school years. Pupils in school should rarely learn facts in isolation, and, since they know no geology, facts regarding unworked minerals are isolated facts. This is the theoretical objection, but there are potent practical objections to be added; firstly, the facts of school geography are too numerous, and it is time that an effort should be made to eliminate the comparatively unimportant facts; secondly, the method of presentation of the facts is loose, and helps the pupils to think loosely; thirdly, the principle of relative importance should be applied to the graduation of the facts to be learnt concerning the world's minerals; it is important to know a great deal, for example, about the iron deposits in the United Kingdom, since there are many iron-workers among our people; it is less important to know so much about the iron ores of Canada, for there are fewer workers in iron; it is of no importance to the child to know about the iron deposits in South Island, New Zealand, since no one works them. The actual or potential value of mineral deposits depends not only upon the factor of situation, but upon the factors of transport, distance from markets, facilities for mining, etc., and it seems to me absurd to exaggerate the importance of one factor to the exclusion of the others. Mr. Chisholm's experience, as an examiner, no doubt agrees with mine; candidates are apt to infer, because a mineral is stated to exist in a locality, that this mineral is an important element in the life of man in the locality; he has, no doubt, found cases where the only knowledge possessed by a candidate regarding a certain district is a knowledge of the presence of unworked mineral deposits and a complete ignorance of the essential facts concerning the real occupations of the people of the district.

I dwell upon this matter at some length, in the hope that it will give rise to the expression of opinions from teachers and others, and in the hope that the columns of the *Scottish Geographical Magazine* will be open for a discussion on this point. Mr. Chisholm refers (p. 409) to my remarks upon the acquisition of topographical knowledge. My experience differs from his; it is still necessary to state that mere drill in the names of capes and bays, etc., is not essentially geographical; a knowledge of the names of the chief capes of the world does not mean that the pupil has acquired some knowledge of geography. Mr. Chisholm refers to my remarks in the concluding chapter, which is a summary of the book, but he seems to have missed the more complete reference to topography in the first chapter, which deals with the scope of school geography.

A teacher's presentation of the matter of his special subject will depend upon his views regarding what may be called the "logic" of the subject as a branch of knowledge. His teaching will be influenced by his pedagogical and also by his scientific outlook; but neither in his actual lessons nor in his description of his teaching will his views upon the theory of teaching or the theory of knowledge find explicit statement; hence Mr. Chisholm, like others who examine a book upon teaching from

the third point of view stated above, is at a slight disadvantage in that he tries to make explicit what is necessarily implicit. My views on the fundamental bases of geography as a science are not set out with precision and care of statement in my book, they underlie my practice and they are implicit in my description of my teaching, but they cannot be regarded as a studied contribution to the theory of the science of geography. Mr. Chisholm, however, lays greatest stress upon this aspect of my book; he says that my descriptive statement of the subject-matter of geography would apply to a large part of medical science. This is so, and some day a geographer will write a geography of medicine; not only medical science but medical practice is limited by its environment, else why should American practitioners, for example, find it useful to visit Europe and compare notes with their co-workers. "The environment in which human life is passed" is not limited to the place-element, the time-element is of almost equal importance, and, perhaps, the human-element is most important of all. Human caprice, human folly and human ambition are environmental influences which the rigid geography of earlier days tended to ignore. School geography is, so far, almost entirely devoted to the element of place, so that I could do little more than suggest other ideas.

Mr. Chisholm next deals with my generalisations. He appears to limit his view of a generalisation to the ideas of cause and consequence; these ideas are to a large degree inapplicable in geography, where a generalisation partakes of the nature of a statement of co-existence of certain related factors: in geography there are more interactions than reactions. My view of the term generalisation is based upon Dr. Venn's *The Principles of Empirical or Inductive Logic*. Referring to the statements that "essential similarities are presented by the winter rain regions wherever they occur" and "monsoon rains are limited to the same area as the tropical temperatures," Mr. Chisholm asks: "What is the essential similarity between the winter rain regions of Sicily, the south-west of British Columbia, the south-east and the extreme north-west of India, and the western seaboard of Japan, and what more typical monsoon area is there than northern China, which surely cannot be described as having tropical temperatures?" In reply reference may be made to Dr. Herbertson's maps of *The Natural Regions of the World*, where the classification of the world into definite regions is surely based upon essential similarities, and where the south-west of British Columbia is *not* given as a region of winter rain and where northern China is *not* given as a monsoon region, and also where the monsoon regions are a sub-division of "The Hot Lands."

It may be that Mr. Chisholm would not accept Dr. Herbertson's precise interpretation of the terms "winter rains" and "monsoons," yet this would scarcely affect my position, which depends upon the acknowledged utility of the regional treatment of geography. I specifically state that similar winter rain regions are not identical, and it seems to me to be a contradiction in terms to speak of temperate monsoon rains.

