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THE SCOTTISH MOUNTAINEERING CLUB JOURNAL

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THE METEOROLOGY OF THE SCOTTISH MOUNTAINS.

By Kenneth K. Hunter, B.Sc.

WEATHER conditions play such a large part both in planning and in carrying out an expedition to the hills that it should be of real practical interest to the mountaineer to have a reasonable knowledge of the causes which bring those weather conditions about. Even if, as is generally the case in Scottish mountaineering, bad weather does not necessarily cause the abandonment of an expedition, the ability to assess the probable duration of a bad spell or the possibilities of improving conditions will be of valuable assistance in determining the best route of ascent. Before considering the meteorological conditions affecting the Scottish mountains, however, it would not be out of place to make some observations on the effect of weather in general.

A thoroughly competent party should be able to make an ascent in almost any kind of weather in perfect safety, although discretion may counsel a retreat under very bad conditions. For instance, an exceptionally high wind may make a ridge impracticable, especially if accompanied by driving snow. Such conditions might put a mountain summit just out of reach. A rock climb may refuse to yield when the holds are smothered in snow or ice, though the high standard in rock and snow work reached by many very experienced climbers in Scotland within recent years has brought many climbs hitherto considered as summer ascents within the scope

of winter climbing. Mist, or poor visibility, should not carry any hazards for the experienced. An inexperienced party, though, may incur risks in very ordinary conditions of bad weather where capable mountaineers would be perfectly safe. Meteorological conditions may be such that progress becomes very slow, the cold may be intense, the party thoroughly wet and the safety margin much reduced in consequence. In addition, it is possible to be benighted in Scotland at some distance from any habitation, for although the height to be gained and the time required are small in comparison with major Alpine expeditions, they are large in comparison with the usual expeditions in England and Wales. This applies especially in the Cairngorms. Mist, too, in Scotland is such a common occurrence that a map and compass should be carried by every party, even on easy ground and in good weather. It goes without saying that each member of a party should also be able to use both map and compass effectively.

In the British Isles the prevailing winds are from the west, and our mountain ranges, except the large central mass of the Cairngorms, are chiefly on the west side of the country. The west side has a much greater rainfall than the east and (again excepting the Cairngorms) a rainfall map bears a close resemblance to an orographical map. Yet though our western districts receive the greater rainfall, there are periods in the year when the mountaineer may reasonably expect good weather conditions in any of the climbing centres. An investigation, however simple, into the meteorological conditions throughout the year and as affecting the Scottish mountains depends on the understanding of certain basic facts.

In the first place the various types of weather which we experience depend on the origin of the air masses affecting the country. It might be expected that, with the tropical regions of the earth receiving the far greater proportion of radiant heat from the sun, there would be (by heating at the earth's surface) an upward movement and expansion of air in those latitudes, this air flowing northwards or

southwards at high levels to descend at the poles through cooling, and then to return as surface movements of cold air towards warmer regions. This circulation set up would be analogous to that in any heating system and should not be difficult to grasp. In actual fact, however, the circulations of air are far from following such a simple plan. This is primarily due to the distribution of land and sea masses, especially in the northern hemisphere, and also to the rotation of the earth.

Although still far from being exact it would be more true to say that in the northern hemisphere, as affecting the British Isles, there are two separate circulations, the one of subtropical air and the other of air of polar origin. Associated with these circulations are a semi-permanent area of high pressure centred somewhere near the Azores and, similarly, a semi-permanent low-pressure system near Iceland. Between these two circulations—the one of a subtropical air mass, the other a polar air mass—there is a highly mobile boundary zone known as the " polar front." Before considering the significance of this front it would be as well to discuss the various air flows which may affect the British Isles, and Scotland in particular.

The two air flows most frequently met are those which come from the west. One, associated with westerly or north-westerly winds, is of polar origin and the air is generally very unstable. Without entering into unnecessary details it is sufficient to say that this means the drop of temperature with height is fairly rapid. When, through surface heating, convection begins, the rising columns of warm air, although cooling by expansion, are at all times warmer than the surrounding air and continue to rise rapidly. Near the surface of the earth the rate of cooling of these rising columns of air is 5.4° F. per 1,000 feet. At a certain height, however, the air by cooling and expansion will become saturated and cloud will form. The rate of cooling then becomes 2.7° F. per 1,000 feet (although it again increases with falling temperature) and, at this slower rate of cooling, the uprising columns of air, now in the form of cumulus clouds and constantly warmer than the surrounding air,

tower up to great heights. With sufficient convection, when the polar air is very cold and unstable, the towering cumulus clouds develop upwards to 20,000 to 25,000 feet and spread out in the form of anvils with fibrous tops composed of ice crystals. Large cumulus clouds give showers, heavy or otherwise, according to their development. The larger form of cumulus with anvil (cumulo-nimbus) often produces hail showers, and it is with this type of cloud that thunderstorms, both summer or winter, can be expected. Although both cumulus and cumulo-nimbus are shower clouds, there are times when the showers are so frequent and persistent that they can be regarded, in meteorological terminology, as rain. This is particularly so in winter-time.

A subtropical airflow, on the other hand, coming from the south-west, produces quite a different kind of weather. The air is very warm and moist and, unlike polar air, is stable, *i.e.*, the drop of temperature with height is small and may be, in fact, non-existent through quite a considerable layer of the air mass. Being warm in relation to the colder sea over which it passes, it brings with it much sea fog, especially in winter, and low stratus cloud which will envelop mountains right down to their bases. As it passes east the cloud begins to lift slowly, but in winter-time it will persist at very low altitudes right across the country. In summer, on the other hand, it begins to break up and rise through warming across the land until it disperses altogether. Under such summer conditions the mountains in the extreme west may be under cloud all day whilst those lying farther east will enjoy sunshine. With this stratus cloud drizzle is the rule rather than the exception.

Two interesting points arise out of the comparison of these two air masses, the polar and the subtropical. The first is that with polar air a climber may expect it to be very much colder on a mountain top than at its base. In winter, for instance, if the air temperature were 45° at sea-level, it could be as much as 20° less at 4,000 feet, well below freezing-point. In subtropical air, on the other hand, there may be only a few degrees difference between the temperature at sea-level and on a mountain top. These latter conditions are well known to many a climber who, on a winter ascent in very mild weather, is disappointed to find the snow soft and wet right up to the summit cairn.

So far we have considered conditions in a definitely established air flow from the west. Before considering the meteorological conditions and phenomena leading up to such an established air flow it is necessary to mention the general weather to be expected with winds from other quarters.

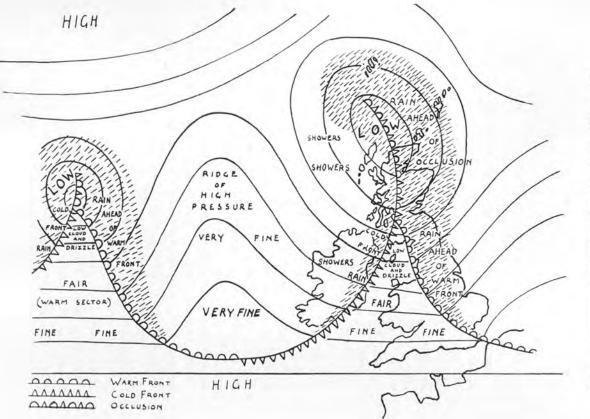
A northerly wind may be expected when an anticyclone is situated over the North Atlantic. The air, coming even more directly from polar regions, is generally very cold. It can be expected to bring very showery conditions to the mountains in the extreme north and to the Cairngorms, but farther south the weather conditions should be much more favourable apart from the cold. Easterly winds are to be expected with anticyclonic conditions to the north of the British Isles, but now the polar air, having travelled over the vast plains of North Russia or over the Scandinavian countries, is much drier than polar air having had a maritime course, so that dry weather should persist over all Scotland, although there is usually a persistent layer of cloud, probably at about 6,000 to 8,000 feet during such a weather period. In winter this easterly air can be extremely cold. Subtropical air which has had a land track over Italy, France or Germany and the Low Countries is of so rare an occurrence that it can be ignored as far as this article is concerned.

It should be noted here that the mountain element will intensify any tendency towards bad weather. Polar air, already unstable, is forced higher in its passage over any mountain range, thus adding to the effects of convection already in process. By either process the air becomes oversaturated and must part with some of its moisture. Conversely, air which has passed over a mountain range and which descends on the lee side will have a smaller water-vapour content. In its descent it becomes warmed and dries out, thus giving warmer and finer weather

that side of a mountain range. In the Alps this is known as the "Föhn" effect, and with a westerly wind in Scotland such an effect is quite appreciable in Aberdeen or anywhere to the east of the main mass of the Cairngorms. It is, of course, for this reason that the Cairngorms have better weather with westerly winds than the West Highlands but worse weather with northerly or easterly winds.

Reference was made earlier to the polar front dividing the polar and subtropical air masses in these latitudes. This front stretches right across the Atlantic, moving south in winter and north in summer. Near the American coast this seasonal movement is very considerable but in the area of the British Isles it is much less so. Far out in the Atlantic, waves develop on this front and travel eastwards, gradually deepening as they move until, in extreme cases, the trough of the wave may be well south of the English Channel whilst the tip crosses northern Scotland. The leading edge of each wave is a surface front of warm air, the trailing edge being conversely a surface front of cold air. As these warm and cold fronts move across the Atlantic or the British Isles an observer will experience a change from cold to warm air, followed after an interval by a further change from warm air to cold. Unfortunately for the observer each change from one air mass to another is accompanied by a belt of bad weather, the whole system being associated with a depression which deepens as it moves across the Atlantic towards the coasts of the British Isles and whose centre can generally be reckoned to be at the tip of the wave forming the warm and cold fronts. A cold front actually travels faster than a warm front, so that in time the one overtakes the other and the wedge of warm air lying between is lifted progressively clear of the earth's surface. When this occurs the fronts are said to be occluded (see Note I and Diagram). The meteorological forecasts issued by the Air Ministry to the general public seldom refer to these fronts but classify each system as a trough of low pressure.

If the foregoing picture has been understood, the



general sequence of weather associated with each system is more easily grasped and will be of more interest to the climber. The first indication of approaching bad weather is the appearance in a clear sky of cirrus clouds carried forward by the upper winds. These earlier "mares' tails," perhaps 500 miles ahead of the warm front, are succeeded by a continuous layer of cirro-stratus hardly discernible to the casual observer but giving rise to a halo of 22 degrees radius round the sun or moon. the milky sky gradually thickening and assuming a dull grey appearance. A rain belt, possibly 200 miles wide. can be predicted from these signs some hours ahead and can be relied upon to last several hours, the wind backing to south or east of south (i.e., moving against the sun) and rising often to gale force. As the warm sector of air reaches the observer, the wind veers south-westerly and the rain ceases or becomes much less persistent. It is then that "muggy" humid conditions are experienced with much low stratus sweeping across and enveloping the hills, intermittent or persistent drizzle, especially near the coast-though, as has been explained earlier, this low stratus may, especially in summer, lift and break up so that the weather to the east becomes quite fine and warm. When the following flow of cold air reaches the country there is again a veer of wind to west or north-west accompanied by further rain, heavier and often associated with hail, but of shorter duration. Then the skies will clear and for a few hours the weather may be very pleasant until the large cumulus clouds associated with this cold air and accompanied by their showers, heavy or otherwise, are upon us. Such troughs, crossing the country, come in families of up to six or seven at a time. Sometimes the fronts associated with a trough are not very active. Under such conditions the weather changes will be much less marked, rain less heavy or perhaps only intermittent.

In between each trough there is a ridge of high pressure more or less developed. It is these ridges of high pressure which can so often be misleading. They are associated with clear skies, calmer conditions and excessively good



June 1936

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visibility. Audibility is also exceptionally good. But each is of short duration and the climber on holiday is well to take immediate advantage of such limited spells of fine weather before the next trough arrives.

Two points can be noted with advantage by those on climbing holidays. When the country is affected by a polar air stream and the showery conditions experienced with it, it will generally be found (except on the extreme coasts to windward) that the clouds will disperse by night and the wind fall, often to a calm. The maximum development of cloud is in the afternoon so that the best climbing conditions are early in the day. Those, too, who occasionally choose to make an ascent by moonlight will find the best conditions under such circumstances. On the other hand, low stratus brought by warm air is most persistent in the earlier part of the day, and the best conditions for visibility and freedom from mist will be found in the late afternoon or early evening.

Actually, with reference to these incursions of warm air into northern latitudes, except in summer the warm sector of air seldom reaches Scotland. Occlusions and associated troughs of low pressure with their heavy rain still pass across the country, but one exchanges, as it were, one cold air mass for another equally cold. Scotland, in addition to the depressions travelling across the Atlantic with waves on the polar front, is often affected by the displacement of the Icelandic "low" southward.

These notes on the sequence of weather accompanying a trough of low pressure should be of assistance to a climber in planning his expeditions throughout a holiday, but it is hardly necessary to add that there are many complex systems which cross the British Isles and when it will be obvious to anyone and everyone that the weather is "set stormy."

Anticyclones bring their own weather. It is unfortunate that their arrival, their duration and their decline cannot be forecast with such accuracy as a trough of low pressure, but with a well-developed anticyclone in summer forecasts can often be issued to cover several days. The

weather conditions associated with them are usually good though often cloudy. In winter especially the cloud layer is very persistent, but it can generally be reckoned that the longer the anticvclone lasts, the less cloud there will be. This is because an anticyclone is an area of subsiding air, and the greater the subsidence the warmer and drier the air becomes. In fact the subsidence is accompanied by an inversion of temperature. and it is below that inversion that the cloud layer forms. In anticyclones of some age the inversion becomes quite low, below the tops of the mountains, and a haze layer may form at the inversion. Under such conditions it will be possible to see from a mountain top summits many miles away, whereas a few hundred feet lower the visibility is quite seriously restricted by the haze. Another type of inversion is formed on a quiet night with clear skies, owing to outward radiation of heat from the ground. This will extend up to about 1,000 feet, and the cold air will drain down the mountain sides into the valleys. Valley fog is often associated with these surface temperature inversions and may last through the day in winter-time. It is then that the climber will ascend through cloud to clear skies above, with the mountain tops, bathed in sunshine, rising above the sea of cloud like so many islands.

While it has been mentioned that the temperature at 4,000 feet may be as much as 20° lower than at sea-level, the records of the old observatory on Ben Nevis showed that over a period of twenty years the mean temperature at the summit was $15 \cdot 7^{\circ}$ lower than at the base. With a temperature inversion it is possible for the temperature at the summit of a mountain to be higher than at the base. A notable example occurred during the great frost of 1895 when for several days the summit temperature on Ben Nevis was 15° higher than at Fort William.

