

THURSDAY, DECEMBER 11, 1873

THE ARCTIC EXPEDITION

WE were able to announce, in our last number, that the version of the reply of the Government with regard to the despatch of an Arctic Expedition, which had appeared in the daily newspapers, was inaccurate, and that the subject was still under consideration. But the grounds for abandoning Arctic discovery, which were attributed to the Government, have no doubt occurred to the official mind; and they involve fallacies which would be so fatal to the best interests of this country, that we cannot allow them to pass without remark.

It was said that the Government hold that survey operations have a stronger claim than those of discovery; and that if Ministers were inclined to augment charges for such purposes, they would incline to do so for survey, rather than for a new voyage of discovery.

We have here an attempt to separate scientific expeditions into two branches, survey and discovery. The originator of this fallacy does not appear to be aware that all surveying voyages are voyages of discovery in the strictest sense. Their operations are intended to explore, and accurately lay down, unknown or little known coasts or harbours. Captain Cook's voyages were surveying operations, and it will scarcely be denied that they were also voyages of discovery. The Arctic voyages of Ross and Parry included surveys which have been of the utmost value to the whaling fleets ever since.

Arctic discovery is now advocated by naval and scientific men for the very reason that it will include marine surveys and hydrographical investigations of the most undoubted importance. Few operations have "benefited commerce and promoted international intercourse" more than Arctic voyages of discovery. One of our earliest Arctic expeditions discovered the White Sea route to Russia, and opened a flourishing trade. The Spitzbergen voyages led to the establishment of a fishery which added millions to the wealth of these islands. The discovery of Davis's Straits did the same. Ross's first voyage showed the way for the whalers into Baffin's Bay. Parry's voyages pointed out new ground in Prince Regent's Inlet. The handling of steamers by Osborn and Cator, as Capt. Penny declared at the time, caused a revolution in the system of ice navigation by whalers. Arctic voyages are surveying operations, and they have benefited commerce as much as any other surveying work whatever. As to promoting international intercourse, Arctic achievements have always excited friendly sympathy and interest throughout the civilised world.

We must also notice the shocking insincerity of the reply that is imputed to the Government. An Arctic Expedition cannot be undertaken, we are told, because Ministers are anxious to provide funds for ordinary surveys. Now it is a fact that no Government has ever more persistently neglected the surveying branch of the service; which has been so starved and pared down as to cause anxiety to those acquainted with the subject. If the Hydrographer's official position did not seal his lips, he could give an account of the way

in which the surveying department has been treated of late years, which would excite indignation throughout the country. Some idea may, however, be obtained of the way in which surveys are neglected, from the following figures. From the year 1849 to 1853, the proportion of each 1000*l.* of naval expenditure spent on surveying averaged 15*l.* 5*s.* It is now 9*l.* In 1871-72 the total effective naval expenditure was 7,807,946*l.*, and the expenditure on the surveying branch was 70,456*l.* The total tonnage of the British mercantile marine in 1871-72, was 7,142,894, so that the total naval expenditure per ton of British naval shipping, was 1*l.* 1*s.* 11*d.*; and the proportion of expenditure for surveying and discovery, by far the most useful and important work of the navy in time of peace, was 2*d.* Not only has surveying and Arctic work been rendered inefficient by extreme parsimony, or wholly neglected; but, while the wealth of the country has enormously increased, the expenditure on the best work of the navy has been cut down to a third less than it was twenty years ago.

It may be that the official notion of surveying is confined to the revision of work on comparatively well-known coasts. Even such work is done inefficiently; and its renewed efficiency would be no argument for the neglect of Arctic exploration. At the time when Arctic expeditions of discovery were despatched, the more ordinary surveying operations were not neglected. Officers were surveying the coasts of these islands, Capt. Graves was at work in the Mediterranean, Collinson in China, Kellett in the Pacific, and their vessels were properly equipped. Assuredly the Government are bound to restore the Surveying Department to efficiency; and such a reformation would include the despatch of a thoroughly well-equipped Arctic Expedition for survey and discovery. We understand that a further most able and carefully-considered letter has been addressed to Mr. Gladstone on this subject; and we earnestly trust that, after further consideration, the Prime Minister will see that his plain duty points in the same direction as political expediency. The country feels strongly on the subject; and the resolution to despatch an Arctic Expedition of discovery in 1874, will meet with the hearty approval of all classes of the community.

