and subsequently killed on December 19, 1914, at Jablonica, in the Carpathians, aged 32.

Lieutenant Eduard Pichl, the Dolomite climber, a former president of the Ö.A.C., was severely wounded in 1914, in the arm, in Galicia, and taken prisoner by the Russians.

Herr Hans Holzgruber, member of the Committee of the Austrian Club, volunteer, was killed in the Carpathians in March 1915.

Dr. Fritz Edlinger, Oberleutnant, was killed in Galicia in May 1915.

Herr Karl Kirchhof, lieutenant 3rd Tirolese Sharpshooters, was killed in Galicia in March 1915.

Herr Hans Dülfer, probably among the very best of the young Munich climbers and well known for his desperate climbs on the Totenkirchl and other peaks of the Kaisergebirge, was killed on June 15, 1915, before Arras, serving as volunteer in the Bavarian army, aged 22.

Dr. Jenö Serényi, the well-known Hungarian mountaineer and authority on the Hohe Tatra, was killed on the Italian front on July 14, 1915, aged 27. He had been awarded the silver medal for valour.

THE EDWARD MEDAL of the Second Class has been awarded to MR. GEORGE SANG, a well-known member of the S.M.C. and the A.C. for great presence of mind and courage in rescuing two munition girls at a fire caused by an explosion at an Explosives Factory.—*Times*, January 1, 1917.

REVIEWS.

Summer Holidays in the Alps, 1895–1914. By W. E. Durham, Prebendary of Exeter, Member of the Alpine Club. T. Fisher Unwin. 1916. Price 15*s.* net.

FOR the necessarily middle-aged reviewer the most comforting facts about the story of Mr. Durham's summer holidays are that he began them—if his references have been rightly calculated—when he was about forty; that he put into the years between forty and fifty-six not, it is true, very much fancy work or many new routes but activity enough for most men between four-and-twenty and forty; and that he is quite reasonably sanguine of a fresh start when the world drops on to its feet again. He wrote the book out of his old diaries because he was hungry for the Alps, in the hope that some other hungry people would turn it over and have their memories stirred. Your professional critic might say some rude things about it. There are a shocking lot of misprints. There is one page on which *gare* is twice spelt with two *r*'s. The *u*'s in Dévouassoud Gaspard's name (fine fellow; I wonder if he is still alive?) both become *n*'s twice over, and the last *a* in his surname becomes an *o*. These are samples.

To boil down all his old diaries successfully is a terrible strain on any man's literary resources, and, as the professional critic would put it, 'we cannot honestly say that Mr. Durham's resources show no trace of strain.' But there—these are small things if the author's aim is reached. And Mr. Durham has stirred his reviewer's memories deep. He made his first serious ascents in the Engadine and in 1898: I also. (Only, thank God, I was well under forty.) Hans Grass the younger was his first guide: he was mine too. The Dent Blanche from Arolla in 1901 was the first great peak of the Central Pennines for reviewed and reviewer; and both lit their pipes on the summit without protecting the match. In 1907 they both fought doubtful weather within sight of the calotte of Mont Blanc; with these differences—that one was in June, one in September; that the elder and better sportsman tried the Brenva route and fell off splendidly, while the more cautious junior was kept from the mere Dôme route by his guide's fear of avalanches. If they never met, in this or any other year when their lines on the map crossed, it is because Mr. Durham's generous five- or six-week season seems to begin about June 20 (and so to have its snow-line between the knees and the middle), while my beggarly inside of a month has often run into September, but never touched July, and so knows comparatively little of full couloirs and snow-burdened summit ridges; barring of course years like 1910, when the Furka roadside in August was as patchy with snow as a Norwegian foreground, or August 1913, when Mr. Durham would have found the Oberland much as he knows it.