Temperature generally is of importance, not only from its direct effect as far as bodily comfort is concerned but because it determines whether water on a mountain will be liquid or frozen. There is a great difference between summer climbing when progress is over grass,

heather or bare and warm rock, and winter climbing when the grass and heather are covered with snow and the rocks more or less iced. These differences are as much the result of past meteorological conditions, and sometimes more so, than those prevailing at the time. In the early summer, for instance, the atmospheric temperature may be fairly high, while snow and ice are present underfoot in large quantity. In early winter, on the other hand, the air temperature may be low or very low, but snow has not fallen or accumulated to any extent. Although the quantity of snow depends on past meteorological conditions then, the actual "state" of a snow-covered mountain depends on the meteorological conditions of the day. In quiet, frosty weather snow not exposed to warm sunshine remains powdery indefinitely. Alternate thaws and frosts without fresh snow give various kinds of crusts, and eventually typical névé, or hard snow, of which only the surface becomes soft in any real thaw. In fact, right up to April the sun may have little effect on fresh snow on a north-facing slope as the sun's rays strike the slope at a small angle and are mostly deflected.

There is no mountain in Scotland whose summit is covered with snow throughout the year. The surfaces which are exposed to the direct rays of the sun become bare of snow at periods varying according to the amount of snow which has accumulated during the winter and the varying conditions during the spring and early summer. Ben Nevis is the only mountain of whose snowcap at the summit we have actual records, and it was found that the maximum depth of snow between 1884 and 1902 varied from 142 inches in 1885 to 54 inches in 1895. The period of maximum depth also varied. It was on the 3rd of April in the former of these years and on the 13th of April in the latter, but in the year 1884 there was a depth of 141 inches as late as 28th May.

But while the summits do not retain their snow-cap throughout the year the case is different in the north-east corries. The air temperature is never high enough for a sufficiently long period to melt the accumulated snow,

and the slopes are so steep that, in many cases, they receive little or no direct sunshine.

The conditions of the Scottish mountains vary, therefore, between "summer" when the snow lies only in the shaded corries of the higher mountains, and "winter" when everything down to sea-level may be covered. But the winter conditions vary greatly, not only from year to year but from day to day. During an "open" winter there may be numerous falls of snow. but these will melt almost at once except on the tops. In a hard winter, on the other hand, even a small total fall will lie, with the hills white right down to the valleys for weeks. It is not possible, even approximately, to fix a winter snowline. On any given day in winter the snowline might differ from that of another by a thousand feet or more. For instance, on 1st January 1925 snow lay down almost to sea-level, whereas on the same day in 1927 there was hardly a sign of snow except a few patches above 3,000 feet. Again, 31st December 1936 saw the hills almost devoid of snow. Next morning though, after a wild night, snow lay quite deeply down to 1,500 feet, only to be removed as quickly within twenty-four hours by heavy rain and a high temperature, so that no snow at all was visible below the mist at 2,000 feet.

Snow, of course, is only a form of rainfall and, the causes of mountain rainfall and rainfall generally having been discussed, a few details of the records may now be considered. If the northern part of Scotland were divided by a line running roughly from Stirling to Cape Wrath, the rainfall on the east is under and that on the west is over 40 inches. There is, too, something like a backbone of heaviest rainfall extending from about the mouth of Loch Long northwards to Kinlochewe, and from this the rainfall diminishes in every direction. The east side of the country is much drier than the west at corresponding altitudes. From records during the years the observatory was in commission Ben Nevis had the highest rainfall of any reporting station. The rainfall among the Arrochar mountains is about double that of the Cairn-

gorms. There are two patches of the country where the rainfall exceeds 100 inches, one based on Glen Quoich and Glenfinnan, and the other on Ben Nevis. The nineteen-year record obtained by the summit observatory on Ben Nevis gave an average of 160.78 inches, and in the 100-inch areas it is quite possible that there are places with as high a rainfall at quite moderate altitudes. At Loan, Loch Quoich (650 feet), the annual average is 165 inches. It is estimated that at Sgùrr na Ciche (3,410 feet) the average may exceed 200 inches. Further and more exact details of rainfall are given in Note 2.

Apart from the annual records of rainfall the mountaineer is primarily interested in the monthly variations of weather, especially those who are fortunate enough to be able to choose their own season. For many reasons the spring months are the best for Scottish mountaineering, and not the least of these reasons is that these months are the driest of the year. In fact the heavy falls which affect mountain districts occur mostly at other periods of the year. Records bear this out, for at mountain recording stations the rainfall for the periods April, May and June is almost exactly one-twelfth of the annual rainfall and not one-quarter as might have been expected.

Quite apart from the dryness of the spring months, however, and the wide divergence between rainfall in the three months mentioned as compared with the rest of the year, there does seem to exist a tendency for abnormal weather to recur at certain times of the year. Folklore of all countries includes beliefs in these abnormal weather periods, but the popular beliefs were ignored by meteorologists until, in 1869, Alexander Buchan wrote his famous paper on "Interruption in the rise and fall of temperature in the course of the year." The reality of Buchan's six cold and three warm spells may be debatable, but they aroused widespread interest, and since then much work has been done on the study of such recurrent abnormalities or "singularities" in the annual variation of climatic elements.

The most recent detailed investigations carried out

in the Meteorological Office are discussed in an article by Dr C. E. P. Brooks which appeared in August 1946 in the monthly magazine *Weather*. This magazine is published by the authority of the Royal Meteorological Society and contains much that is of interest alike to professional and amateur meteorologists. The article referred to is too long to quote verbatim, but the following paragraphs summarise some of the deductions drawn by Dr Brooks and his associates and, with a study of the accompanying table, should be of valuable assistance to a mountaineer in choosing his holiday period.

The singularities which were finally accepted as probably real were deduced by the examination of the day-to-day weather for the fifty-two-year period, 1889-1940, the results of these examinations being set forth in the table. This table gives the average and extreme dates of the beginning and ending of any singularity. It also gives the number of years in fifty-two in which a singularity could be recognised and the frequency of persistent anticyclonic or stormy conditions on the "peak" day.

Singularities can be divided into four seasonal groups :---

- 1. October to early February, characterised by stormy periods with minor anticyclonic interludes.
- 2. February to May, in which the main phenomena are cold waves associated with northern anticyclones.
- 3. The European "summer monsoon," consisting of incursions into Europe of polar maritime and tropical maritime air, alternating with some regularity.
- 4. September and early October, characterised by spells of anticyclonic conditions and late "summers."

The general characteristics of a "stormy" singularity are either the displacement of the Icelandic "low" southwards, or an increase in its intensity with a trough extending south-eastwards. These are associated with a tendency for primary or secondary depressions to traverse

LIST OF "SINGULARITIES IN EUROPE."

Singularity.	Beginning Date.		Ending Date.			Occurrences in Fifty-two Years.		
	First.	Mean.	Last.	First.	Mean.	Last.	No. of Years,	Frequency at Peak Date.
Early January, stormy Mid-January, anticyclone	* Tan. 7	Jan. 5 Jan. 18	Jan. 18 Jan. 23	Jan. 6	Jan. 17	Jan. 22	45 45	31, Jan. 8
Total Total Annual A	3		Jan. 23 Jan. 31	Jan. 17	Jan. 24 Feb. 1	Jan. 30 Feb. 24	44	18, Jan. 20-21 31, Jan. 31
	Jan. 18 Feb. 1	Jan. 24 Feb. 8		Jan. 24			29	22, Feb. 13
Early February, anticyclone	Feb. 16		Feb. 15	Feb. 6	Feb. 16	Feb. 28	20 22	
Late February, cold spell	Feb. 10 Feb. 11	Feb. 21	Feb. 23	Feb. 22	Feb. 25	Mar. 3	46	21, Feb. 22 32, Mar. 1
Late February and early March, stormy Mid-March, anticyclone	Feb. 11 Feb. 27	Feb. 26 Mar. 12	Mar. 9	Mar. 1	Mar. 9	Mar. 30	40 27	17, Mar. 13-14
Lata March, anticyclone	reb. 21	Mar. 12 Mar. 24	Mar. 19	Mar. 12	Mar. 19	Mar. 29	35	26, Mar. 28
Late March, stormy	M 00		Mar. 29	Mar. 24	Mar. 31	Apr. 11	35	
Mid-April, stormy	Mar. 28	Apr. 10	Apr. 15	Apr. 10	Apr. 15	Apr. 26	27	25, Apr. 14
June, summer monsoon	Apr. 19	Apr. 23	Apr. 27	Apr. 23	Apr. 26	Apr. 30	(40)	19, Apr. 25
	May 24	June 1		June 6	June 21	June 28		112
July, warm period	A	July 10			July 24	C A	35	16, Aug. 28
	Aug. 14		Aug. 29	Aug. 20	Aug. 30	Sept. 3	43	
Early September, anticyclone	Aug. 21	Sept. 1	Sept. 6	Sept. 7	Sept. 17	Sept. 30	31	25, Sept. 10
Mid-September, stormy	Sept. 7	Sept. 17	Sept. 20	Sept. 18	Sept. 24	Oct. 3	33	22, Sept. 20
	Sept. 9	Sept. 24	Oct. 10	Sept. 14	Oct. 4	Oct. 16 Oct. 30	35	26, Oct. 8-9
Early October, stormy Mid-October, anticyclone	Sept. 28 Oct. 8	Oct. 5 Oct. 16	Oct. 10	Oct. 5	Oct. 12		35	19. Oct. 19
	Oct. 8	Oct. 16	Oct. 19	Oct. 15	Oct. 20	Oct. 28	50	(31, Oct. 29
Late October and early November, }	Oct. 11	Oct. 24	Oct. 31	Oct. 30	Nov. 13	Nov. 27	52	28, Nov. 9, 12
Mid-November, anticyclone	Nov. 7	Nov. 15	Nov. 22	Nov. 14	Nov. 21	Nov. 30	34	20, Nov. 18, 20
Late November and early December, }	Nov. 9	Nov. 24	Nov. 30	Dec. 4	Dec. 14	Dec. 26	51	$\begin{cases} 25, Nov. 25 \\ 34, Dec. 9 \end{cases}$
Pre-Christmas, anticyclone	Dec. 9	Dec. 18	Dec. 24	Dec. 19	Dec. 24	Jan. 5	29	19, Dec. 19-21
Post-Christmas, stormy	Dec. 19	Dec. 25	Jan. 1	Dec. 25	Jan. 1	Jan. 21	43	35, Dec. 28

* Merged with preceding stormy period.

The Meteorology of the Scottish Mountains. 207

the regions of north-west Europe, including the British Isles, and penetrate Scandinavia or the Baltic. The "fair" or anticyclonic periods are either due to an increased frequency of anticyclones in polar air moving southwards or to an extension of the Azores "high" north-eastwards.

It will be seen that the early February anticyclone, 8th to 16th February, practically coincides with Buchan's first cold spell, the mid-April stormy period with his second cold spell, the mid-July warm period includes his first warm spell, and the latter part of the late November and early December stormy period includes his third warm spell (the early part of this stormy period barely touches Britain). Thus, allowing for the fact that stormy periods are relatively warm in winter and cool in summer, four of Buchan's nine periods are supported by this quite independent investigation. When we consider that Buchan's '' spells '' were deduced from ten years' observations made near Edinburgh as early as 1857-66, this measure of agreement is rather striking.

At first sight it may seem that the wide scatter of the dates of beginning and ending robs them of any real meaning; alternations of anticyclonic and stormy conditions occur so frequently in this country that at least one of each should occur in any one month. Actually, although the identification of any given singularity is necessarily to some extent subjective, each one tends to have its own special characteristics which facilitate identification. Moreover the wider departures from the average dates are mainly accounted for by unusual persistence of stormy or anticyclonic conditions. Mostly the occurrences cluster closely round the average dates, as can be seen by comparing the frequency of occurrence on the "peak" date with the total number of occurrences recognised; in only two cases is the peak frequency less than half the total number of occurrences.

In the winter half-year at least the stormy and anticyclonic periods do not occur irregularly, but on the average at rather constant intervals of about thirty days. Thus the stormy periods begin on 24th October, 24th



THE 20,000 FT. PEAK OF SOUTH ROLWALING (Climbed by Scottish Expedition. Route lay up right glacier to little saddle)

November, 25th December, 24th January, 26th February, 24th March and 23rd April. The anticyclonic periods begin on 16th October, 15th November, 18th December, 18th January, 12th February and 12th March. This remarkable regularity is not likely to have arisen by chance, and supports the idea that singularities are real phenomena. Taking account of all the evidence, it seems very probable that the greater number if not all of the singularities listed in the table represent real tendencies for similar weather to recur at or about the same time every year. They do *not* occur with clockwork precision—they do not even occur sufficiently regularly to be of use in forecasting—but they do represent a balance of probabilities.

From the climber's point of view, especially if a climbing holiday is planned to cover a week or more, the dates given in the preceding paragraph certainly give a basis to work on. It would appear that anyone choosing the last week of any month between October and April is likely to experience poor weather. The best week in any of these months, barring April, would seem to be about the middle of each month. It will be noted with significance by those who make a habit of climbing during the Christmas or New Year Holidays that the post-Christmas stormy period tends to merge with the early January stormy period! The omission of any weather singularity in May may be commented upon. This month, on an average, is associated with fine, dry weather though with a persistence of cold easterly winds. The end of the month may, though, produce a very warm spell of weather, referred to in the table as summer monsoon.

The need for protection against sunburn on the Scottish mountains occurs seldom, but carelessness at times may give cause for considerable discomfort. In mountain meteorology the direct heating of the sun's rays does definitely have greater importance than in low-lying parts. The sun's rays pass freely through dry air but are stopped to a large extent by mist and fog. The water vapour in the air is not, however, distributed throughout its depth with any approach to uniformity. About

one-half of the total is under 6,500 feet, about threequarters below 13,000 feet, and about nine-tenths below 21,000 feet. Even the higher Scottish mountains, therefore, take us above a substantial proportion of the vapour. Naturally, then, apart from cloud, and sometimes in spite of cloud, the effect of the sun's rays is very pronounced. In addition to the effect of sunburn, sun-glasses are sometimes indispensable, especially when the sun's rays are reflected from a snow surface in thin mist, for then not only does the climber experience the reflected glare but the whole mist becomes dazzlingly illuminated.