Finally, there are several other matters to which Mr. Chisholm

refers. Having met teachers who are interested in the controversies connected with the formation of coast-fjord lines, and others who use block diagrams in their teaching, I refer to these facts and point out that the teacher, as a student, may be interested in controversies which are not fit studies for his pupils, and in the second case, that block diagrams of river capture—to take an example of their use—should follow, if used at all, the study of models of definite areas of the country. I do not say that the study of block diagrams to show the processes of river capture is necessary; I refer to a growing practice of using such diagrams, and suggest that the model should come first, a practice which is not usually adopted.

Similarly, with reference to the Hudson Valley, Mr. Chisholm emphasises what he considers my lack of explanation of the present importance of this topographical feature. My reference to the Hudson Valley occurs in a chapter concerned with the relations between history and geography, and I deliberately chose this valley as an illustration of the point that no matter what value is, or can be, attached to its present importance, that importance is not relatively so great as the importance of the valley during previous centuries. Put baldly, the argument is this: let the present value be  $X$ , then the value in past years was more than  $X$ . Surely such an illustration was not the place for an exposition of the factors which contribute to the present importance of the Hudson-Mohawk traffic line, no matter how great, or even if such were the case, how small, the present importance may be. The deliberate choice of the Hudson Valley might be presumed to emphasise the point that man's progress has reduced the relative importance of topographical features, since he is ever engaged in the attempt to minimise their relative importance. Briefly put, the opening of every new route across the Appalachians has reduced the relative importance of the Hudson Valley, which was at one time the only route westwards.

Again Mr. Chisholm quotes part of a paragraph: "the element which introduces order into the treatment of town life is largely the question of the uses to which the coal deposits have been put," and says that this quotation is based upon too limited a view, the consideration almost solely of the British Isles and certain parts of Germany, to the exclusion of the United States, and omits to quote the remainder of the paragraph which goes on immediately: "and hence the British Isles can be conveniently treated in reference to the industries which have arisen upon the coalfields," and fails to state that the paragraph from which the quotation is taken is headed "The British Isles." With so many signs that attention is concentrated upon the British Isles, it does not appear to me that the reader should extend his thought beyond the limits of these islands. The implication of the paragraph was intended to cover the well-known teaching practice of concentrating the treatment of British towns on those populous centres which lie upon the coalfields. This practice is familiar to me through twenty years' experience of teaching in schools.

[NOTE.—As several of the points discussed in the above article seem of practical

importance in the teaching of geography, further discussion from teachers and others would be welcomed. The points upon which it seems attention might be usefully directed are especially the following: The extent to which unexploited mineral deposits should be considered by the teacher in an ordinary school course, and especially the value of the late Dr. Herbertson's division of the world into *Natural Regions*, notably of his somewhat exceptional use of the term monsoon. This use, accepted by Mr. Wallis, does not seem to be that of most authorities. *Ed. S.G.M.*]

---

## GEOGRAPHICAL NOTES.

### ASIA.

**Exploration of Siberian Coast.**—In reference to our note on this subject which appears on p. 207, it is announced in the daily press that both the Sverdrup and Vilkitski expeditions have returned safely to Europe. The two parties in their three ships reached Archangel in the middle of September. Commander Vilkitski has been successful in making the continuous voyage from Vladivostok to Archangel along the northern coast of Siberia, and this without the loss of any member of his crew. No details are as yet available in regard to Captain Sverdrup's expedition, beyond the fact of the safe arrival of the *Eclipse*, the ship of the expedition, at Archangel.

### AFRICA.

**The German Colonies in Africa.**—M. Gustave Regelsperger contributes to the *Revue Général des Sciences* for June 15 an article on the German Colonial Empire as it existed before the outbreak of the war, and on the probable future lines of development of its component parts. The most interesting parts of the article relate to the African colonies, which are the most extensive, and it is this section which we shall summarise here.

Beginning with the western colonies, we find that Togo is a narrow strip of territory extending from the coast to about 11° N. lat., compressed between French and British lands. As regards productions and fertility this strip of land falls into various zones. Nearest the sea is a belt of sand and narrow lagoons, behind which lies a vast undulating plain, with a tropical climate and heavy rainfall, rich in forest, and fitted for the cultivation of coconut trees, oil-palms, cotton, and so forth, while the natives grow also a variety of cereals and vegetables. This coastal savana is separated from an inland mountain belt by an arid steppe. The mountain chains run from north-east to south-west, and rise to heights of about 2250 to 2500 feet. The rains are heavy, and as the soil is generally more or less impermeable there are many rivers and springs. A considerable amount of forest occurs, and cocoa, coffee, and rubber vines can all be grown. The great resource of the regions is, however, livestock rearing, hitherto carried on only by the natives. The industry is capable of considerable development, but is greatly