One result of his early seasons was that Mr. Durham got plenty of climbing in 1914, before the ugly day when Christian Jossi went to join his battalion, and then had to lend his Herr five hundred francs—the virtue having gone out of cheque-books—with which to get away from Lausanne. Other results of course are that Mr. Durham gets the flowers and the polite landlords; but then—not to let the case for a good month go by default—has he seen the cows come down, or the September grapes hanging across the streets in Châtillon; has he eaten baskets of autumn fruits in the market place of Aosta or crossed the Col de Collon to his favourite Arolla on dry crusts and one-third of a tin of pressed beef among five, because he came to Prarayé by moonlight—at the world's end, as it seemed—and found the patron gone and the food with him? Even the Riffelalp is tolerable in the third week of September, and Chamonix on the day the cooks and chambermaids started down for Aix or somewhere was wonderfully attractive ten years ago. This flux of memories is a tribute to Mr. Durham.

There are many fine climbs and no end of jolly days in the book. It is not surprising that the people at the Montanvert were sceptical when Mr. Durham came back from climbing the Aiguille Verte by the great couloir in very good time for tea. The pace is witness enough to Jossi's strength and snowcraft and his com-

panion's ability to play up to him. There is a traverse of the Meije in bad conditions, very well told, and finely executed and many resourceful bits of snow work in June and early July. As a story perhaps the best is that of a long cloudy wandering on the snow-fields near the Col de Bertol, ending at the wrong pass, and crowned by a moonrise through the mists on the Arolla glacier; though the failure on the Brenva and many small and pleasant adventures are all good reading. For those who want to know what memories the book will stir, it may be said that there is no dolomite or Austrian Alps in it, nothing in the Tödi country, nothing south of the Mont Cenis line; plenty of Central Pennines, Graians and Oberland.

J. H. C.

Camp Craft: Modern Practice and Equipment. By Warren H. Miller, Editor of 'Field and Stream.' With Introduction by Ernest Thompson Seton.

THIS book is addressed by an American to Americans, and Americans of a particular class. To an English reader much of its interest lies in the fact that it displays with remarkable vividness the large part played in the holiday life of Americans belonging to that class by 'camping.' One comes across traces of this elsewhere. It has left its mark on current literature, and supplied the *leit-motif* of more than one magazine story. Here one gets to the very heart of the matter. Camping in this sense, as a pursuit extensively practised, is unknown in England, and indeed in Europe, where the precise conditions necessary for it scarcely exist. These are, briefly stated, extensive tracts of country, not very remote from great cities, but roadless, uninhabited and unappropriated, and provided by nature with unlimited timber and water, and a plentiful supply of game.

The simplest and severest way of playing the camping game is to sally forth on foot, alone or with a single companion, into a wilderness of this character, carrying thirty-five to forty-five lb. weight of tent, sleeping-bag or blanket, cooking kit, provisions, &c., together with a rod or gun, an axe, and minor accessories, and to see how long you can go on, supplementing your stores with what you can catch or shoot, and with such fruits, vegetables &c. as you find growing wild. Those play the game best who can carry on longest, and with a minimum of discomfort (this point is essential). One gathers that three weeks is a good record for a solitary woods-cruiser, and a strong player would cover a lot of ground, and change his camping-place frequently, though not necessarily every night. This is not exactly Mr. Miller's way of putting the matter, but it represents pretty accurately the underlying idea. There are, of course, many extensions and modifications of this, all depending ultimately on whether and to what extent any form of transport, other than one's own shoulders, is available. To drive a wagon into the woods with

the materials for a permanent base camp, from which shorter trips are made on foot, would seem to fall within the rules.