The greater force of the wind on the mountains is partly due to simple mechanical causes. A body of air is in motion and finds its progress hindered by a mountain Its passage is narrowed vertically (and horirange. zontally also in the case of a pass), and its velocity is increased by the pressure of the mass behind forcing it through. Again, the friction of the earth hinders the movement of the lower atmospheric layers and, at 2,000 feet or above, the wind speed is considerably greater than at sea-level. Actual figures show that in subtropical air the wind can blow twice as strongly at and above 2,000 feet than at sea-level, and in polar air more strongly in approximately the ratio of three to two. At night, above 2,000 feet, the wind will continue to blow almost as strongly as by day, but at sea-level will fall away to a fifth of the speed of the upper layers and may, indeed, die away to a calm.

In addition to their effect on general air movements the mountains produce air movements of their own. A steep mountain valley filled with snow or ice cools the air in contact with it, and the result is a downflow of chilled air. The same effect is produced in a valley which, by its depth, is cut off from the sun's rays for the greater part of the day. The writer once experienced a downdraught of wind on the north-east face of Beinn Laoigh which, in gusts, almost approached gale force, although at the summit cairn there was little more than a strong south-westerly breeze. The explanation lay simply in the fact that the snow-covered north-east face of the

mountain chilled the air in contact with it to such an extent that the south-west wind swept down the mountain side with considerably increased velocity. The converse effect, a rising current of warm air, may be produced by the action of the sun warming a hill face. Although less appreciable than in the Alps, both air movements, descending and ascending, can be experienced in Scotland. Although hardly relevant to this article, it might be recorded that on the northern shores of the Adriatic, and with a suitable pressure distribution, an off-shore wind, known locally as the Bora, frequently reaches well over gale force with gusts exceeding 100 miles per hour. Starting through excessive cooling on the slopes of the snow-covered Alps to the north, it is intensified by the funnel effect of the numerous valleys extending towards the sea. A similar wind, reaching almost as high a velocity, blows across the plains of China to the North China Seas. This is again caused by cooling of the air over the snow-covered Tibetan plateau and is accentuated by the prevalent winter anticyclone over the Asiatic continent.

Visibility, depending primarily on the amount of moisture in the air, is always better in polar than in subtropical air. It is better, too, in the morning than later in the day, for the ascent of warmed air carries up moisture and also impurities such as dust. Visibility is also affected at times by salt particles in the air during periods of strong winds off the sea. Any such deterioration will persist at all times of the day. Industrial smoke affects visibility perhaps more than is realised. Even as far away as the Western Isles a shift of wind from off-sea to the south-east will reduce visibility from 50 miles or more to as little as 10 or 15 miles, though, at all times, it depends a great deal on the amount of moisture in the wind from the new quarter.

The mountaineer naturally sees many interesting meteorological phenomena. The Brocken Spectre and similar appearances due to the combination of sun and mist are the most striking. They are not very common in the Scottish mountains, though in some mountain

ranges where the weather conditions are more uniform they are seen with some approach to regularity.

The uncertainty of our mountain weather has a charm of its own. The glorious views of mountain range after mountain range are one phase and a very pleasant one of mountaineering. But the experience of working one's way through dense mist, of rising above it and seeing peaks like islands in a white sea, of watching the rainbow colours playing round the crag on which one stands, or of battling against wind-driven rain or blinding snow each has the possibility of intense enjoyment and even more intense satisfaction in retrospect at the end of the day. And it may safely be said that the enjoyment will not be less if one has studied some of the natural laws which produce these conditions.

The weather forecasts issued by the Meteorological Office can be used in conjunction with a knowledge of local weather. Some knowledge of meteorology helps in analysing them and interpreting them more accurately. The most up-to-date forecasts are those issued by the B.B.C., for those in the press are received for publication many hours beforehand. Much more detailed information is available, if desired, direct from the Meteorological Office. This may include weather reports from any special station, or a report from a particular station at a specified time. It is possible to arrange for a regular series of weather forecasts to be dispatched once a day at a time specified by the applicant, or, on the other hand, to arrange for notification to be given when particularly desired weather conditions are reported from any station (for example, when snow is reported in Scotland). The special notifications of favourable weather conditions to meet the requirements of farmers are also available to anyone who so desires. Any climber sufficiently interested to take advantage of the full meteorological service should apply to the Director, Meteorological Office, Air Ministry, Kingsway, London, W.C.2 for Form 2453, which gives regulations for the supply of information.

The principles of forecasting may be studied in the

official publication, *The Weather Map* (H.M. Stationery Office). The system of forecasting is based on the preparation of weather maps covering a very large area, and while the individual observer can do little in the way of scientific forecasting, a knowledge of its principles is a useful part of a mountaineer's equipment.

NOTE 1.—As much of this article is based on that on Meteorology in the *General Guide*, acknowledgment is made to the late Mr Gilbert Thomson and Mr C. K. M. Douglas, as also to Dr C. E. P. Brooks and the Council of the Royal Meteorological Society for the use of certain material and the reproduction of the Table.

NOTE 2.—The formation of occlusions which play so large a part in Scotland's weather may be further explained thus. In any frontal system there is a mechanical movement of warm air forwards and upwards over the cold air which lies ahead of it. It is this upward movement which plays as great a part as anything else in causing bad weather ahead of a warm front. Similarly, the overtaking cold front acts as a wedge, so lifting the warm air which lies ahead of it. A little thought will suffice to indicate that when the cold front overtakes the warm front, the warm air which lay between has been lifted, and continues to be lifted progressively clear of the earth's surface. The weather ahead of an occlusion is very similar to that ahead of a warm front; in fact, the only notable difference from the observer's point of view is that there is no great change of temperature at any time, due to the lifting of the warm air clear of the surface of the earth.

NOTE 3 .- The Rainfall Map of Dr Buchan can be found in Bartholomew's "Atlas of Scotland " and " Atlas of Meteorology." Early papers of Dr Buchan quote an average over two years of 150 inches at Loan, near Loch Quoich, and reference is also made to Glenfyne (1866-70) 103 inches, Bridge of Orchy (1864-73) 118 inches, and Glencroe (1864-70) 128 inches. More recent study of rainfall discloses the fact that between 1931 and 1939 the annual rainfall varied between extremes of wet and dry. For instance, the annual rainfall at Arrochar was 122.9 inches in the exceptionally wet year of 1938 and 62.4 inches in the very much drier year of 1939. Acharacle (Shielbridge) varied between 96.2 (1938) and 52.9 inches (1939). Corresponding figures from Loch Shiel (Forestry Commission) are 143.2 and 68.2 inches, Ardgour House 148 and 73 inches, Kinlochleven 140.4 and 68.8 inches. Many other records could be quoted but, omitting reference to maxima and minima, other centres show illuminating differences, Killin seldom exceeding 60 inches, Fortingall 50 inches, Pitlochry 35 inches, Braemar 40 inches, Grantown-on-Spey 35 inches and Dalwhinnie 55 inches. Loch Ness, Kinlochmoidart, Fort William, Roy Bridge, and Portree (Skye) have averages between 60 and 80 inches as a general rule.

NEPAL HIMALAYA, 1952.

By Tom Weir.

CLIMBING in the Himalaya has so many aspects that in the space of a short article I can do no more than stress one of them, and that one, by the Editor's wish, is mountaineering in the Himalaya from the point of view of a Scottish-trained climber with a modicum of Alpine experience.

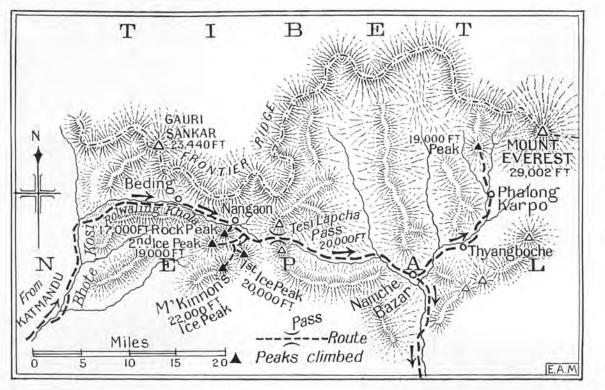
First of all I had better outline the composition of our party and its general objectives in Nepal in the autumn of 1952. We were the old Scottish Garhwal Expedition with the exception of W. H. Murray who was replaced by G. S. Roger, who had not been to the Himalaya before but whose Alpine record is extensive. We went out in the post-monsoon period because it was then our permit to climb was granted, and initially we thought of trying Cho Oyu which had just defeated Shipton's 1952 Expedition.

But a big peak is beyond the finances of a small expedition, as we quickly found when it came to totting up the L. S. D. required, so we decided on the principle of a skirmish among smaller peaks: and the area we chose was the region just west of Everest, where the Rolwaling Gorge cuts into the mountains, but is separated from the Everest region by the Tesi Lapcha Pass which crosses the main chain at 19,500 feet, and was crossed by Hillary for the first time in 1951.

From what we had heard from Secord and others of Shipton's party there was no shortage of climbablelooking mountains north of Rolwaling, and reports spoke of some peaks of 20,000 and 21,000 feet going abegging in the glaciated region just inside Tibet from this gorge.

This sounded the ideal thing for us, and it was to these peaks we trekked from Katmandu at the end of the monsoon, a time of festival not only for the natives, but for the fleas, bugs, and leeches which inhabit the vegetation at this steamy season.

Ninety miles of cross-country marching, across the



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foothills to the ravine of the Bhote Kosi which drains from Tibet, and we entered Rolwaling by a wild jungle path dipping among great rock bluffs and tangled bamboos under the amazing peak of Gauri Sankar. which very nearly became the objective of our expedition whenever we saw it. The snag was that we could see no easy way of getting to the bottom of it. We were on the wrong side of the Rolwaling but in a reconnaissance position that enabled us to look into a subsidiary gorge, wild as the Rishi, which rose in waterfalls, rock slabs, and jungle for 4,000 feet. Above this it was no longer a gorge problem but a mountaineering problem, and a big one at that, for the jungle gave out on rock peaks which would have to be climbed in order to reach the true east ridge of the mountain, which rises as a long shoulder of ice, steepening as it goes up and reaching its maximum gradient in two bulges near the summit.

Ideally, the place from where to climb this peak is Tibet, by its north ridge which we saw later, but a British climber is more likely to end in clink than on the summit if he tries it from the north side, since the main trade route crosses all too close to the mountain. It would be a stimulating problem for the next Scottish Nepal expedition to try it from Rolwaling by the east ridge, since it would give a bit of everything, exploration in gorges, rock climbing on the intermediate peaks, and sensational climbing on an ice ridge towering straight over the jungle. The arctic and the tropical meet with dramatic force in Rolwaling.

Our exploration area was in the upper Rolwaling, but not in Tibet as we had planned. By a stroke of luck we chose a fine rock peak of around 17,000 to 18,000 feet for reconnaissance, and not only had a good climb on it but a joyful surprise as well when we found ourselves looking into a range of peaks on the south of the gorge, whose presence we had no reason to suspect from the map because they were not on it. True, there were some vague shadings indicating mountains, but nothing of the true nature of this heavily glaciated range of upstanding rock and ice peaks were shown.



GAURI SANKAR (East Ridge on left)

Tom Weir

Nepal Himalaya.

We were lucky to get the view, for quite suddenly, as it does so often in Scotland, the weather changed to snow and mist, and the apparently simple rock spire we were on became complicated. The zigzags of the route in snow couloirs and corries were not found without difficulty, and we were glad of openings in the cloud.

Which brings me to a point I should like to stress; and this is the importance of cultivating what I have not got, and that is an eye for country. How many people take note of their surroundings properly when the sun is shining, noting carefully the position of crags, landmarks, streams, snow-gullies; checking back to camp and forward to the peak by compass for some easily recognisable feature; or noting the direction of some obvious change of route? Having failed so often in mist to find crags in Scotland that I thought I knew, I would offer the advice to the potential traveller that he should learn to note such details, and in time he might become as proficient as Tom McKinnon, who lost a spoon on the way into the untracked Rishi Gorge and found it on his way out.

The effects of altitude are worth mention on this climb. Tom McKinnon moved very fast on this ascent which involved about 4,500 feet of ascent from our camp at 13,000 to 14,000 feet. (We had no aneroid, so all heights are guessed.) The other three of us moved more slowly and felt distinctly uncomfortable with headaches and general weakness. We got to the top but suffered for it on the steep descent, or in camp, with squeamishness and bouts of vomiting, Scott and Roger being so affected that they were unable to eat. I felt squeamish myself but quickly recovered after half an hour. Later on it was I who was sick and Scott who was well. There are no rules with altitude, unless that some exceptional men like McKinnon do not seem to suffer its effects. It was notable that the three of us who had been to the Himalava acclimatised quicker than Roger.

The climbing plan now was to bag some of these unsuspected peaks, and we moved to a base at 16,000 feet on the lip of a corrie, overlooking Rolwaling to an amazing panorama of Tibetan summits—the peaks, in

fact, that we had originally planned to climb. We had five Sherpas with us in this camp; and the number was insufficient, for some of them fell ill with the effects of altitude next day. Not all Sherpas are Tensings, and the snow was deep and soft, making the reluctant even more reluctant.

It took us two days to get ourselves and two porters to a camp at 19,000 feet on the lip of a tremendous icefall, splendidly placed for a couple of good peaks. One was a snow dome of around 22,000 feet. The other was a sharp rock and ice peak of over 20,000 feet. The outlook at sunset as the clouds boiled around us, flaring out of the depths of gorges in red and gold, was a sight to remember. We planned to climb the lower peak.

No one accustomed to Scottish or Alpine climbing would have found the problems of next day very far outside their experience, though they would have found the effort required greater, since, at even the modest height of 20,000 feet, you have to push yourself considerably more than at Alpine heights. A steep ice wall with a snow cornice barring exit was a typical Scottish gully problem, and it led to a broad ridge sloping gently to a steep rock tower of red granite, magnificently sound and well provided with holds, ending on a summit which had room for only three men on its top. For such a difficult-looking peak it went surprisingly easily and enjoyably, and we looked around for fresh worlds to conquer.

The obvious peak was the 22,000-foot snow dome which now stood revealed in all its massive snow cornices and icefalls. We had unwittingly unlocked the gateway to it by our climb, for what had looked a tangled and complicated ice mass without chink in its armour now stood out of a broad plateau linked to the peak on which we stood by an easy ridge that by-passed all ice obstacles. This was a find.