LOCAL SCIENTIFIC SOCIETIES *

III.

IN the ten years succeeding 1860 the number of local scientific societies formed throughout the country was more than double that of the previous decade, amounting altogether to fifty-six, of which no less than forty-five are field-clubs. Many of these are well known for producing excellent work, but we must refer our readers to the list at p. 521 of vol. viii. for details. The Quekett Club of London was formed during this period, as were also a number of clubs in the Severn Valley, the Eastbourne Natural History Society, and others which have done good work, but which are far too numerous to mention. Two or three very excellent societies were formed in North Britain during this decade, including the Perthshire Society of Natural History, which, at any rate as represented by a few of its members, is one of the hardest-

* Continued from p. 40.

working societies in the kingdom. Under its auspices the *Scottish Naturalist* is published, and a *Flora and Fauna* of the extensive and varied county of Perthshire is being brought out; recently we noticed a proposal issuing from one of the members for the establishment of a British Naturalists' Agency. A very laudable though somewhat Scotch appendage has just been added to the Society, in the shape of a "Perthshire Mountain Club" for the exploration of the Perthshire mountains, more especially those that have been neglected by naturalists, with the following office-bearers:—A cairn-master, a scribe and naturalist, a geometer, a bard, and, to crown all, a quagh-bearer, a quagh being a two-eared drinking-cup from which to quaff the "mountain-dew" withal.

Another Scottish club that we deem worthy of special mention is the Alva Society of Natural Science and Archæology, whose history has been one of continued success. There can be no doubt, the secretary informs us, that this Society has tended to foster a taste for natural history in the neighbourhood, and encouraged the observation of local phenomena. It was founded in 1862, and now numbers 110 members belonging to all classes of society; the patron being the Earl of Kellie, the president the sheriff-substitute of the county, the vice-presidents a medical practitioner, a grocer, and a wine-merchant; the councillors a clergyman, a bank agent, a hairdresser, an architect, and an ironmonger; the treasurer a druggist, the secretary a medical practitioner, the curator a blacksmith, and the librarian the governor of the prison. The object of the Society is the study of natural science and archæology by the exhibition and preservation of specimens, the reading of communications, by lectures, excursions, and the formation of a library and museum. The number of members has become so large, and the collections of the Society have so accumulated, that their present place of meeting has become too small, and the Society has therefore contracted to have a special building erected for its own use, at a cost of about 1,600*l.*, raised by subscription from among the members and the noblemen and gentlemen of the neighbourhood. The papers read at the monthly meeting are printed in one of the local papers, the type being afterwards broken into pages, and a small volume of transactions thus published for each year. One of these volumes we have before us, and its contents are varied and exceedingly creditable, though we miss a list of the fauna and flora of the small county of Clackmannan, in the county town of which the Society has its head-quarters. We hope this excellent Society will make the compilation of such lists part of its work in the future.

Our space only permits us to name the Largo Field Naturalists' Society, on the north shore of the Frith of Forth, a society founded in 1863, and which, to judge from the papers read and the secretary's report to us, is doing excellent service in connection with the natural history of the county of Fife; it appears to have a valuable collection of specimens. We mention these three societies because, in some respects, they are worthy of imitation by other similar associations, and because, we regret to say, Scotland is not represented in the list of field-clubs in anything like the proportion, even considering its size, that England is; very large districts, which we are sure would yield abundant fruit of a rare and interesting

kind, being entirely unworked by any club. We hope in the course of a very few years to see this defect remedied.