Mr. Miller opens with a rapid sketch of seven Camping Scenes: (1) in the Appalachians, the easy, beginner's, country; (2) in the sterner regions to the North, Maine and the Eastern provinces of Canada; (3) on one of the great Atlantic bays (here transport is by boat, and the difficulties of the game rather evaporate); (4) on a long river trip; this is the only kind of *prolonged* nomadic trip practicable in the East, where the one form of transport available, besides back-packing, is the canoe.[1] Then we take a great stride westward to (5) the Rockies, and (6) a region vaguely described as a thousand miles southward, which would seem to be the country of Clarence King, and conclude with (7) Alaska, and the Arctic or semi-Arctic wilds of Northern Canada, where transport means sledges and dogs. The book, however, is really concerned with Nos. 1 and 2, blended with 4. No. 7 reappears fleetingly in connection with problems of tent-warming and foot-gear; two short chapters on No. 5 are devoted mainly to the rudiments of what may be termed horse-craft and to the mysteries of the diamond hitch; Nos. 3 and 6 vanish altogether. Mr. Miller writes—and this is one of the strong points of his book—almost wholly from first-hand personal knowledge, and it is in the Eastern States that he is really at home. Here he has tried every variety of the camping game, from solitary back-packing to spending a summer in the wilds with a friend and their respective wives and children. His other strong point is that he has for his subject a very genuine enthusiasm. It has led him to make endless experiments with all the articles that play a principal part in the game—tents, sleeping-gear, cooking kits &c.—experiments which he has carried out himself with his own hands, partly for economy's sake, but largely also, one may be sure, because only in that way could he satisfy his craving to reach the utmost limit of efficiency. The statement of his views and conclusions exacts, and repays, careful and attentive reading, but it is far too detailed to be dealt with here. One may observe in passing that those of his readers who have travelled in the Canadian Rockies will probably think that he unduly depreciates the teepee.

A large portion of the book—all excellent and to the point so far as we can judge—is occupied with food and its preparation. This will surprise no one who has had even the slightest experience of camp life, but the extensive range taken by the subject of camp fires is rather unexpected. 'There are a whole series of camp fires,' and Mr. Miller enumerates no less than ten kinds, all of which are fully described later, but this 'does not begin to exhaust the subject,' for a good fireman must know what woods are serviceable and the reverse for each kind. Then comes a list of five-and-twenty or thirty trees, classified from this point of view, with the comment that 'a

[1] Cf. *A.J.* xxvi. 354–55.

knowledge of how to identify the above trees, with or without the leaves, is the minimum of forestry that anyone should take into the woods in his mental kit.' Well may Mr. Miller say that the subject of camp cookery is a vast one.

There are some good hints on emergencies of various kinds, and other matters, but perhaps too much space has already been bestowed on a work which is not addressed, in any direct sense, to climbers. Yet the impulse which drives a man to become a 'woodser' has a good deal in common with the one which sends him to the mountains, and in regions outside the Alps at any rate a mountaineer would be more generally efficient if he were a good 'woodser' as well. Somehow this volume sets one thinking that two or three summers in one's younger days spent in acquiring Camp-craft as expounded in it, instead of devoting them to ball-games, or sport, or even climbing, would have constituted a valuable addition to one's education.

The Canadian Alpine Journal, Vol. vii., 1916.

THE season of 1915 was productive of some interesting exploratory expeditions in at least four different regions widely separated from each other. Among them the place of honour is very properly given to that veteran pioneer Dr. Coleman, who broke new ground with a vengeance, by the ascent of a glacier-clad peak in the Torngats. One wonders how many people were aware even of the existence of this range. It is situated on the Atlantic Coast of Labrador, in the extreme North, thirty miles or thereabouts from Cape Chidley; it is 1300 miles N.E. of Toronto as the crow flies, but to reach it required a forty days' journey of 4000 miles by rail, steam, motor-boat, schooner, and finally, an Eskimo skiff. His peak, which he christened Mount Tetragona, is about 4700 feet, and he subsequently climbed three other summits, about thirty miles to the S. of Tetragona, one of them over 5000 feet. The most considerable previous ascent in Labrador was that of a peak in the same neighbourhood called Mount Faunce, about 4400 feet, in 1900. Dr. Coleman gives no particulars of the later climbs, and one could wish that this interesting paper, dealing with an unmapped, and almost untrodden region, had been considerably longer. A short geological description of the Torngats is given later, in the Scientific section of the volume.