There were only two snags. One was the extreme softness and depth of the snow, the other was the fact that we had only two fit Sherpas; and two Sherpas however willing cannot carry for four men. One man and two Sherpas might climb the peak, and we put it

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to Tom McKinnon that, as the fittest man, he should go for it. He was instantly enthusiastic. We left a fixed rope on the ice wall, returned to camp, and he set off for the peak the same afternoon with the two Sherpas Mingma and Dawa Tenzing.

That night he camped at 20,000 feet and, after a bitterly cold October night, set off at 7 A.M. on the final 2,000-foot climb to the summit, the porters and himself taking turns at kicking steps, selecting the line of least resistance on the heavily corniced slopes. At 9.30 A.M. they were on top, and at 2 P.M. they were back with us in camp. The only worry on the climb, McKinnon said, was possible deterioration in the snow for the descent, but otherwise he did not consider it a difficult climb. It was a very fine effort indeed, in our opinion, for the peak did not look easy.

Next day we had the most enjoyable climb of the expedition, on a rock peak that rose over 3,500 feet from our lower camp at 16,000 feet, towering out of a little glacier in one sweeping ridge to a veritable spire. This climb had everything. The glacier demanded care; and access to the sunny rock ridge was only possible by climbing a 100-foot wall, icy with *verglas*.

The rock stretching ahead was red granite, shattered into pinnacles and crushed into masses of huge boulders in places. The scale was so vast we felt fortunate to have forehand knowledge of a likely route; for we had picked out a landmark in a tall tower and knew we should pass close to it and left of it, where it rose above us now.

Scott, whose skill on rock is well known, started up a direct route, but was soon forced into an easier line. We zigzagged on the line of least resistance on slabs and vertical chimneys, savouring corners where the mountain fell sheer away for thousands of feet. We remember particularly one slab above such a place, not very difficult but not easy, and we thoroughly enjoyed it as in Glen Coe. The summit was a spike with room for only one man at a time, and we reached it at 12.30 P.M., having been climbing for only six hours. So we were getting fit.

Poised on the top we looked between our toes to the

Rolwaling Khola some 8,000 feet below, its path a thread on the south wall of Gauri Sankar. The trees and autumn brilliant shrubs which had so charmed us by their rich colour were flattened out from this height into a general impression of dark, austere slopes. The hugeness of the landscape spread before us would have been an overpowering impression of barrenness, but for the certain knowledge of the little things that make up so much of the joys of Himalayan travel, the feast of colour lying round every corner, the camping places among alps gay with gentians.

Up here we had the best of two worlds, because we could read into the scene spread before us. We could see through binoculars, for example, our footsteps zigzagging in a long trail over glaciers and icefall to our camp of two nights ago at 19,000 feet; more exciting than that, we could pick out a trail weaving out and in among the ice cliffs of McKinnon's peak to end on the summit. That was one world, of action and adventure and nights in high camps, we would remember to the end of our days.

There was nothing in any of these climbs, or indeed in any of the other climbs we did, so different from what we normally do in Scotland or in the Alps. The weather was good; the rocks were dry; the glaciers were safe; and there was almost no avalanche danger. Conditions, in fact, were quite the opposite to Garhwal, where we never saw a view from a summit or got ideal conditions for reconnaissance.

In Nepal we came, we saw, and though we did not conquer much, the things we tried to do were successfully accomplished. We crossed the Tesi Lapcha from Rolwaling, which Hillary had crossed in the opposite direction, and we found it a highlight of the expedition, for it involves rock climbing and glacier craft. Then, from Namche Bazar, we went up to the fork of the Khombu glacier on Everest to climb a 19,000-foot peak and see this enchanting land, which it was Shipton's luck to explore in 1951 and 1952. Our efforts were modest but our rewards were high.

Beinn a' Bhaile.

What I would say to those who are thinking of taking a stab at the Himalaya is that now is the time to go; especially if you leave in spring before you pay your income tax, for prices are rising, and P. & O. fares to India have gone up once again. Spring and summer before the arrival of the monsoon is a better time than after it, I would say, since you get better value for your money in terms of daylight. The weather will not be as settled as we enjoyed, but the flowers of the high alps will charm you even when you cannot see the peaks.

NOTE.—T. D. McKinnon, D. Scott, T. Weir and G. S. Roger left Katmandu on 26th September 1952 and returned thither on 20th November (see *J.*, 1953, p. 184).

BEINN A' BHAILE.

By R. W. MacLennan (J.M.C.S.).

IT is remarkable how few mountaineers are even aware of the existence of this summit. It is justly singled out for comment in the appropriate S.M.C. Guide, but its inaccessibility and the fact that it is not a Munro have apparently been sufficient to deny it the popularity it deserves. Until this year there was no recorded ascent. A recent expedition (J. Russell, S.M.C., and R. W. MacLennan, J.M.C.S.) therefore took considerable pains to include Beinn a' Bhaile in its itinerary in July 1953. To illustrate the injustice hitherto done to a peak which, as regards one feature, is as unique as Ben Nevis, the reader is asked to forego the usual data about location and exact height until he has exercised his judgment on the following description.

By road the only approach is from the east over moderately rough going. The party made a lengthy detour round the head of a loch and forded an estuary at low tide. Owing to the configuration of the land which is a steadily rising plateau, the Beinn a' Bhaile range was not visible until we had come into fairly close

proximity. We were then faced by an extensive chain of summits rising against the western horizon. Some difficulty was experienced in determining which one was our objective. Eventually, however, we identified a hog-back ridge running due north and south. From this side the actual ascent, although we found it rather laborious, presents no special difficulties, and we reached the summit ridge without incident.

From here there was a magnificent view over the entire range, many of whose peaks are little inferior in height to the Beinn itself. The panorama from the ridge westwards is unobstructed, and some idea of its elevation above the surrounding landscape may be gained from the fact that on a clear day St Kilda is usually visible. The present party, however, was denied this experience by a heat haze on the horizon.

From the main summit a sloping ridge, rather reminiscent in contour of the Grand Cornier, runs down to a clearly marked subsidiary peak. Following the example of the early Cuillin climbers, the party exercised its privilege of naming the two peaks after its members— Sgurr Sheumais for the principal summit and Sgurr Mhic Ghillinnein for the lesser—a nomenclature which was in accord with the seniority of the members and in inverse ratio to their own respective altitudes.

From the ridge it could be discerned that the western face of the Ben consists of a steep, curving corrie like that of Beinn Laoigh. There is a continuous, unbroken sweep, without ledges or terraces, from the slightly overhanging ridge down to the floor of the corrie. After the gradual slopes of the east face the party found the exposure so stimulating that nothing could deter them from descending by the North Spur and making a second ascent up the central face of the corrie.

Neither summit is as yet marked by a cairn—probably for the reason contained in the footnote.

NOTE.—(1) Beinn a' Bhaile is on the west coast of North Uist, approximately 2 miles due west of the road between Bayhead and Tighary. (2) It is 72 ft. high. (3) It is grass-grown and composed entirely of sand.

Climbing Munros makes one Fit.

CLIMBING MUNROS MAKES ONE FIT.

By Patrick L. J. Heron (J.M.C.S., Lochaber).

WHAT began it ? Some people climb hills for one reason, some for another, some even, they say, because they like it. No one has ever heard the writer say that. In my case a medical check-up for an insurance policy showed I was overweight, had a high blood-pressure and was generally suffering from advanced senile decay. This was obviously a case in which to prove the doctors wrong again; and, to get fit, the choice lay between digging the garden in a big way or having a bash at the hills—so what would you have done ?

To live in the Highlands one needs some compensations to make existence tolerable and one of them is, of course, that there are lots of hills, some of them quite close. I was climbing (or should I say hill-walking ?) for over six months before I heard how many Munros there were, this giving me at once an objective and making it clear that there were just about enough to last three years at present progress. In the event, they were done somewhat sooner, possibly because some of the less interesting were rushed just a little.

I have always been keen to go somewhere new rather than repeat past experiences, whether holidays, cycling or walking tours; and, the Highlands being suitable for none of these purposes, to collect the Munros was just the very thing to give a fresh objective each day. It followed, as a matter of course, that to avoid covering the same ground twice a range of hills is best started from one end and not the middle, even if it means postponing a visit to the most interesting top till a later date. Sticking to this principle is a big labour-saving device. Lots of odd hills can also be picked up on summer evenings and at week-ends when the weather is mixed.

I have, however, been extraordinarily lucky as regards weather, partly by not altogether ignoring the B.B.C. forecasts and selecting the best district accordingly, even if this is not decided till 8 A.M. on a Sunday morning.

More than three-quarters of the hills have been visited on good to perfect days. Of the rest, almost all have either been done again on a fine day or a neighbouring peak has been climbed. A few really bad days, summer and winter, gave some compass-reading practice. I have had skis to the top of just one Munro, although, I regret to say, conditions and the skier were so bad that the skis were carried all the way up and most of the way down.

Of course, lots of the hills are themselves uninteresting, but it is often the case that there are compensations such as striking views and pleasant walking, so that a reasonable day's bag can be made. This is especially the case if a car is available and a non-climbing driver, in my own case my wife, who has driven many hundreds of miles to meet me at unusual places at unusual times.

When thus fully motorised easy excursions can be made over the Monadhliaths from the Spey Dam to Newtonmore, the Cairnwell Pass to Loch Muick and the Cairnwell to Inverey. Rather more ambitious days were the Fannichs from near Braemore to the east end of Loch Fannich, from Glenmore Lodge to Cornavon Lodge (with a night at the Shelter Stone) and the Beinn Tarsuinn group starting at Poolewe and finishing on the road near Braemore.

Lest it be assumed that I am either retired or have not yet started work, I hasten to say that all the above trips were done on a Saturday-Sunday or Sunday alone, starting and finishing at Fort William. With an alarm clock and a little will power anyone could do the same. The finest day scenically, as regards remote and craggy hills, was undoubtedly that between Poolewe and Braemore. I exclude the Ridge of the Coolins as this is unique. And the hardest day ? One can make any day hard by doing enough hills, but I would award first prize, both as regards a full day and for a single peak, to the return journey, on a hot day, to Ladhar Bheinn along the south side of Loch Hourn.

What is there, now that they are all in the bag? My worry is that there is so much more to do and so little time in which to do it. Probably, as these notes do not

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contain the descriptions of the frightful difficulties and fatal accidents usually met with in mountaineering articles, the Editor will reject it. But then, I am not a mountaineer.

NOTES ON CLIMBING IN HARRIS.

By G. Scott Johnstone.

THE following notes are the result of an attempt, by my wife and myself, during a three weeks' cycle-camping visit to the Outer Isles in the autumn of 1952, to examine as many as possible of the crags recommended by the "Islands" Guide Book as giving probable rock climbs. That the results of our stay are so meagre is in part due to a somewhat sanguine view of the climbing potentialities of the crags mentioned by the Guide Book, but mainly to the coincidence of our visit with an almost continuous series of south-west gales whose ferocity, on an unobstructed Atlantic seaboard, has taught us a few camping lessons.

The centres chosen for our visit were Islivig (Uig, Lewis), Tarbert (Harris) and Grogarry (South Uist), but our stay at the last place was cut short by the impossibility of shifting camp from Tarbert owing to bad weather. All these centres have a post office ; Tarbert and Grogarry have private accommodation by arrangement, and Tarbert has, in addition, a hotel. There are local bus services but bicycles are useful.

Uig Hills .- This is a delectable group of miniature mountains. With a bicycle Islivig is an excellent centre, and good, if somewhat exposed, camp sites are available about half a mile north of the clachan. Bobby Folkard's party have had the best climbing here and we can add little to their notes, and only one climb, of little merit (I. 24, 96).

Tiennasval (pron. " Chainsval ") .- N. Buttress, ca. 400 ft. (Moderate). Follow the edge above the northern trifurcation of the Great Gully. Good, but easy slabs near top. Rock, granite and granite pegmatite.

Griomaval.—Mist and rain prevented an attempt on the Slab face. Despite an unusually gloomy view taken by the *Guide* of climbing prospects here, we consider it has possibilities.

Creag Dubh Dhibidail.—Like all previous comers we were rather awe-struck by this sight. Pitoneers may appreciate it.

Tarbert Hills.—There is, local to Tarbert, a climbing ground perhaps equal, in variety and length of climbs, to Arrochar. In addition, if one is mechanised, other major crags are within reach, of which we only climbed on Clisham. Camp sites for a prolonged stay are unbelievably difficult to find in this wilderness of rock and peat, and we only got a good one near Loch Dieraclett when hay had been removed off some croft land. Nor did we see anything better during a ten days' stay.

Sgaoth Ard .- The crags here are on the north face (not as the Guide suggests in Glen Laxadale). Access, if walking, via the old Stornoway road in Glen Laxadale, upon which one can cycle for some distance, or if mechanised, by the Stornoway road to Loch na Ciste. In either case a walk of half an hour from the nearest point of the road takes one to the crags. The cliffs on the north face of Sgaoth Ard are the most likely to give good rock climbing of all the crags within walking distance of Tarbert. The face is about 500 feet high and broken up into numerous buttresses, of which only the three at the west end are of interest. The others are grassy and will probably only give scrambling. From west to east is, first of all, Slab Wall, a belt of steep and partly overhanging slabs which will probably give a good route of about 250 feet to the east of the parallel cracks which split this face. The wall is limited on the east by a deep, narrow cleft (of little interest). This is followed to the east by No. 1 Buttress, which has a formidable nose, with a semi-detached block, forming the east wall of the deep gully. This nose is about 250 feet high and vertical. The eve of faith detects a very severe route up it. The rest of No. 1 Buttress is more rounded and broken, but still steep and much longer (ca. 500 feet). It should give good climbing, despite heather ledges. To the east of No. 1 Buttress is a gully with a scree cone (no climbing):

Notes on Climbing in Harris.

then follows No. 2 Buttress which is divided vertically by a gully or shelf, which slants up from west to east. Then follow numerous more broken buttresses.

Climbs.—No. 2 Buttress (500 ft.) of which 250 ft. is scrambling and the rest hard difficult. Scramble up edge of eastern section of buttress overlooking the shelf. Rock becomes continuous and steep after 250 ft. The last 10-ft. slab is climbed direct. The rock is granitic gneiss and hornblendite. This latter is rounded and lichenous and, though sound, rather treacherous to moulded rubber soles when wet.

Gillaval Glas.—Access via the Stornoway road to Ardhasaig Bridge, or directly over the top from Tarbert. The crags are in Glen Skeaudale and the suggested face in Glen Laxadale seems to have vanished since the *Guide* was written. The main crag is Cnoc Eader Da Bheinn (locally called Gillaval Dubh), above Ardhasaig Bridge, and is very imposing. As the *Guide* records, it is too broken up for serious climbing, and the gully referred to appears to be all grass. There may be a short route high up on the east wall of the third buttress from the east, but we could not face the long ascent to it!

