first seeing them, that the men had been discharging their excess energy by playing in the snow, and that the balls merely marked the beginning of a snow fort.

As I approached the parade ground, however, I noted, first, the absence of footprints in the snow; second, that the paths of the balls were in general parallel, and third, that the "balls" were rolled in one direction only, like cotton batting or a bundle of rugs, and that they were properly speaking "rolls" instead of "balls" So I was forced to the conclusion that they were the effect of the wind.

On questioning the old inhabitants of the Fort I learned that they were indeed wind-blown, and that such effects occurred not infrequently there.

The "balls" or "rolls" varied greatly in size. Some were over three feet in diameter, but the majority were smaller, about two feet. The largest one that I saw was about four feet in diameter and two feet thick.

They were all bi-concave. The paths in their wakes were triangular in shape, and varied greatly in length, depending of course on the size of the ball. The path of the large roll mentioned above was over fifty feet in length.

All the larger balls had fallen on one side, showing that size was not so much a matter of wind-power as it was of balance.

There were about three inches of soft snow on the ground, and the velocity of the wind was nearly cyclonic.

Karl M. Dallenbach
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A WALL-SIDE MIRAGE

To the Editor of Science: Dr. Knowlton's note on "An unusual mirage" in Science for October 3, suggests mention of a mirage on a vertical north-south wall, on Garden Street, Cambridge, when the warm afternoon sun shines on it in quiet weather. If the observer stands close to the plane of the wall, he can easily see a mirror-like reflection of the elbow or of the side profile of a person who is walking near the wall, fifty or a hundred feet away.

W. M. Davis

QUOTATIONS

THE BRITISH ASSOCIATION

The authorities of the British Association for the Advancement of Science have made known their satisfaction with the meeting at Bournemouth, which ended last Saturday. This judgment doubtless was determined by the old standard, which, even before the war, was neither high nor rising. A warm welcome from the beautiful town, convenient arrangements for the meetings, summer weather, and nearly 1,500 members, including quite a number of scientific men, plenty of attractive subjects dealt with by speakers who "drew," and excursions with a decent scientific pretext—such were the materials that produced success. It is to be noticed that they would have suited the requirements of almost any kind of congress. It is more difficult to distinguish in them the "differentia" of a meeting for the advancement of science. Where revelations of the secrets of the war had been promised, there the visitors thronged. The vast growth of naval engines and armaments, hydrophones in fish-like cases, paravanes, sound ranging devices, airships and aeroplanes, tanks and submarine mines, poison gas and high explosives, excited and delighted the members of the British Association precisely as they would have excited and delighted the general public. There was a refrain of the achievements of British men of science, as opposed to the vaunted science of Germany, but there was very little of detailed scientific statement or discussion of methods. Almost equally popular were the items in the Educational Section. Sir Robert Blair on continuation schools, Bishop Welldon on citizenship, General Baden-Powell on the Boy Scout movement, other speakers on the advantages of private schools or the benefits of a sound knowledge of English, received and deserved attention. In mentioning a few other examples of the subjects that attracted large audiences we throw no doubt on the value of knowledge on the political bearings of international rivers, the use of hypnotism in treating shell-shock, or whether or not the working day should be

determined by legal enactment. But these, in fact, and as they were presented, have only a remote connection with science.

There is a double reason for the inconspicuous appearance of the scientific side at meetings of the British Association for the Advancement of Science. The results of research, if they are to be useful to other workers, or even if they are to increase the scientific reputation of their authors, must receive quick and effective publication. The organ of the British Association is a bulky annual volume, costly to buy, slow to appear, and cumbrous on private shelves. Prudent investigators prefer other means of making known their work, and hence offer to the association very little that is new. The traditional policy of successive councils, or more probably of the general officers who are the effective managers of the association, has been to cater for numbers rather than for quality. Hence the tendency in favor of the popular. Hence the continuous increases in the numbers of the sections and sub-sections, the wish to provide for any subject that can be alleged to have a connection with science. The theory no doubt is that these outer circles should be infiltrated with the scientific spirit. The practical result is that many papers are accepted by the British Association which are better suited, were they certain of acceptance, to specialized congresses, or to local debating societies. An excuse that is offered for this policy is that large attendances mean large receipts and the possibility of making large grants for more research. A sum of over £1,300, it is proudly stated, is to be provided for research by reason of the success of the Bournemouth meeting. Twelve sectional committees put in their claims on it, and a general committee, supposed to contain, and actually containing, some of the best brains in Great Britain, had to meet in solemn conclave to allot this vast sum.

The British Association does some good work. It could do much more. It serves as a meeting ground of men engaged in different branches of science. Were they not swamped by the camp-followers and separated by subdivision, they could really come together for the double purpose of social contact and of discussion of the technical methods on which the progress of science depends. It is the great annual opportunity for the publicity of scientific work. The more necessary that it should avoid the popular "copy" which has always a ready access to the lay organs of publication. The more vital that it should present the highest aims and needs of science. What is most vital is that it should insist on the advancement of science simply as knowledge, and not merely as a means to practical utilities. Certainly in the recesses of some of the sectional meetings, and in a few of the formal addresses, there was insistence on pure as opposed to applied research. But the small voice of the true scientific spirit was drowned by the resounding advertisement of the practical utilities that had come from science. Moreover, it frequently became shrill with personal protest—protest from scientific men who thought that they had been neglected or controlled by "practical" men. We do not dispute that the protests were sometimes just, and that it may have been useful to make them. But the nation, and perhaps even the government, which is a very different thing, will listen more readily to science at its best. And the best voice of science is neither protest, promise, nor boasting, but the proclamation of the intrinsic worth of knowledge spoken with faith and imagination.—The London *Times*.

SCIENTIFIC BOOKS

Un manuscrit inédit de Dolomieu sur la minéralogie du Dauphiné. Grenoble, imprimerie Allier Frères, 1919, 50 pp. 8vo.

We are indebted to Professor Alfred Lacroix, Secretaire Perpétuel of the Académie des Sciences, for the publication of an inedited manuscript of Déodat de Dolomieu. This treats of the mineralogy of the old province of Dauphiné, and embodies notes sent to Dolomieu by the city librarian of Grenoble, Du Cros. As a little of the nomenclature has become obsolete, Professor Lacroix has here and there supplied (in parentheses) the modern equivalents, and in a very brief