The exploration of the Purcell Range[1] is proceeding apace. An excellent and very graphic paper describes two short but successful visits to it by a large party of both sexes, of which the first resulted in the conquest of Mount Ethelbert, situated in a very picturesque and attractive part of the range, not previously visited by mountaineers; during the second no less than six summits, at the head of Horse Thief Creek, only one of which had been

[1] See *A.J.* xxx. 363.

previously climbed, were reached in the course of three consecutive days. The party included Mr. and Mrs. A. H. MacCarthy, who are the happy possessors of a ranche near Wilmer, within one or two days' easy journey of this delectable country; Mr. H. O. Frind, like Mr. MacCarthy, a member of our own Club; and the indispensable, ever-victorious Conrad Kain, whose record of new ascents must be one of the longest and most remarkable held by any guide now living.

Miss Jobe organised a second expedition to the Big Mountain in the Far North,[2] which has now been finally christened Mount Alexander Mackenzie. She was again under the guidance of Donald Phillips, who with two other members of the party made a very determined assault on the peak. He reached the final arête, which was heavily and dangerously corniced, and after making some progress, was constrained by clouds and a gale of wind to abandon the attempt, when the summit appeared to be only about 100 ft. above them. His decision was unquestionably a sound one, but it was very hard luck. Miss Jobe describes Alexander Mackenzie as a magnificent peak, 'undoubtedly the culminating northernmost peak of the Canadian Rockies,' and estimates its height at not more than 11,000 ft. Its low snow line, and towering superiority over all the neighbouring mountains, had led earlier observers to expect that it was considerably higher. On the return journey the party made the second ascent of Mount Bess.[3]

Mr. Holway, well known as the companion of Mr. Howard Palmer in the exploration of the Selkirks, made the first ascent of Mount Edith Cavell, a peak attempted in 1913 under the name of Mount Geikie[4]; he then went up one of the minor tributaries of the Fraser into the country just outside the area surveyed in 1911 by Mr. A. O. Wheeler and made a partial ascent of Mount Longstaff. He reports 'a wonderful field for exploration, especially in the big bend of the Fraser.'

In the country adjacent to the line of the Canadian Pacific Railway we have accounts of two attempts, the fifth and sixth, on the still unconquered Mount Moloch, and ascents of Mount Goodsir (apparently the third) and of the Black Douglas; the latter expedition was made by a party from the Club Camp at Ptarmigan Lake, of which the usual official account is given later.

Other items of interest are articles on 'Some Meteorological Phenomena,' by Mr. Wheeler; on Harold Topham, by Mr. H. E. Foster, his companion in the Selkirks in 1890; a list of members

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[2] See *A.J.* xxx. 362.

[3] See *A.J.* xxvi. 14 and 396. From Miss Jobe's description I think the route followed was practically the same as that of the first party. The height of this mountain seems to be 10,500 ft. *plus* the height of the snow-cap. A. L. M.

[4] *A.J.* xxviii. 368.

of the Club engaged on Imperial War Service; and In Memoriam Notices of three remarkable men: the veteran Sir Sandford Fleming, Honorary President of the Club, Dean Robinson of St. John's College, Winnipeg, and Major Stanley L. Jones, President Elect of the Club, who died of wounds last year, leaving behind him a very noble record of which his colleagues may well be proud.

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Reference may be suitably made here to a passage in an article in the latest volume of 'Appalachia' on the Mountaineering Clubs of America, where the writer mentions what must surely be by far the oldest of Climbing Clubs. The honour of having originated it rests with Governor Alexander Spotswood, who 'just two hundred years ago, in 1716, founded the Tramontane Order, the insignia of which was a golden horse-shoe bearing the inscription "Sic jurat transcendere montes" [Query, Sic juvat transcendere . . . ?], which any gentleman able to prove that he had drunk His Majesty's health upon the summit of Mount George in Virginia was entitled to wear.'