About quarter of a mile east of the summit of Gillaval Glas and immediately below two small semi-permanent lochans, is an excellent crag, about 250 feet high. The crag has a square-cut base slightly overhanging a grassy ledge. It is steep, slabby and beautifully clean.

Lochan Crag.—200 ft., Very Difficult. Start on ledge about 50 ft. from west edge of buttress and make (by a zigzag on west) for a rock recess surmounted by a prominant V chimney which slightly overhangs the recess. The traverse into the recess provides an interesting excursion on steep slabs with the correct number of holds. Other routes are possible on this crag, and we had some good fun on a short steep buttress some hundreds of feet to the north-east.

Sgaoth Iosal.—This hill is a wonderful rock playground, but nothing more. With the exception of Slab Corner none of the crags exceeds 200 to 220 feet. The rock is wonderful (granitic gneiss) and, as the small crags are steep, one wishes they were four times as long. These crags are the most accessible we know of in Scotland, being only a few hundred feet above the main Stornoway road.

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The southern nose of the mountain overlooks Glen Skeaudale and consists of steep slabs, probably 350 feet high, but these, while certain to give good climbing, lack definite natural routes. They would be worth attention at a later stage of the climbing developments hereabouts. To the north, overlooking the Stornoway road, these slabs steepen, but become shorter and are finally limited by a well-defined buttress (No. 1 Buttress), well seen while ascending the Stornoway road from Ardhasaig Bridge. Then follow three more short, steep buttresses with intervening grassy gullies (Nos. 2 to 4 Buttresses). This group is separated by steep, broken ground from an imposing buttress almost under the summit. This appears almost as a pinnacle from certain low viewpoints. There are other steep crags here but of no great length.

Climbs.—No. 1 Buttress, ca. 200 ft. Three pitches. A good steep difficult on wonderful rock. Pinnacle Buttress, ca. 200 ft. (Moderate). This crag was climbed on its southern edge and, while steep, a fantastic profusion of jughandles made it disappointingly easy. It might give a better, but shorter, scramble on its north edge.

BEN LUSKENTYRE—Uamasclett.—This crag was visited. Where steep it is repulsively heathery. Gardeners may find some scope here. We left it alone. *Glen Beesdale.*—Good steep slabs abound here but are all discontinuous.

Other Crags: Clisham .- While not strictly one of the Tarbert Hills, the only centre of accommodation for this hill is Tarbert. Bikes, cars or buses should be pressed into service here, as it has, in the Slabs of Coire Dubh, by far the most enjoyable climb that we performed. Coire Dubh has a very high, steep and rocky back-wall, and the slabs are unmistakable, being a great plaster, about 800 feet high, limited on the left by a narrow gully (possibly a future moderate climb) and on the right by a straight grassy gully. A rake rises from right to left across the slabs, and the climb starts at the bottom righthand corner formed by the rake and the grassy gully. The climb is difficult to classify. While the slabs are by no means steep, individual parts may be steep and quite holdless. In at least two cases the limiting angle of friction of palm and commando sole was nearly reached (wet weather).

Notes on Climbing in Harris.

Climb.—500 ft. just difficult, followed by 300-ft. just moderate. Start at bottom right-hand corner and keep 50 to 100 ft. from grassy gully for 500 ft. where the route breaks out into the gully. Traverse left and finish easily on slabs at a gentler angle. A better and more difficult route would avoid the breakout by inclining left after about 400 ft.

Strone Scourst and Oreval.—We feel that Strone Scourst has been badly treated by the Guide Book as, despite grass ledges, it is still one of the most spectacular walls in Britain. While it possesses no defined buttresses, the ledges do not appear to offer escape routes to anyone embarked upon the ascent. Unfortunately the wind was so high when we visited the crag that we were blown off our balance in the valley, so did not consider the attempt to ascend the crag as justifiable. The crags on Oreval, mentioned in the *Guide*, are insignificant. There is a good driving road (probably an estate road) right to the foot of the tremendous downfall of Strone Scourst.

South Uist.—Camp sites are easily available here to the west of the main road. On the hills, camp sites are again almost impossible to find, especially in Glen Dorchay which is the approach to Coire Hellisdale. We had not time to visit the crags here, but had a good day's walking on these hills, with delightful views.

GENERAL NOTE: Shooting.—Our visit was in August-September and, as far as we can ascertain from the locals, all the hills mentioned except for Strone Scourst are under sheep and are not shot over. Apparently only the hills round T. O. M. Sopwith's estate at Amhuinnsuidhe, and the moors south of Morsgail, are under deer. This, of course, may vary from year to year, but such a possibility seems to be unlikely.

R. W. MacLennan (J.M.C.S.) and J. Russell (S.M.C.) made a climb on Uamsclett on 27th July 1953, starting 50 ft. to the left of shallow grass on the right of the main buttress, a difficult of over 200 ft. in height. A 60-ft. rock rib is followed by a right traverse along base of broken slab and across grass gully. Climb corner and follow a groove upwards to the right, then a series of short walls, with a short 20-ft. wall and easy slabs to finish.

NEW CLIMBS.

NORTH-WEST REGION.

Applecross.

Sgorr na Caorach—No. 1 Buttress, Jupiter.—First ascent on 28th March 1952 by J. M. Taylor, W. D. Brooker and T. W. Patey. This mild severe route of about 1,000 feet is only surpassed by the Cioch North Wall climb, providing the next best yet longest route on the mountain, absolutely direct, with little scope for variation and following the main central rib throughout, with many fine situations. It is the next buttress on the right of the gully leading to the neck behind the Cioch. From the lowest rocks indeterminate ground leads to the base of the first big tier, 200 feet up.

The route lies to right of a recessed chimney which is on the right of some mossy overhangs. Diverging from it, go up 60 ft. to a platform. Here a thin ledge under an overhang leads back left above the top of the main chimney. At its end a 10-ft. chimney gives access to easier ground. The middle wall of buttress rises in front, and the route goes up a deep 20-ft. chimney in the centre, a 15-ft. flake crack and a 25-ft. groove on the left. From here appears on the right a perched spillikin, on a ledge in an exposed situation. Belayed from the left, balance round this, and then go 70 ft. straight up on good rock to a terrace. A few yards right the route goes up for 60 ft. with one awkward movement.

The buttress now falls back somewhat, but a steep 70-ft. band girdles it, barring the way. Follow a thin crack. Ten feet up are some jammed blocks, requiring a shoulder to surmount. For the remaining 20 ft. the crack is still hard. This was the crux on the first ascent under wet conditions. Serious difficulty ends after another 50 ft. For 200 ft. things go easily and a final narrow arête, sweeping up for 250 ft., gives a good finish. Time taken was $4\frac{1}{2}$ hours.

No. 4 Buttress, Totem Buttress, was climbed on 30th March 1953 by two parties: (1) T. W. Patey and J. M. Taylor, (2) W. D. Brooker and J. Morgan. It is a standard difficult of about 450 feet, and was climbed with a few inches of slush on the rocks, rather unpleasant. The buttress is characterised by a curious rock pillar the Totem, seen on the skyline near the top. Buttresses are numbered rightwards from gully to the neck behind the Cioch. This climb started on the right flank of the buttress.

The first obstacle is an obvious 20-ft. chimney with an awkward exit, whence a grassy depression leads to a terrace, followed to the left side of the buttress. Soon a ledge returns to the crest on the right, and a short rocky nose is surmounted. A steep rocky tower rises above. Rounding a corner on the left, climb a deep chimney leading to easy ground above. Ascend short pitch over huge blocks to a ledge below the final rampart. The curious will diverge to the left, up a short gully, to inspect the Totem and so to the top, but the more elegant finish is by a steep chimney on the right.

Sgorr na Caorach-Remaining Buttresses on North Side.-No. 2 Buttress is squat, about 500 feet high and carries much vegetation. Two routes were followed, neither very inspiring, one on each side of the buttress. The right-hand route, next No. 3 Buttress, was the better, with one good slab pitch. This one, Dexter, very difficult, was climbed by T. W. Patey, C. D. Thomson and R. P. U. Taitt on 2nd May 1953; the other, called Sinister, very difficult, on 2nd May by J. M. Taylor and A. G. Nicol.

Sinister.—Easy scrambling to a small rock tower on left edge, facing No. 1 Buttress. Climb tower by chimney on left and then straight to easy ground in 200 ft. *Dexter.*—Scrambling for 300 ft. to base of partly detached tower, passed by dark chimney on the right. Then step off a flake to a ledge and round a corner on the right to large platform. Above is a 60-ft. slab with small holds, using a running belay on a spike. Moderate rocks follow.

No. 3 Buttress has an apparently impregnable centre face. The right flank is grassy and unpleasant and was descended by Taylor and Nicol on 2nd May 1953.

Beinn Bhan, North Gully, A'Chioch.—J. Wood and I. Rettie climbed this on 31st May 1952. There is a big pile of rubble at the entrance, and one climbs on loose scree broken by five chockstones, each of moderate difficulty. A pinnacle now divides the gully, and the route goes left up a grassy wall. The final 120-foot pitch is a difficult, steep scramble.

Meall Gorm .- This imposing line of cliffs, south of the Applecross road, is well terraced, vegetated and not

very suited for climbing. High up, near the hairpin road bends, there is a prominent 600-foot buttress with a slender ridge on the left. Buttress was climbed on 2nd May 1953 by J. M. Taylor, C. D. Thomson and R. P. U. Taitt, providing a moderate route, rather featureless. The ridge was climbed by A. G. Nicol and T. W. Patey, who got a better climb.

Blue Pillar.—A very difficult 500-ft. climb. Follow the crest, often narrow, throughout. At mid-height is a vertical step, where the route uses a steep crack on right, at the top of which a jammed flake stands precariously. Surmount final tower by a deep chimney on the right.

Strath na Sheallag.

These climbs were done by H. G. Nicol, D. St J. R. Wagstaff and E. A. Wrangham, the first and last sharing the lead. Conditions for (1) and (2) were wet, (3) was dry and (4) covered in soft snow.

1. Sapling Climb.—Climbed 3rd April 1953. 280 feet, Very Difficult. This, and the next climb, are on Junction Buttress, at the junction of Glen na Muice Mhor and Bheag. It is an attractive cliff, 300 feet high, which provides a good half-day from Shenavall. There are now four routes on it with opportunity for several others. This route was an attempt to climb the smooth buttress right of Pasture Gully (see E. C. Pyatt, *Journal*, Vol. 23 (1946), p. 313), but it avoids the main face.

Start at a cairn 30 ft. right of the gully. (55 ft.); up the wall directly for 40 ft. then left to a tree belay. (25 ft.); up the wall ahead using a heathery groove on the right, then left round a corner to another tree belay. (80 ft.); straight ahead up broken stuff, heather, and trees to a more sturdy tree under a steep wall. (40 ft.); make away from the gully (which is here rather close) by climbing the left side of the wall by steep cracks, semi-layback. Then up slabs to the usual tree belay. (30 ft.); the impending wall ahead is turned by the straight crack on its left, thread belay. (50 ft.); up the steep scoop above the belay by good cracks, then another little wall ending on heather, to the final tree belay.

2. The Jew's Nose.—Climbed 3rd April 1953. 205 feet (of climbing), Hard Severe. On the left side of the buttress between Pasture Gully and the left edge of the



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NEW YEAR ON STOB GHABHAR

New Climbs.

cliff, about 50 feet above the ground, is a large terrace covered with birches: the Forest. The route gains the left end of the forest directly from below.

Start below a steep corner, at the foot of a fierce-looking layback crack (75 ft.); climb the crack, and go right along the top of a large detached flake into an overhanging groove; climb this past two trees to a substantial holly; from this go left and up to the forest (130 ft.); above the forest is a great smooth slab. A line of flakes leads up and out to its left edge above the tip of the nose. Follow this past a little holly (possibly one can split the pitch here) and a loose block, and finally up a conspicuous flake crack to the skyline; go round to the left, and a belay is found about 30 ft. up easier ground on the right. Scrambling now to the top.

3. Terminal Tower, Sgurr Ruadh.—Climbed 4th April 1953. 400 feet, Difficult with one Severe pitch. This tower is the westernmost bastion of An Teallach, above the west end of Loch na Sheallag. The route it provides is not a serious climb, being capable of much variation. The 2nd pitch is much the hardest, but is possibly avoidable.

Start at the lowest point of the rocks, which face north-west (cairn 50 ft.); straight up without difficulty to a bay (70 ft.); there appears to be a choice of routes. Make up to the left and climb an underhung crack, awkward to start; avoid its continuation by going out to the left, up and back right; higher is a thread belay (150 ft.); stances, etc., everywhere; up making for an indefinite gully which divides the tower ahead (60 ft.); up a little *diédre*, and more cracks to a block belay on the right (40 ft.); up cracks again, easily (25 ft.); take the final rocks direct on vast holds to the cairn at the finish.

4. Central Buttress Direct, Beinn Dearg Mhor.— Climbed 5th April 1953. About 800 feet, Severe. This fine buttress had previously been climbed (S.M.C. Guide: Central Buttress Gully) by Parker, Richards and Dennis by the gully which runs up the right-hand part of the steep lower half, and which almost divides the left-hand part from the rest of the mountain. This route runs up the right edge of this left-hand part, overlooking the gully.

Start 60 ft. up from the foot of the rocks, on the right. The first pitch is artificial, but thereafter the line is one of least resistance (50 ft.); a terrace gives a footing on the buttress and a little chimney is climbed to the next terrace (70 ft.); along the terrace to the left, then back right up a deep easy chimney (70 ft.); slant right and up

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a chimney to a stance overlooking the gully (thread belay, 50 ft.); the pillar above is climbed by the chimneys on its left to a deep cleft (chockstone belay, 50 ft.); step up a steep little wall; right and up, then left and up to a stance (piton belay, 25 ft.); up more easily and left into a chimney (70 ft.); up the chimney (exit on moss), and on up the right side of a pillar to a great jammed block, very conspicuous (60 ft.); continue on the right to steep corner (60 ft.); in the same line again to the level ridge at the top of the gully (300 ft.); follow the original route up the upper buttress to the top.

The Sidings, Glen na Muice Beg, The Funnel.— Climbed 6th December 1953. 350 feet, Severe. The next conspicuous feature left of Route 1 is a curving chimney, running almost the full height of the cliff. Start at the foot of this. The climb is continuous, both in standard and interest. The climb was done by E. Wrangham and D. St J. R. Wagstaff on snowy rock.

