

the large crevasses (often concealed from view), seracs, and the very unsatisfactory form of moraines. Avalanches were of frequent occurrence. Unfortunately, the meteorological conditions were unfavourable to plane-tabling.

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### PROCEEDINGS OF THE ALPINE CLUB.

A GENERAL MEETING of the Club was held on Tuesday evening, April 6, 1909, at 8.30 P.M., Mr. Hermann Woolley, *President*, in the chair.

The Accounts for 1908 were presented by the HONORARY SECRETARY and unanimously adopted. The Hon. Secretary reported that he had arranged that the Club should pay £400 for the dilapidations required on the expiry of its lease, and the thanks of the Club were accorded to him for the trouble he had taken in arranging this.

The PRESIDENT, having alluded to the deaths of Sir Maurice Holzmann, K.C.B. (1874), a former Vice-President, and Col. H. G. Watson (1908), announced that the late Mr. C. E. Layton had left instructions that the Alpine Club was to be empowered to select from his collection any books suitable for the Club Library; the Librarian had gladly availed himself of this privilege.

Mr. ANDREWS read a paper on 'Climbing on Lliwedd,' which was illustrated by lantern slides.

Mr. READE was sure that all who knew Lliwedd had enjoyed the paper. Climbing on Snowdon had the advantage of being within easy reach of one's hotel. He thought Lliwedd the finest cliff in England or Wales. It looked from the bottom extraordinarily impossible, and when climbing on it, it appeared so steep that one could not see more than a few feet ahead. Some of its tremendous slabs were comparable to those of the Chamonix aiguilles.

Captain FARRAR said that his interest in Welsh climbing was first aroused by travelling with a friend in the Alps, who was always comparing them with the mountains in Wales. He went to Wales with a languid interest, but returned in a week a humbler and much wiser man. He was led over some desperate places. He had been accused of using strong language, but it was always, he considered, appropriate. He found harder things in Wales than he had ever found in the Alps. They were short or they could not be done at all. One had to use every muscle and every bone, and even then it was hard work to get up. It was a splendid training-ground for the mountaineer.

Professor J. B. FARMER thought that everyone would realise how fine a training-ground it was. He knew no cliff where balance was more necessary. The rock was very varied in character. It had been bent and twisted, and as a result in the comparatively short distance of half a mile there was a great variety of rocks of different texture, and for that alone it was well worth not

only a visit, but careful study, for it taught one to climb rocks of very different types.

Mr. MUMM had visited Snowdon in 1889. He had climbed Lliwedd. He experienced what was referred to in the paper, that when some way up on the cliff and looking down one could not say how one had come. When he was there, there was only one route; now there seemed to be about thirty. The route he went was by the Central gully and the Western Peak. There was water-worn rock at the bottom. Then a flat platform was reached and the gully was left by a right turn. They found the rock good. They wandered wrong, however, and got into difficulties. He was with Macnamara and Beaumont. They started at 11.5 and got to the top at 8.20—four hours and a quarter for 1,000 feet. Near the bottom none of the route was easy, and towards the top some of it was very difficult indeed.

In moving a vote of thanks the PRESIDENT remarked that the paper to which they had listened was highly significant of the great development in the art of rock-climbing that had taken place since the first attempts to climb the face of Lliwedd in the early 'eighties, and also strikingly exemplified how surprising a number of different routes could be found by careful and systematic research on a precipice of decidedly unpromising appearance. He would like to ask Mr. Andrews whether the climbs on Lliwedd had been explored from above by the use of pitons and ropes.

The vote of thanks was unanimously passed.

Mr. ANDREWS, in reply, stated that Lliwedd had been conquered by fair mountaineering, and its climbs had never been treated as gymnastic problems. Though difficult, he did not consider that climbing on Lliwedd required strenuous efforts. He agreed with Professor Farmer on the value of these expeditions as a training in balance. Any climber who had learnt to stand securely on one of the narrow ledges of Lliwedd would have undergone an invaluable preparation for rock and ice in the Alps.

A GENERAL MEETING of the Club was held on Tuesday evening, May 4, Mr. Hermann Woolley, *President*, in the chair.

Messrs. H. Edwards and H. E. G. Tyndale were balloted for and elected members of the Club.

The PRESIDENT announced that the Committee had elected Dr. M. A. Stein, the explorer and cartographer of the Kun-Lun Range, an Honorary Member of the Club, and thanked Mr. Spencer on behalf of the Club for his services in connection with the Exhibition of Photographs.

Dr. STEVENS wished to see the publication of a certain number of reproductions of the photographs on the walls. He suggested that a selection might be made for reproduction and published in some handy form, as he thought many would greatly value it. Personally he should like to see it as a Supplement to the 'Alpine Journal.' Every year there were many fine photographs shown, and he thought that reproductions might be made every year. He

therefore moved that the Committee be requested to consider the possibility of issuing some such reproduction of photographs.