'A Consideration of the Possibility of Ascending the Loftier Himalaya.' By A. M. Kellas. *The Geographical Journal.* Vol. xlix. (Jan. 1917) p. 26.

In the 'Geographical Journal,' January number, will be found a most interesting paper by Dr. A. M. Kellas, on the possibility of ascending the highest mountains in the Himalaya.

At the present time the highest recorded ascent is that of the Duke D'Abruzzi in the Karakoram range, a height of 24,600 feet. Dr Kellas himself has been as high as 23,180 feet on Pawhunri.

The paper is far too full of important material to be adequately dealt with in a review. Those who are interested in the subject will find in the paper itself not only a mass of interesting material, but at the same time all the facts put in a clear and convincing manner. Dr. Kellas has gone into the whole question in a thoroughly scientific way, and has considered the Physiological and Physical difficulties that beset mountaineers when they attempt high ascents. The paper is certainly the best up-to-date statement of the complicated problem of what exactly conditions the possibility of climbing at very high altitudes.

Dr. Kellas starts with the problem: 'Could a man in first-rate training ascend to the summit of Mount Everest (Tibetan Chomo Langmo), 29,140 feet, without adventitious aids?' And one is not disappointed to find that he concludes with the words: 'It is highly probable from the data cited that a man in first-rate training, acclimatized to maximum possible altitude, could make the ascent of Mount Everest without adventitious aids, provided that the physical difficulties above 25,000 feet are not prohibitive.'

In the paper the difficulties of ascending to great altitudes are considered from two points of view: I. *Physiological* and II. *Physical.*

I. *Physiological Difficulties.*—He points out there is no doubt but that the physiological difficulties are of a very high order, due chiefly to the deficiency in the supply of oxygen. The oxygen supply at the top of Mount Everest is only one-third of that at sea level.

It is of course the oxygen in the air that maintains life, the hæmoglobin in the blood being oxidised in the lungs to oxy-hæmoglobin, which being carried to the tissues gives up its oxygen, thus maintaining life. This process is a reversible chemical reaction, and can be expressed by the equation—

$$\text{Hæmoglobin} + \text{Oxygen} \rightleftarrows \text{Oxy-hæmoglobin.}$$

In the lungs the oxygen is combined with the hæmoglobin, and in the tissues the oxy-hæmoglobin is decomposed, yielding up its oxygen, so as to bring about all the oxidation reactions that are necessary for life. Insufficient supply of oxygen, therefore, strikes at once at the root of capacity to do work, or in other words to ascend to high altitudes. How fundamental respiration is in maintaining life is at once seen when the fact is grasped that unconsciousness would take place in less than a minute if an indifferent gas such as pure nitrogen were breathed, and death would follow in a few minutes.

Dr. Kellas attacks the physiological problem by four methods :—

(1) Consideration of the physiological effects recorded during high balloon ascents.

(2) The results obtained in air chambers by varying the pressure.

(3) Observations and experiments of physiologists at sea level and at moderate altitudes—up to 15,000 feet.

(4) The effects of minor Himalayan ascents up to the highest recorded, viz. 24,600 feet.

The deductions from the results of balloon ascents, and from the breathing rarefied air in special chambers, both prove conclusively that air alone at one-third of an atmosphere pressure (i.e. top of Mount Everest) would hardly keep alive anyone who was unacclimatised to high altitudes, but that air enriched with oxygen would easily maintain life during rest, or moderate work, at 29,000 feet. A balloon ascent was made in 1901 to a height of about 35,500 feet: oxygen was inhaled. In an air chamber where a mixture of oxygen and carbon dioxide was breathed, the experimenter was for a short time under a pressure of 120 mm.: this pressure corresponds to approximately 50,000 feet above sea level.