In the three years 1871-2-3, at least twenty-seven new societies have been formed; there may have been more of which we have not heard. Fourteen of these have had their origin during the present year; and if field-clubs continue to multiply during the remaining years of the decade in the same proportion, we may expect to see very few districts in England and Scotland at least, without its local field-club. We had hoped that the inquiries of the British Association Committee on this subject might have given an additional impetus to the spread, as well as to the usefulness, of such societies; but we fear that hitherto this committee has done absolutely nothing.

We cannot conclude this part of the subject without referring to the field-clubs of Lancashire and the west of Yorkshire. In Lancashire there are a number of field-clubs* composed almost exclusively of working-men, some of which have been in existence for many years, and all of them, we believe, in excellent working condition. In Lancashire there are at least eleven of such clubs, one of which is among the most efficient field-clubs in the kingdom. This is the Todmorden Botanical Society, which may be taken as a specimen of these Lancashire clubs, and of which Sir Walter Elliot thus speaks:—

"One of the most successful of the above is the Todmorden Botanical Society, established in 1852, principally through the exertions of Mr. Stansfield, who has always been its president. The bulk of the 185 members are working-men, who pay a subscription of 6*s.* a year, meet on the first Monday of every month, and in the winter, on the intermediate fortnights, for lectures and papers; and make six field excursions, four within ten miles, and two longer ones, extending into neighbouring counties, and even as far as Scotland. They have a good herbarium, and have prepared a flora embracing a space of six miles round Todmorden. They have also acquired a library of 600 volumes, chiefly botanical."

We can only briefly refer to the West Riding Consolidated Naturalists' Society, which at present, as will be seen from our list, consists of an amalgamation of twelve local clubs, belonging to various towns in the West Riding, and all of them, like the Lancashire Societies, composed mainly of working-men. Each of these societies has, we understand, its own district in which to carry on its field-work, and the united societies have stated meetings, but so far as we have ascertained, they have not yet decided upon a satisfactory *modus operandi*. The amalgamated societies have, however, a journal in common, "The Yorkshire Naturalists' Recorder," in which their proceedings are published, we believe monthly. There is no doubt that if their united societies could devise a satisfactory organisation in which to carry on their work in co-operation, great good would be the result. Their example might, we think, be followed with advantage by other contiguous small societies, which we fear are often apt to get disheartened from the paucity of working members, and a feeling of isolation. This is

* We regret that these were omitted from our list, as we got no information from them, and Sir W. Elliot does not give them in his list, only referring to them for some reason in his address.

the only instance, so far as we know, in which a number of contiguous societies have united into a connected group, though other societies occasionally have excursions in common.

We regret to say that since our list was published, we have ascertained that two of the Yorkshire Societies named therein, are now defunct, viz. the Halifax Naturalists' Society, once a member of the West Riding Union, and the Leeds Natural History Society. We have been told that the Wigan Field Naturalists' Scientific Society, given in Sir Walter Elliot's list, with 150 members, is also dead. We hope that in reality these are not dead, but only sleeping; and that means may soon be taken to rouse them again into activity.

Altogether, then, including the Lancashire Societies not in our list, and others of which we have heard since our list was published, one of which was founded at Ballymena, County Antrim, the result, we believe, of some lectures there last winter, there are at the present time in Great Britain and Ireland at least 169 associations established solely or partly for the pursuit of science in one form or another. Of these 104 are professedly field-clubs, while a considerable number of the remainder do field-club work in so far as the publication of lists of the natural productions of their surrounding districts are concerned. Only 22 of these 169 societies were founded previous to 1830, while all the field-clubs were formed after that year, and by far the greater number of them within the last twenty-three years. We do not reckon among these the scientific societies which have been formed in connection with our public schools, to which we shall refer afterwards.