(1, 30 ft.) Up the chimney to an ash tree belay. (2, 60 ft.) The chimney again, exit past a flimsy tree, belay 15 ft. farther up. (3, 60 ft.) Another chimney pitch, awkward exit. (4, 40 ft.) The groove ahead; start on the right, then come back left, and up to a flake belay below a steep black chimney. (5, 50 ft.) The exit of the latter is holdless, so instead traverse out left, round a corner, past a detached flake, to the bed of a parallel chimney (belay). (6, 50 ft.) Starting on the right climb into the chimney at 15 ft., and up it to a large chockstone. (7, 60 ft.) Go up on the right for 20 ft., then traverse back left across the chimney, and up a short steep wall. It is now possible to scramble or climb according to taste to the top of the crag.

Strath na Sheallag.—Rather over a mile N.N.E. of Achneigie, and near the short-cut path from Corryhallie to Shenavall there is a quartzite cliff, "The Nursery." On 8th December 1953 we did three boot climbs on it. The central and highest mass is formed into three vague buttresses: Freeman on the left 180 feet, Hardy in the centre 220 feet and Willis on the right (cairn at foot) 180 feet. They are all about Very Difficult in standard. (Also by Wrangham and Wagstaff.)

Other Areas.

BEN LAIR-1. Butterfly Buttress, Right Wing.-Climbed 3rd December 1953 by Messrs Wrangham and Wagstaff. 1,000 feet, Very Difficult. On the left (east)

New Climbs:

of Molar Buttress there is a wide gully, or amphitheatre. The next buttress on the left again of this is a great double buttress with the shape of a butterfly. This climb takes its right-hand side. The lower section is steep.

Start just right of the foot of the rocks: (1, 80 ft.) Take a ledge slanting left to the centre of the buttress, and go up to a ledge equipped with a birch tree. (2, 70 ft.) Go round the right corner of the steep wall above, up and back left; then up for about 30 ft. to a belay under a steep wall. (3, 140 ft.) The crux: take a shallow crack on the right, which develops into a ledge curving left under an overhang. Follow this to its end, then go up to the upper of two large grass ledges. (4, 250 ft.) Carry on rather to the left; stances, etc., at suitable intervals. (5, 350 ft.) Keep on the crest (rather indefinite) of the buttress till the rocks get gradually easier.

2. Olympus.—Climbed 5th December 1953 by Messrs Wrangham and Wagstaff. 500 feet, Difficult. On the immediate left of Marathon ridge is a rather thin buttress, starting a good deal higher up. Scramble up this till a gully cuts sharply across the buttress. Here it steepens. The route is straightforward, it being best to keep as near the left edge as possible.

Beinn a' Mhuinidh (Kinlochewe), Tuit.—240 feet, Very Severe. Climbed on 9th August 1952 by J. R. Lees and D. D. Stewart (both of Kinloss Mountain Rescue Team). The climb lies to the right of the waterfall. (The well-known waterfall route is on the left.) Tuit is Gaelic for "Fall."

Start at cairn 20 yds. right of waterfall at lowest point of wall, and climb up left to a small and then to a large pine tree. Chimney on right gives access to wall above and a ledge with rambling pine tree in a corner. The narrow rib to the right of the corner leads to the final wall. The last pitch only is very severe.

Stac Polly, November Groove.—350 feet, Very Difficult. Climbed 8th November 1953 by D. D. Stewart and G. Cairns (Mountain Rescue Team).

Easily seen from road on south-west face of mountain are two long chimney-grooves close to the smooth south-east wall. Start at a cairn and crack below the grooves, and later traverse right into the right-hand groove before turning a square chockstone on the left. Stiff corners and cracks lead upwards and line of groove is regained below final overhang.

CREAG SHOMHAIRLE (in Sutherland)—Crescent-shaped Chimney Route.—This was climbed on 28th June 1953 by D. H. Haworth and Joyce Tester. This cliff is 1 mile long and gives good rock climbing. It is 1,000 feet in height and faces Strath Coille na Feanna. Access to the foot of the cliff is gained through a wood. The cliff can be seen from the road at the inner end of Loch Eriboll. It is 3 miles from the road and a cart track goes for the first mile up the Strath Beag to Strabeg.

The climb is about 800 ft. and Very Severe for one pitch. It starts up the wall on left of the chimney. A traverse is then made to the right into the chimney at about 120 ft. Next, move out left on to the wall again and up a slanting grassy rake. Then a very severe and delicate traverse to the right and up into chimney (chockstone belay 20 ft. below overhanging top). Move out to the left and up second chimney. Then take right-hand fork of chimney (a large chockstone forms a window in it). Access by a traverse to right. Climb out from behind the big chockstone and up wall on left. After 140 ft. one comes to a big grassy terrace. The second half of the climb is completed by following the not too obvious chimney immediately above.

SKYE.

Sron na Ciche, Eastern Buttress, Magic Casement.— 300 feet approx., Very Severe. Climbed on 21st June 1953 by Maynard M. Miller (American A.C.) and G. H. Francis (Climbers' C.). Above where the Terrace meets Sgumain Stone Shoot some prominent boulders abut against ledge on Eastern Buttress. Above is slabby bay, start of Girdle Traverse and above this a squat buttress cleft by a central crack. Here is start of climb about 70 feet lower than start of Zigzag Route.

(1, 40 ft.) Up to crack by large blocks and into it. Chockstone at mid-height useful then scree ledge above. (2, 25 ft.) Avoid easy way on left but take right one of two open grooves. Layback and delicate slab above lead to belay position on an edge. (3, 30 ft.) Back left by a stomach-traverse under leaning flakes, then upwards by easier rocks to ledges and belays on the lower, scree-covered rake of Zigzag Route. Walk across, and slightly up this rake (ca. 30 ft.) to climb the uppermost crack leading to the Upper Rake of Zigzag Route. (4, 25 ft.) Up the crack which is straight and steep, with a 2-ft. slab on its left. At the top walk up 10 ft. of the easy ground of the Upper Rake to the foot of an imposing vertical crack, the crux of the climb. (5, 35 ft.) The crack is climbed past a bollard-spike to an inserted chockstone. Slightly above this a channel-section peg was inserted (and stirrup hung from it). The next peg goes into a thin crack trending left, above (stirrup). The third was impossible to remove, and remains in the main crack higher up. It is too deeply planted to take a snaplink (nylon "string" sling, snaplink and stirrup). From high on this stirrup reach handholds and pull up on to blocks and a chockstone belay in a deep groove above. (6, 25 ft.) Up the groove to its back, through a cracked overhang, and up a steep groove above to a ledge with a cairn. (7, 30 ft.) Easy ways go to left, but the best finish is to climb a left-slanting groove directly behind the cairn, returning up right to a ledge. Continue to another ledge with good belays. (8, 60 ft.) Climb a steep crack just right of a basalt dyke, and cross it to finish left up a glacis. Easy to the top.

Mhic Coinnich, Coireachan Ruadh Face, Thunderbolt Shelf.—This 500-foot, very difficult route was climbed in vibrams by T. W. Patey and W. D. Brooker on 13th August 1953. It lies on the very steep cliff immediately to the south of Bealach Buttress and can be easily reached from the 2,595-foot col by descending Rotten Gully to the Terrace. Below this go down a little difficult chimney just on true left of Rotten Gully, and so by easier ground to the screes. The south flank of Bealach Buttress is formed by a gigantic vertical wall. The route is on the face just left of this wall and keeps close by it. The lower part consists of three almost vertical walls each about 60 feet high.

Turn the first by a huge chimney cleaving south flank of Bealach Buttress. Then traverse left 30 ft. on a ledge and climb wall above to another ledge. Move left 15 ft. and climb third tier to a ledge, actually a continuation of the Terrace on Mhic Coinnich. Slant up left, keeping fairly close to wall on right. One pitch goes over a flake on the wall itself. Higher up, take a direct line upward by prominent vertical chimney leading to main ridge about 100 ft. from the 2,595-ft. col.

Banachdich, Coireachan Ruadh Face, The Twins.— Just north of Bealach Coire na Banachdich are two prominent steep buttresses divided by a dark gully the Twins.

South Twin, 250 ft., moderately difficult (Patey and Brooker, 15th August 1953). The foot is a huge slab topped by overhangs. On left flank a chimney indents and its right edge gives steep climbing

to a level crest. Trend left across a wall and up crest to summitrather shattered rock.

North Twin, 300 ft., mild severe (same party and date). From recessed platform 20 ft. up climb steep crack to ledge on left flank. From its far end climb steep, slabby left wall of buttress until possible to traverse right to crest. Vertical knife-edge leads up on good holds to level ridge of rock ending in a neck. Shattered rock follows.

Banachdich (Coruisk Face), Midget Ridge.-From the Bealach Coire na Banachdich the main ridge north crosses a minor summit above the Twins and descends slightly to a small saddle. Hence easy ground leads down to level scree terrace underneath summit cliffs. Traversing this one passes under steep black cliffs cut by terraces until one reaches a prominent narrow arête trending somewhat right. This, Midget Ridge, 400 feet, moderate was climbed by Patey and Brooker on 15th August 1953. They followed the crest closely on good rock, at times narrowing to a knife-edge.

Banachdich, Coruisk Face, Clouded Buttress.—About 100 yards north of Midget Ridge, beyond imposing vertical walls and to right of a big gully is this prominent buttress, which gave a 600-foot mild severe climb to Patey and Brooker on same day as Midget Ridge. It ascends direct to the main Banachdich summit, the route appearing to be the only possible one, and rocks sloping outwards, demanding great care.

From the foot trend right, and later left. Cross steep slabs towards the left until direct ascent possible. Work right and up to slabby ledge. Traverse left on slabs to a shallow 10-ft. chimney, and then left and up to recess in left corner of buttress, at a great white scar. The crux is the exit by the right-hand corner above. Then go straight up for over 100 ft. to a terrace. The final tower above may be avoided but gives a good finish, just a little south of Banachdich summit.

Climb groove with very difficult start, then up for 80 ft. Exit by an obvious gangway on left to platform, then up a corner to a similar platform. From highest point climb to final overhang. Move right, where a fine mantelshelf leads to base of steep slab, climb to and up notch in overhang, finishing by a crack on the right.

1. North Buttress, An Caisteal.—Climbed 10th May 1953 by E. A. Wrangham in dry weather. 1,200 feet, Difficult. Happily the supply of great unclimbed buttresses in the Cuillin is still far from exhausted. I can find no record of an ascent of the right-hand-most of the three buttresses which An Caisteal throws down into Harta Coire, though an unsuccessful attempt is recorded in the Sligachan book. It is defined by the North gully on the left, and the gully between Sgurr na Bairnich and An Caisteal on the right.

Start up the first wall by its left side. Return to the centre of the buttress and climb a long stretch of easy slabs, which steepen until a terrace is reached. The wall or tower ahead is the crux. Climb it direct, moving from left to right, and back. Then on up to a final little tower which climb either by a chimney in the centre or a small gully on the left, to its green mossy top, where there is a cairn.

2. Central Buttress, W.S.W. Crag, Marsco.—Climbed 22nd May 1953 by E. A. Wrangham in dry weather. 550 feet, Difficult. A route up the buttress forming the right-hand edge of the amphitheatre. There are steep smooth walls with corners on their left.

Start at the foot of the rocks. Ascend fairly directly by the corners till the top wall is reached. Go round to the right of this, and up to the "shoulder" (mentioned by Odell, S.M.C. Guide). Here Odell's route is joined. 250 ft. to the top.

GLENCOE, ARDGOUR, AND BEN NEVIS.

Buachaille Etive Mor.

Crowberry N.E. Face; Engineer's Crack.-Very Severe in rubbers, 225 feet approx. Climbed September 1951 by H. McInnes, C. Vigano and R. Hope (Creagh Dhu M.C.).

Start on Fracture Route and, well below the piton, traverse left about 15 ft. to a small ledge in the Crack (20 ft.). This climbed, using five pitons and stirrups until level with crux of Fracture.

Traverse right, on to Fracture, below crux and finish up it. The first 20 ft. of the Crack to the ledge was climbed solo by W. Smith (also Creagh Dhu) in August 1951; very severe in rubbers.

North Buttress, West Face, Bludger's Route.-Very Severe in rubbers, 300 feet. Climbed 21st September 1952 by P. Walsh and H. McInnes (alternate leads) and T. Laurie. This starts between Belial and Guerdon Grooves, about 25 feet from the latter, but full detail not yet available.

WINTER ASCENTS—1. Raven's Gully.—Found Very Severe and climbed by H. McInnes (C.D.M.C.) and C. Bonington (J.M.C.S., London) on 14th February 1953.

Crampons used on pitch 4 which, using two pitons, required 11 hours. Socks used above this, although crampons used on the final slopes. The chockstone in pitch 5 was lassoed, allowing pendulum action, and saving hours of struggle as the pitch was very much iced. Two pitons used on pitch 6. The ascent took $6\frac{1}{2}$ hours, six pitons used, two of which as belays. Ten hours or more might easily be needed. A previous attempt on 3rd January 1953 by H. McInnes, J. Cullen and C. Vigano (C.D.M.C.) was defeated at the final 10-ft. chimney. (See note in 1953 *Journal*, Lagangarbh Section of New Year Meet.) On 20th January 1952 two parties, mostly Creagh Dhu members, but also Banks (A.C.) and Lovat (S.M.C.) attempted the climb, which had to be abandoned at pitch 5 for lack of time. Pitch 4 took nearly 3 hours.

2. Crowberry Ridge by Abraham's Traverse was climbed on 13th February 1953 by H. McInnes and C. Bonington. It should be noted that Crowberry Ridge has been formerly climbed in winter conditions by other variations, but not over Abraham's Traverse.

The Traverse was climbed, after several attempts, in socks and using one piton. The pitch was hard severe and took 2 hours. Much soft snow covered ice. The rest of the climb was mild severe and the whole ascent took 4 hours. Bonington used crampons.

3. Agag's Groove was climbed on 8th February 1953 by two parties—H. McInnes and K. MacPhail (C.D.M.C.) and C. Bonington, J. Hammond and G. McIntosh (J.M.C.S., London). The first party took $2\frac{1}{4}$ hours and the second $4\frac{1}{2}$ hours. The hardest bit was the right-



June 1947

B. H. Humble

CHIMNEY ARÊTE, COBBLER, NORTH PEAK (J. Cunningham on first ascent)

New Climbs.

angled recess in the upper part of pitch 1. Here was black ice, and a piton was used. The moderate sections of the Groove were difficult, owing to falling snow covering holds which were often iced. A second piton was used at the normal crux of the route, to protect against a high wind. Hammond used crampons. The standard of difficulty was severe.