The observations and experiments of the physiologists that Dr. Kellas quotes are perhaps the most interesting part of his paper, but at the same time they show how complicated the problem is, and how necessary is further experiment before final deductions of a conclusive kind can be drawn.

The effect on visitors to the summit of Pike's Peak, 14,109 feet (where there is a cogwheel railway to the summit), is discussed,

and the fact quoted that mountain sickness is of very frequent occurrence. All recent experiments have clearly indicated that Paul Bert was correct in his statement (as far back as 1878) that the cause of mountain sickness was simply want of oxygen. But although casual visitors to the summit of Pike's Peak often suffer from sickness, a few days' residence on the summit entirely does away with all the symptoms; in other words, the body has become acclimatised to the low air pressure or the want of oxygen.

The manner in which the oxygen of the air is carried to the interior of the body and there made use of has already been mentioned. The oxy-hæmoglobin of the blood has been largely experimented on by the physiologists. It is obvious that a study of the pressure conditions under which hæmoglobin respectively takes up and gives off oxygen, would help one to understand the physiological difficulties of respiration at high altitudes. Diagrams are given showing the dissociation curve of oxy-hæmoglobin in water and in blood at 39° C. (blood temperature).

If the dissociation curve of oxy-hæmoglobin in water is taken, only a trifling difference in saturation with oxygen for an alteration of altitude of nearly 16,000 feet is found—a difference that should not cause serious effects. But if the dissociation curve of oxy-hæmoglobin in blood be taken, a quite different value is obtained: it is much lower, and at once accounts for Bert's suggestion that oxygen deficiency was the exciting cause of mountain sickness. There are many factors that affect the action of oxygen on hæmoglobin—temperature, presence of carbon dioxide (an acidic body), and other acids such as lactic acid, and the presence of salts. The influence of all these disturbing factors has to be taken into account. For instance, the blood acidity 'is of far more vital importance than might at first sight appear. *The automatic regulation of the process of respiration* depends upon the quantity of carbon dioxide in the blood.' The carbon dioxide in the blood acts (being an acid) directly on the respiratory centre in the medulla oblongata, nerves from which control the muscles of respiration; but at high altitudes the quantity of carbon dioxide in the blood diminishes. But fortunately acclimatisation at high altitudes is accompanied by increased acidosis of the blood, otherwise fainting would be one of the serious dangers that the mountaineer would have to reckon with.

Another set of observations made by physiologists and others is of particular interest, viz. that 'the number of red blood-corpuscles and the quantity of hæmoglobin in the blood increase in due proportion to each other.' This of course is of great importance (for there is no doubt that the number rapidly increases when higher altitudes are reached), and also at first sight easily explained by supposing that nature accommodates itself to a new environment. 'Much more work however must be carried out before its exact significance is understood.'

The normal number of red corpuscles, per cubic millimetre, at

sea level is about 5,000,000. The inhabitants of the Pamirs, who live permanently at a height of over 13,000 feet, have a normal blood count of 7,595,000,[1] and Europeans (in the expedition of the Indian Survey to the Pamirs in 1913 for the linking together of the triangulations of India and Russia) so far accommodated themselves to their environment (about 13,000 feet), as to possess a blood count of 7,402,000. Obviously, therefore, this multiplication of the oxygen-carriers in the blood, which also means increase in the amount of hæmoglobin, is of paramount importance in the problem of the capacity for work at high altitudes. It seems to be the chief means of accommodation by the body to cope with the rarity of the air. There is no doubt that a large number of new red blood-corpuscles are grown, but at the same time it is almost certain that the blood also merely concentrates itself by transudation of part of the plasma through the capillaries, consequently producing an increased number of corpuscles per cubic millimetre.