This was seconded by Mr. A. J. BUTLER and unanimously carried.

Mr. J. J. WITHERS read a paper on the 'Col des Cristaux,' which was illustrated by lantern slides.

Mr. MORDEY said that Mr. Fynn, mentioned in the paper, was an Englishman, and Mr. Murphy an Irishman, both of them resident in Switzerland and much interested in climbing.

Captain FARRAR spoke as one who had failed to get over the ridge at a place where no one had yet succeeded. He knew Mr. Fynn, and praised his mountaineering skill. It was Mr. Goudet, and not Mr. Murphy, who was with him on the expedition referred to in the paper. Mr. Goudet was afterwards killed in Austria.

Mr. FRESHFIELD said that the ridge was classical in being one of the places where alpine mountaineering began, as the Chamonix peasants went there to hunt for crystals. He always considered the ice-axe to be a development of the alpenstock and the crystal-hunter's small axe. If the two were fastened together the ice-axe was made.

The PRESIDENT said that Mr. Withers was to be congratulated on having made a new pass in the classic region of the Argentière glacier, round which so many peaks and passes reminded us of first ascents made by members of the Club.

Judging from the description they had heard, the Col des Cristaux must be a particularly attractive pass, and if taken with the Col d'Argentière should afford climbers who liked a long day a very fine high-level route from the Swiss Val Ferret to the Montanvert.

A GENERAL MEETING of the Club was held in the Hall on the evening of Tuesday, June 8, at 8.30, Mr. Hermann Woolley, *President*, in the chair.

Messrs. Jean Maunoury and Hermann Roos were balloted for and elected members of the Club.

The regulations for the Winter Dinner were submitted by the Committee and unanimously approved.

The PRESIDENT in introducing Dr. Stein said, 'It is well known to all of you that Dr. Stein received the Founders' Medal of the Royal Geographical Society for 1909 as a recognition of the valuable work he has done in the course of his remarkable journeys in Central Asia. It was in consequence of his exploration and surveying of the Kun-lun and the Nan-shan ranges that your Committee requested him to allow himself to be elected an honorary member of this Club. I have great pleasure in asking him to address you.'

Dr. MAX AUREL STEIN read a paper on 'Explorations in the Kun-lun and Nan-shan,' which was illustrated by lantern slides.

Mr. MUMM was glad to express his admiration of what Dr. Stein had done, the more so that until he had heard the paper he had no idea of the amount of exploration work accomplished by him in the

great mountain ranges, though he had known something of the valuable archæological work done by him. He had not known that Dr. Stein had so strong a claim to be an honorary member of the Club. He merely wished to express his extreme admiration for Dr. Stein's work.

Mr. FRESHFIELD said that by the map he found that the nearest point to the region described that he had visited was 1,000 miles away. He could not, however, resist the pleasure of tendering his heartiest thanks to their Honorary Member for the work that he had been able to do. Dr. Stein had not only qualified himself for the highest place among archæologists in a district where Chinese and Tibetan records were found alongside of Greek seals, but he had done wonderful work as a mountain explorer and surveyor. Mountain exploration might be compared to a pyramid, based on the surveyor who makes passes, and rising through the man who attacks peaks to its final perfection, the chimney-climber. The man who forms the foundation is, perhaps, of even higher value than the climber who forms the summit of the pyramid.

He thought it might be of interest to mention that the money promised by the Royal Geographical Society for an expedition through Nepal to Mt. Everest, which had been frustrated at the last moment by the action of the Indian Government, was going to be devoted to the exploration of an unexplored range of snow mountains in Dutch New Guinea under Captain Rawlings, of Tibetan fame. It might be noted with reference to a recent discussion between Dr. Sven Hedin and himself that if Chinese troops could cross the high snow passes described by Dr. Stein, there could be little difficulty for them in crossing the grass passes from Tibet into Sikkim, and therefore that to argue the eastern Himalaya to be uncrossable by armies was to maintain a view proved by history to be fallacious.

The PRESIDENT said: 'Although a study of the map reveals the great distances traversed by Dr. Stein in Chinese Turkestan, it hardly helps us to realise the enormous difficulties that he had to overcome. After seeing the photographs no one can have a doubt as to the magnitude of the task that Dr. Stein has successfully accomplished. We are very much indebted to him for coming here this evening and telling us what no other person could have told us about these great mountain ranges.'

A hearty vote of thanks was accorded to Dr. Stein.

Dr. STEIN in reply said: 'I feel grateful for the kind way in which the President and other members have referred to my work. I have never had time for serious climbing, and for the past twenty-one years have regretted it. I hope that these ranges will in future attract members of this Club.'

*Postscript.*

THE DUKE OF THE ABRUZZI'S HIMALAYAN EXPEDITION.—We learn from the *Morning Post* of August 13 that the Duke of the Abruzzi has reached a height of 24,600 feet.