Gearr Aonach.

East Face, Bunny's Route.-Very Difficult, 220 feet. Climbed in summer 1952 by H. McInnes, Mrs Laurie and Miss A. Williamson.

About 200 ft. before reaching the great boulder in Coire an Gabhail, go up a stone shoot on the right to the face. There is a very noticeable short, wide, deep chimney at the top of the wall. An obvious fault leads to the chimney by a leftward trend. Climb fault and chimney (crux) in three pitches.

East Face, November Wall.—Mild Severe, 140 feet. Climbed November 1952 by W. Smith, H. McInnes and H. Currie (C.D.M.C.).

Start at a cairn directly below the obvious chimney of Bunny's Route. Climb a short chimney leading leftwards about 20 ft., then right slightly for another 20 ft. and finally traverse left and follow a shallow groove to a ledge with piton belay at 110 ft. Climb 20-ft. wall to grass ledge right of large overhang. Finish by climbing chimney of Bunny's route, on right.

Aonach Dubh.

Far Eastern Buttress, N.E. Nose.—Very Difficult. Climbed 22nd April 1946 by J. Neill and A. H. Henson. The route goes up the corner formed by east and north-east faces.

Follow the crest by scrambling and then harder climbing until forced to traverse right. Use the natural line with one final awkward move at the end. It is to right of route described in *Journal*, Vol. 24 (1949), p. 139.

(Same Buttress), Hole and Corner Gully.-Moderate. Climbed 22nd April 1946 by L. Greenwood and S. Fry. A deep gully to right of and behind the N.E. Nose route, contains two pitches, the second being an interesting cave.

The following four routes have been climbed by L. S. Lovat and J. M. Johnstone (usually alternate leads):-

WEST FACE—No. 2 Gully Buttress, Terrace Crack.—
 200 feet, Difficult. Climbed on 1st March 1953.

Begin at an obvious scoop at the left end of the Buttress. Climb it for about 40 ft. to a terrace, above which there is an overhang. Traverse left along the terrace round the corner on to the north face till a right-angled recess is reached. Climb its left-hand edge and step rightward over the apex to the foot of a noticeable clean-cut crack. The crack (20 ft.) is climbed to another terrace. Traverse left about 20 ft., climb the right-hand edge of a wall and so scramble to the top of the Buttress.

2. WEST FACE (Amphitheatre)—Bregaglia Buttress.— 170 feet, Very Difficult. Climbed on 1st March 1953. This is the buttress, mentioned in the "Glencoe" Guide as unclimbed, in front of which is Winifred's Pinnacle. It gave a short but interesting climb and was named from the bright orange-vellow colour of the upper rocks.

From the neck dividing the Buttress from Winifred's Pinnacle climb into a recess and traverse right over an awkward open corner on to the crest. Climb the crest which is steep, involving one difficult step, to a belay at 100 ft. The remaining 70 ft, is not difficult.

3. EAST FACE—*The Long Crack.*—300 feet, Severe in rubbers. Climbed on 6th June 1953. Apart from the waterslide, the most prominent feature on the Weeping Wall face is a very long crack beginning mid-way up the slabs to the right of the waterslide and continuing almost until the face merges with the Terrace. The route joins the Crack from directly below and follows its line.

Start at a block, well above which the Crack can be seen and climb 15 ft. to a broad ledge. Traverse right a few fect to a short overhanging groove. Go up the groove and climb a steep wall on small but excellent holds till the angle eases. Traverse right to the foot of the Crack, which is obvious (80 ft.). No adequate belay exists. The first section of the Crack slanting rightward is the crux. Climb the steep wall on its right until a paucity of holds necessitates either a delicate traverse to right and up on to a grass stance or a pull-up on a small hold and an easier traverse to the stance. Climb the second section in the Crack itself and so continue to the Terrace. 4. EAST FACE—Arrow Wall.—350 feet, Mild Severe. Climbed on 7th June 1953. This is the wall between Quiver and Archer Ridge. The route follows a line of weakness straight up the middle of the wall.

Begin at a fault mid-way between the starts of Quiver and Archer Ridge. Climb straight up for about 40 ft. until a shortage of holds forces a trend to the right and up. Then traverse leftward horizontally on small holds for about 6 ft. to a nose. Traverse hard left round the nose (very difficult) and climb up to a ledge above which is a holdless wall. Traverse left to the belay at the top of the first pitch of Quiver (100 ft.). Directly above this belay (to the right of Quiver groove) is an overhanging black groove. Climb the groove which has excellent holds but is very steep. Well up the groove make a long upward step over an overhang (crux) and continue straight up to a belay. Follow the groove to the top.

Stob Coire nan Lochan.

North-East Face, Pinnacle Buttress.—Very Difficult. 300 feet (from lowest rocks). Climbed on 18th June 1953 by D. H. Haworth and Miss Joyce Tester. This is the unclimbed northmost buttress in the corrie.

Start at lowest rocks and climb to grassy terrace (easily gained from left). Walk up terrace and climb chimney on left. Awkward vegetatious exit to next terrace. Traverse rightwards to far end of terrace and climb corner to final terrace. From near right end climb chimney to top. Climb is vegetatious with few belays.

Sgor nam Fiannaidh.

The following winter ascent of Clachaig Gully has been reported, done on 3rd January 1952 by R. Hope and H. McInnes (C.D.M.C.) and found to be very severe, the time taken being $4\frac{3}{4}$ hours. Great Cave Pitch had snow and ice. Jericho Wall was iced and cutting down to rock holds was necessary. Four pitons were used on it as runners, and this was the crux. Red Chimney was iced but not difficult, and above this was only snow.

Garbh-Bheinn of Ardgour.

Great Gully.—On 3rd July 1953 D. H. Haworth and Miss J. Tester climbed some variations and also a direct route up the final 100-foot chimney.

Where the 100-ft. rib divides the gully they used the left fork, believed to be unclimbed. However, unknown to them, in 1952 W. Scrimgeour led a novice up this branch, Scott Johnston and Trevor Ransley following later. Haworth and Miss Tester, however, made a first direct ascent of the 100-ft. vertical chimney (high above the Great Cave), finding the last 30 ft. to be very severe.

Ben Nevis.

No. 5 Gully Buttress, Fives Wall.—Well up on the No. 5 Gully side of the buttress is a curving grass terrace, cairned at the east end. This route was climbed in September 1953 by J. R. Marshall (J.M.C.S.) and C. L. Donaldson. It is a severe of 200 feet.

Go up groove, then right, along ledge. Climb beyond termination then up to large flake. Climb this, then by cracks to large slab ledge. Traverse left and up short crack; then by little wall to a big ledge rightwards. Then up fine crack to the top.

CAIRNGORMS AND LOCHNAGAR.

Lochnagar-Black Spout Pinnacle, Route II.-This route, finishing up the face above the foot of Black Spout and starting from the entrance to left-hand branch of Black Spout, was climbed on 28th February 1953 by T. W. Patey and J. M. Taylor, the rock-climbing conditions being excellent and grading Hard Severe.

At the entrance to left branch one can move left on to large grassy expanse. (Above is the wide, open depression of Twin Chimneys route.) At the extreme end one reaches a long, narrow chimney, with an expanse of smooth slab on the left and a vertical wall on right, providing a 100-ft. pitch and ending on a short ridge projecting from the vertical upper cliff; a grand situation. (This chimney was climbed by N. Forsyth and J. H. B. Bell in 1941; J., Vol. 23, p. 32.) The crack immediately above seems hopeless. Party descended other side from ridge for 20 ft., at the top of a long fault running downward towards the Springboard, 300 ft. lower (possibly unclimbable).

The only way out seemed to be by a horizontal traverse towards a steep groove, 50 ft. away on the open face. Exposure was severe and difficulty increasing. A running belay was effected half-way along, and a difficult move made on to a steep, smooth slab, which was

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crossed by using a few barely adequate holds on the wall above. This was most delicate, as several holds were glazed with ice. Once the groove was gained, a short 20-ft. ascent led to a good platform and the end of serious difficulty. Route I was joined 60 ft. higher, in a large amphitheatre, and straightforward climbing led in about 200 ft. to the top of the Pinnacle. An attractive route on good rock, rather harder than Route I (Brooker Sutherland). Socks used on traverse.

Lochnagar—West Buttress, Hidden Gully.—This is essentially a winter route, following the line of least resistance. Under good snow conditions there is no outstanding difficulty. It was climbed on 27th February 1954 by two parties—T. W. Patey and J. Morgan; J. M. Taylor and L. S. Lovat. From the foot of chimney section of Gargoyle Chimney route a line of weakness slants upwards to the left to upper Black Spout Buttress.

Steep climbing for 100 ft. on mixed snow and ice to left of Gargoyle Chimney led to obvious slanting gully of hard snow ending as a curious V-cleft. Continue now, up gully parallel to Black Spout Buttress, over a steep pitch (formerly used on winter ascents of the Buttress to turn difficulty on the crest). Easy snow now to terminal wall, turned on right by slanting ledge overlooking Gargoyle Amphitheatre (end of Causeway Rib).

Lochnagar; Shadow Buttress A; Bell's Route (winter ascent).— On 5th December 1953 W. D. Brooker, J. W. Morgan and J. M. Taylor climbed this on heavy powder snow, the initial rib being the hardest part of the climb. The crest was reached fairly low and followed to the top. The climb took $3\frac{1}{2}$ hours.

Eagle Ridge.—On the same day the second direct winter ascent of Eagle Ridge was made in $4\frac{1}{2}$ hours by Patey and Tom Bourdillon—difficult conditions with heavy powder snow.

Beinn a' Bhuird, Garbh Choire, Squareface Buttress.— T. W. Patey and J. M. Taylor climbed this 330-foot route of mild-severe standard in July 1953. It is on the prominent crag which is seen high up between the Sneck and the Mitre Ridge. The route, not seen from directly below, is on the west wall. One starts at the foot of Back Bay Gully, right of and close to edge of the Buttress.

Climb 100 ft. to large platform on the edge. Then 30 ft. up edge to stance below overhang. A delicate 30-ft. slab traverse goes right (past the first obvious upward groove), until it is possible to go straight

up and return leftwards above to a platform on the edge at 90 ft. Now up to right for 30 ft. to a short, horizontal crack. Six feet on the right a deep fissure cleaves final wall. After 12 ft. of jamming leave it for a shelf on the right. Thence a delicate upward traverse leads to the top. A fine exposed climb on good rough rock.

Beinn a' Bhuird, Mitre Ridge.—A first winter ascent was made by W. D. Brooker and T. W. Patey on 2nd April 1953. The climb was plastered with snow, even the steepest pitches, but the snow was securely attached where needed, though extensive clearing of holds was necessary. There was some ice as well.

The initial slab, owing to lack of time, was passed on the right, though it was covered with good snow. The first chimney was heavily iced and was turned by the leader by a wide crack on the right and a return traverse above. Gaining the crest, the first inconsiderable 10-ft. wall gave as much trouble as anything and required combined tactics. At the base of the first tower the party crossed a slab on the left and climbed a 20-ft. open chimney—critical climbing with holds obscured by snow and ice. This was the crux. The next pitch, to the neck behind this tower, was similar, less difficult but more sustained. A fine 30-ft. traverse over a slab on the left led to the ascent of the second tower. The final arête to the top was most impressive in its mantle of snow. The climb took $4\frac{1}{2}$ hours.

Creagan a' Choire Etchachan—The Bastion.—This severe variation lying to the right of the normal route was made on 25th October 1953 by T. W. Patey and W. D. Brooker. Low down it followed a prominent dyke of red rock on the right edge of the buttress and then went left on to some large blocks. A long groove with an exit to the right led to easier ground.

CAIRNGORM—Coire an't-Sneachda, Aladdin Buttress. —A new finish—The Lamp Direct—has been made on 9th August 1953 by Ralph Naylor (N.Z.A.C.) and M. W. Parkin (Climbers' C.) on sound rock, severe, about 140 feet. It lies up the left edge of big steep buttress, bounded on left by Aladdin's Couloir.

The original route starts at bottom left corner of buttress. Two good pitches, slab and parallel grooves, lead to a spike belay at 85 ft. Hence, avoiding loose traverse under overhang to the right, go ahead for 100 ft. on grass and rock to belay, and then grass and steep loose rock to the top. This is original way; variation proceeds

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from the last-mentioned belay by a 70-ft. exposed pitch. Cross an overhanging wall on right by a slabby, upward ledge, and then traverse 20 ft. beneath an overhang to a block forming the second of two corners. Climb over it and go left on a crack beneath another overhang, continuing over small shelves and up to a pile of great blocks. Now 45 ft. by slabs and a little wall to a grass ledge. Then 25 ft, up a delicate rib. Easy scrambling to Aladdin's Pinnacle (The Lamp) and to the top. The right side of Pinnacle is very loose. There are belays at the hardest pitches of this climb.

Loch Avon, Kiwi Slabs.— This climb of 450 feet or so, rather severe, lying on the steep crag of overlapping slabsbetween the Feith Buidhe and the Coire Domhain burn,' was made on 8th August 1953 by Ralph Naylor and' M. W. Parkin. Start about 100 yards right of the lowest point of the crag and as much left of the Domhain burn, i on a prominent, square-cut green buttress, left-hand edge.-

Zigzag 25 ft. up slabs to ledge. Climb diagonal crack by handtraverse to the tip of buttress and grass ledge at 25 ft. Above is a wet corner formed by a slab with overhanging wall on left. An : avoidable groove leads to the corner (piton used) and next 10 ft. are.. severe. Alternative is up the slab centre (very severe). Easierclimbing to a belay, 10 ft. up, in corner on left at 55 ft. An 80-ft. pitch follows gully on left, using another piton. In the next 80 ft.of pleasanter climbing another piton used. For the next 70 ft. the gully steepens, and one breaks out on the right up a short crack and along a ledge to a chimney formed by a huge flake. Cave and : spike belay in fine situation, 10 ft. up. The next exposed 55-ft. pitch is by a move up chimney and delicately across the face of flake, up its left edge to the top. The difficult 80-ft. wall ahead leads to a cairn, and by easy scrambling to the top of the crag.