Another physiological observation that may be of importance is the secretion of oxygen by the alveolar epithelium. Experiments on Pike's Peak have shown that the secretory action of the lung epithelium is adaptable to high altitudes, and that 'the arterial oxygen pressure in acclimatised subjects was invariably far greater than the alveolar pressure, whereas in new-comers it was about the same.'

Another physiological observation is that at high altitudes moderate exercise increases the pulse-rate to a greater extent than at sea-level. This of course would be beneficial.

Two interesting curve-tables are given showing the 'variation of alveolar oxygen pressure with altitude' and the 'dissociation curve of oxy-hæmoglobin in blood,' together with the heights of some of the most notable mountains, ranging from Scafell to Mount Everest, and plotted so as to show the saturation of the blood with oxygen corresponding to the alveolar oxygen pressures at their respective summits.

Coming to No. II., the '*Physical difficulties*,' there is not much new to be brought forward. Dr. Kellas points out that many of the most magnificent of mountains, K_2, Makalu, the Gusherbrum Peaks, Nanda Devi, Rakaposhi and others, present such physical difficulties that climbers will probably not attack them at present. He considers, however, that peaks such as Kamet, Nanga Parbat, and Kanchenjunga look possible of ascent; and he is well qualified to judge, for he has been to all of them. He also includes Mount Everest with these last three, but, until facilities are given by the Nepalese Government, access to Mount Everest is impossible.

Dr. Kellas's paper is a most valuable contribution to our knowledge of the effects of high altitudes on the human body, and his

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[1] It is worth noting that one carrier in the party who seemed inadaptable to high altitudes had a blood count of only 5,760,000.

arguments clearly show that, taking all the facts at our disposal, the answer to the question, Is it possible to ascend the loftier Himalaya ? undoubtedly is in the affirmative. Mountaineers, however, if they wish to conquer the highest mountains of the world, must make haste, for in the aeroplane we have a new and powerful engine for exploration ; whether an aeroplane could, for one glorious hour, sit on the summit of Mount Everest, and then swoop down safely like an eagle from a crag to more hospitable climes, is a question that remains to be answered But, as far as our present knowledge goes, physiologically it would be quite possible. The satisfaction of such an ascent would be immense, but it would be of a totally different kind from the joy of the mountaineer who, after weeks of struggling in sunshine and storm with the great mountain, had ultimately conquered.

CORRESPONDENCE.

ULRICH LAUENER.

DEAR CAPT. FARRAR,—I read with very great interest the account of Ulrich Lauener and of his Führerbuch in the last ALPINE JOURNAL. It appealed specially to me because on my first visit to Switzerland, with my life-long friend and comrade, Dr. Robert Spence-Watson, in 1861, we found Ulrich Lauener in his home at Lauterbrunnen disengaged, and had the privilege of his services for two or three days, from Lauterbrunnen, by Mürren, the Sefinenthal, the Kienthal, the Dündengrat, and the Oeschinen-See, to Kandersteg, and then on to the Gemmi, on which he was obliged to leave us.

We never had his services afterwards, because when we got to Chamonix it was our good fortune to have allotted to us, from the Roll of Guides, Joseph Marie Claret, who was our guide, companion, and friend for nearly thirty years, taking us up Mont Blanc by the 'ancien passage' in 1865 and Monte Rosa in 1866.

I can remember as if it were but yesterday how our good Joseph, on the 'ancien passage,' pushed us on 'Allez, messieurs, allez, vite, vite!' I should imagine that the descent by the 'ancien passage' is usually made at a killing pace, since as the day advances, there is, I imagine, always a risk of falling ice.

In the old days we regarded it as something almost immoral to spend two nights in the same bed (Sundays, of course, excepted). But as you get older you settle more into centres and headquarters. I should say, moreover, that the increase in rock climbing and the searching out of difficult routes, apart from their ultimate or practical object, has the tendency to make one cover less ground and to work more in detail from a centre. John Ball's dicta as to the objects of climbing mountains and crossing passes are now, I fear, out of date.