Of these societies the English ones are mainly grouped in the North of England, along the Welsh border, and in the southern counties, the midland district being but sparsely represented, and Bedfordshire,* Derbyshire, Essex, Hertfordshire, Huntingdonshire, Lincolnshire, Rutlandshire, not at all, not to mention the Channel Islands and the Isle of Man, which would afford opportunities to field-clubs which cannot be attained in the main island at all. Glamorganshire is the only Welsh county represented by a society, while all but three of the Irish counties are unrepresented. Scotland, the birthplace of field-clubs, we have already referred to as being far behind England in this respect. Ireland, and even Wales, cannot perhaps at present be blamed for their backwardness in regard to associations of this kind, though each country, in its own way, offers a magnificent field of investigation to local naturalists. With regard to the unoccupied districts of England and Scotland, we can only hope that the scientific contagion may rapidly spread, as no doubt it will when all the conditions are present for its taking effect. Meanwhile, the rapid spread of scientific societies, and especially field-clubs, and the valuable results that have already followed from the labours of a number of them, must be exceedingly gratifying to all who desire to see the triumph of science, and, indeed, to all who are earnestly seeking after the elevation of their fellow-men. Is it not one more sign that "the old order changeth, yielding place to new?"

* By a misprint in our last article the Woolhope was said to be in Bedfordshire instead of Herefordshire.

MARSHALL'S TODAS OF SOUTH INDIA

A Phrenologist amongst the Todas; or, the Study of a Primitive Tribe in South India. By William E. Marshall, Lieut.-Col. of H.M. Bengal Staff Corps. (Longmans, 1873.)

THE Todas are a pastoral hill-tribe in the Nilagiri region of Southern India, whose singularly interesting social condition fairly entitled them to be described in a volume by themselves. Colonel Marshall succeeds in communicating to his readers the lively interest he felt in his work, and several points of ethnology will be perceptibly advanced by it, notwithstanding much of the theoretical part of the book which will hardly meet with acceptance.

Especially from the moralist's point of view, the condition of these secluded herdsmen deserved to be put on record while still little changed under influences from without. They show perfectly how the milder virtues naturally prevail among men in an intellectually childlike state, if only society is undisturbed from without, and finds its equilibrium within. "The general type of the Toda character is most unvarying; singularly frank, affable, and self-possessed, cheerful yet staid;" theft and violence are almost absent among them; their quiet domestic life is "undisturbed by the wrongs of grasping, vindictive, overbearing natures;" their engagements to support their wives and children, though resting on mere promises, are kept through utter guilelessness and want of talent to plot. Toda society is simply held together by the strength of family affection. "It is a quiet, undemonstrative, but intensely domestic people; domestic in the wider sense of viewing the entire family, to the last cousin, much as one household, in which everyone is everywhere entirely at home; each one assisting, with the steadiness of a caterpillar, in the easy, progressive task of emptying his neighbour's larder; no one exerting himself by one fraction to raise the family. The great feature in Toda organisation, is the all-absorbing power of his domestic attachments, which, like Pharaoh's lean kine, swallow up all other qualities." The points where the moral code of these easy-going folk differs from that of modern intuitive moralists, are especially polyandry and infanticide. Their marriage-relations within the family have perhaps more nearly approached than those of any other known tribe that promiscuity which several modern ethnologists have supposed to belong to a primitive state of society; "it was formerly their almost universal custom—in the days when women were more scarce than they are now—for a family of near relations to live together in one man, having wife, children, and cattle all in common." Here, indeed, is socialism of an extreme order, prevailing among a low race, in whose general condition its evil and good are alike visible. As need hardly be said, to the Toda mind polyandry seems part of the natural order of things. So it was with infanticide, till about fifty years ago an English officer, Mr. Sullivan, mounted the Nilagiri plateau and visited the homes of the Todas. Since then all the events of Toda history have been dated from the visit of "Sullivan Dore," as we date from the Christian era, and thenceforward the Government put down infanticide, and its former prevalence is now only to be traced in the census, and learnt from the memory of old people.