Caenlochan Glen (Glen Isla), Craig Herrich, Photogenic Rib.—This 600-foot route, half climbing and half scrambling, is rather artificial; just difficult but pleasantly exposed. It was climbed on 18th May 1952 by A. G. N. Flew and G. McAndrew (Climbers' C.).. The start is 15 yards right of that of original route.

Use slabs to grassy rake sloping up to left. Traverse right alongledge to foot of arête and straight up it. (This rib names the climban ideal place, for silhouette photos.) Scramble onwards over broken ground and select an arête to climb the next band of rock. Again broken ground. Then use arête from right or left, and route joinsthe original one.

Supplementary.

The following New Climbs are reproduced from the 1953 number of the *Cairngorm Club Journal*. We acknowledge our thanks to that Club for enabling us to make our record more complete.

The following six routes are on Lochnagar :-

The first winter ascent of the South-east Buttress of Creag an Dubh Loch was made on 24th December 1953 by Messrs Brooker and Patey, with powder snow on rocks and ice in cracks and grooves. After a first awkward pitch the rest was easy and the ascent completed in one hour.

Scarface .- Very Difficult. T. W. Patey, G. B. Leslie, and J. M. Taylor, 15th December 1951. This is the imposing mass of rock which forms the right wall of Raeburn's Gully, constituting in its upper part a fairly well-defined rib bounded on the right by a large grassy amphitheatre and in its lower part a series of steep slabs dipping into Raeburn's Gully and ending in a line of short overhangs. Normally a start could be made up a short shallow chimney in the corner at the bend of the gully. This was streaming with water at the time, however, and abandoned for a more feasible route 60 ft. farther up the gully, where the depth of snow in the gully had obscured the initial overhang. A difficult move to the right on holdless rock led to easier ground, whence further progress was possible up steep grass ledges to the left. After 60 ft. a short nose of rock on the right was surmounted by combined tactics. At the apex of the smooth slab above, an excellent belay was discovered at the foot of a dark chimney. The chimney, which was steep and upwards of 20 ft. in height, was furnished with good sound holds to start with, but its upper few feet were more difficult and required the insertion of a piton into a crack on the left wall of the chimney to act as a running belay for the leader. A miniature waterfall added to the difficulty and under normal conditions a piton would be unnecessary.

Steep scrambling for 50 ft. led to a shallow groove of no great difficulty, whence a short chimney on the right led to the large grassy amphitheatre above and completed the lower section (250 ft.). The upper rib provided enjoyable climbing for 200 to 300 ft., and although numerous variations were possible the crest could be followed throughout without much added difficulty. From the foot of the amphitheatre the rib was gained immediately by a short traverse to the left, followed by several interesting short pitches. Thence the route is fairly evident to the plateau.

The rib and the upper 100 ft. of the lower section was climbed previously on 21st October 1951 by T. W. Patey and R. H. Hardie, who traversed on to the lower slabs at the level of the first cave on Pinnacle Gully No. 1 Route. Gargoyle Chimney.—Winter ascent by W. D. Brooker and J. M. Taylor, 20th January 1952. The chimney was an 80-ft. ice pitch: main difficulty the final 15 ft. Above chokestone the crack in right corner used, to avoid excessive ice on left-hand route. Climbed in six hours.

West Rib, Variation.—Very Difficult. M. D. Coutts and T. W. Patey, **31**st August **1951**. From the platform below the steep tower in the upper section of the climb the preliminary slab (but not the steep chimney) was climbed. Thence a traverse round to the left led to a large platform overlooking West Gully. The vertical wall above (**30** ft.) is climbed on excellent holds to a platform. In **60** ft. one joins the original route. Magnificent exposure.

West Rib.—Guide description may be erroneous in so far as the majority now obviously follow a route on the right of the open gully referred to, *i.e.*, 60 ft. to a horizontal traverse leftwards to the pointed belay.

The following four routes are on Beinn a' Bhuird :--

Birthday Route (Crow Step Route Variation).—K. A. Grassick, J. G. Lillie and R. Preshaw, 7th June 1952. The climb is on the third parallel chimney to right of Crow Step Route, after climbing the first moderate section of that route. Follow the chimney with avoiding moves on right and then on left walls. First pitch on right wall then left into chimney. Stance at 40 ft. Then up left wall followed by right traverse to stance above a rock mass at 50 ft. Chimney narrows: difficult up to a straddling rock stance at 60 ft. Last 60 ft. climbed on left by a narrow crack. Awkward move to the final 10-ft. wall. Final strenuous pull up.

Laminated Crag (Very Difficult, 250 ft.) and Back Bay Gully (Difficult, 350 ft.), Garbh Choire.—The magnificent Squareface Buttress near the Sneck forms the left wall of a high bay cut off from the floor of the corrie by the bar of rock holding Consolation Gully. At the back of the bay, under the huge rectangular wall of Squareface, is the long narrow Back Bay Gully, with one prominent chokestone. Laminated Crag forms the right wall of the gully.

Laminated Crag presents a broad front. Near the centre of the wall a small pitch leads to a long transverse level shelf. At the left end of the shelf a huge flake slants upwards to the right. This was climbed \dot{a} cheval and proved very awkward. Before entering the level-floored crevasse at the top of the flake a groove with few handholds (above a short vertical step) was followed to a resting place. A traverse back left up a series of mantelshelves led to a block belay. From here two more upward steps were made to the right to a pointed flake, the negotiation of which was tricky because the crest behind was loose. Above the flake there was a short vertical wall, following which some easy angled iced rock and a short snow slope led to the plateau. K. Winram and M. Smith, 8th March 1953.

The gully provided easy to moderate climbing for 100 ft. on waterworn rock leading to a cave below the chokestone. There is a belay high up in the back of the cave. The boulder was turned on the left wall by a very difficult move—small holds on a steep slab. Above, the gully narrowed and further difficult climbing, again on waterworn rock, led to a block belay at a point where the gully branches. The route went up the left-hand groove to loose blocks, which were turned by an awkward wall on the right. Loose rock to the plateau. G. R. Greig, M. Smith, and K. Winram, 24th August 1952.

Tantalus Gully, C. an Dubh Lochan.-250 ft., Severe, G. R. Greig, M. Smith, and K. Winram, 15th March 1953. From the small upper lochan a large scree shoot, the Main Rake, separates Glaucous from another imposing buttress on which, midway up the Rake, will be found Tantalus Gully. There is little evidence of gully form in the first two pitches, but higher up it cuts deep into the mountain and is contained by high walls. Thirty feet to stance below first and only severe pitch-an overhang and bulge on the right wall which may require a shoulder. The key handhold is tucked away between the overhang and a slab on the right. Easier going up a water-worn groove to a belay set low under the second pitch. This was very difficult, a steep slabby corner with small jammed stones in a crack hard in to the right wall. The angle eases to the third pitch, water-worn slabs with a crack in the right corner (20 ft.). The bed again falls back to the fourth pitch, which rises in three steps. Blocks at top sound : then scree funnel to top.

Hourglass Buttress, C. na Ciche.—A. Thom and F. R. Malcolm, 10th May 1953. Start in well-defined groove (200 ft.) at left corner of buttress. This led to the neck, above which the rock steepens 70 ft. to piton belay, whence traverse right to crack sloping right. Climb crack to small rock shelf (piton belay). Combined tactics enabled leader to reach hold high up on left (crux). Twenty feet to first substantial platform above the neck. A slightly overhanging crack is then climbed (piton). A short traverse to the left, followed by a scramble up a wide crack leads to the top. Very exposed, but rock clean and sound. Vibrams worn. A severe route.

The following four routes are on **Ben Macdhui**, including Coire Etchachan crags. Two routes on this side of Beinn Mheadhoin—Sunday Crack and Bellflower Buttress—may be consulted in the C.C.J., 1953.

Median Route, Coire Sputan Dearg.-300 ft., climbed by A. Thom and F. R. Malcolm, 27th June 1952, starts on a slab between Pilgrims' Groove and Hanging Dyke. Climb slab to rock ledge: then leftward, climb crack topped by large slab to a large split groove and so to the top.



Easter 1953

CLUANIE ONCE MORE !

B. H. Humble

^c Castle Gully.-450 ft., Very Difficult. Climbed by H. S. M. Bates, K. A. Grassick and A. G. Nicol on 24th May 1953. Go 250 ft. up Castle Gates Gully from the Sentinel to an open gully above a red cave on left wall. Lower part is open and slabby. Higher up a narrow 30-ft. chimney with strenuous 12-ft. overhang crack above it leads to a rib about 100 ft. from the top.

Bastion Wall, Creagan a' Choire Etchachan.—450 ft., Difficult. W. Kelly and P. Leys, 31st May 1953. The route started below a prominent quartz vein and about 200 ft. below a gully which separates the buttress from the broken rocks on the left (cairn). The first pitch goes up a wall of slabs on small holds for 90 ft. to a stance. Thence a traverse right led to an arête which was climbed direct for 50 ft. to a small ledge. A traverse left to a larger ledge followed (piton belay). From here a fairly steep wall was climbed, veering to the right. This led to a good stance but doubtful belay. About 40 ft. of slabs were climbed direct to the foot of a vertical wall. This wall was climbed by a groove on the right, after which some steep slabs led to the final pitch—a vertical wall which eases off about 15 ft. from the top. This was climbed direct on good rock and adequate holds. Three hours. Route probably same as Quartz Vein Edge (reported in C.C.J., 1953).

Sticil Face, Shelter Stone Crag.—600 ft., Hard Severe. J. M. Taylor and T. W. Patey, 14th May 1953. Start below and right of Raeburn's Buttress. Access possible to set of grass ledges slanting across to right above lower belt of slabs on north face of Crag. Above these the middle tier of slabs is sheer and unbroken. Follow ledges across to right till they peter out high up. Return to where steep, slabby gully ascends between middle slab tier and Raeburn's Buttress. Go 160 ft. up awkward grass ledges on left of slabby gully to platform. Gully bed too smooth and holdless. Crux is 50 ft. up above flake, and then 30-ft. V-groove follows. Easy ledges now to gully, which continues as chimney. Easy above and a choice of route. Possible to gain upper 200 ft. of Raeburn's Buttress, but party went right by slanting ledge above middle slabs, to a fine deep-cut chimney cleaving final wall. Time 2 hours. Dry conditions; vegetation : hence avoid when wet.

The following route is in Coire Cath nam Fionn, Beinn Bhrotain:----

Tiered Cracks, Fingal's Buttress.—300 ft., Very Difficult. K. Winram, R. Greig and M. Smith, 8th June 1952. Fingal's Buttress is the finest expanse of rock on Beinn Bhrotain. It lies at the entrance to the corrie and is composed of very steep slabs on its left and centre, and on the right throws down ribs of granite into a slabby, scree-filled amphitheatre. From the corrie floor a crack can be seen rising in three sections where the central slabs and the ribs meet. This is the climb.

Broken rocks lead to a level grass platform. A small slab and a damp groove trending left lead to a little wall and another platform. The first tier of the crack lies hard in the corner. It was climbed after much gardening and is difficult. The second tier looked impossible, so the ledge was followed to the right, where a difficult move was made from a scooped slab up round a projecting nose to a mantelshelf. What might have been a difficult cat-crawl was made easier by there being a finger-wide crevice at the junction of the wall and slab. The crawl leads to the third tier and crux. It was not high, but the take-off was from a dubious moss patch and there was a dearth of holds after the first move. Strenuous, no belay. A grass basin was reached where a long chimney, ending in a rock crevasse, led out on the left to the crest of the buttress. The outer edge of the crevasse is climbed to a steep pitch with grand holds where a good view down the steep section was enjoyed. After a broad arête the climb finishes on easy ground, but scrambling on slabs straight ahead led to a difficult chimney overlooking the amphitheatre. This was climbed for good measure.

The following four routes are on Braeriach :--

Sphinx Buttress, Garbh Choire Mor.-350 ft., Difficult. K. Winram, G. Dev, M. Smith and W. Kelly, 25th May 1952. Sphinx Buttress is very individualistic and is the most defined piece of rock in the corrie. It is in no way connected with the other buttresses. Ridge-like in form it stands alone. The start was made to the left of the vertical, curiously incised frontal slab and to the right of a fault ending in an overhang. The rimaye was about 20 ft. in depth and just as wide, but there was a convenient snow-bridge at the start. The first section up the chamfered edge of the frontal slab to a fine position on the ridge crest was a delightful pitch, 90 ft. high on a very steep slab, with fine side-pull holds at the start. The crest comes unexpectedly and it was surprising to look down the other side, which was undercut. A short strenuous pull-up over a nose followed to an airy cramped stance with a belay low down. The next pitch was awkward and led through a gap formed by a tooth of rock leaning over space to a pull-up from a ledge to a belay below the Sphinx nose. The Sphinx looked like a miniature Cioch from here. The slab leading to the top of the Sphinx looked holdless, so the way led round a corner to the left of a mossy crack and awkward slabs set into the Sphinx pedestal. These led to a ridge above a sneck. Across the sneck the narrow ridge was crossed from right to left and a mossy wall climbed to a stance below a long groove with an overhang in the left corner. The groove was climbed on small holds on a slab to a gap above the overhang. There was a good belay just above, where easier rock led to the top of the upper pinnacle. The short descent to another sneck and rise to the plateau was over loose rock.

Pisa, Garbh Choire Dhàidh .- 500 ft., Difficult. J. Tewnion and M. Smith, 5th August 1951. The Chimney Pot lies between Helicon Rib on the left (see Guide, C.C.J., XV, 233) and, on the right, a buttress having a decided lean. The climb lies on this buttress and goes up its left edge. Low angled ribs lead to a grass terrace in line with the bottom of Helicon Rib. A crack (cairn) on the left of a prominent overhanging block was climbed until a wall was reached. This was climbed by an open corner to a ledge. A movement to the left was made to a mossy triangular recess (cairn). An inset corner was followed, leading to a very small ledge on the brink of the Chimney Pot. A short wall above with awkward holds led to further slabs and corner pitches trending right to a shattered ledge. A short step up a narrow groove led to a mossy scoop. A doubtful belay (a sliver of rock) protrudes from a slab on the left. The slab is climbed on the corner. Here serious climbing ended, and for 150 ft. to the plateau the buttress tapers to an arête of piled blocks giving grand scrambling almost on the edge overlooking the Chimney Pot.

Babylon Rib, C. Bhrochain.—400 ft., Moderate. G. R. Greig, M. Smith and K. Winram, 1st March 1953. A narrow wedge-shaped buttress on left of Pyramus and cut off from East Gully Buttress by a narrow chimney. Steep snow led to the foot of the buttress (cairn). Very steep but moderate rock up to a narrow ledge and belay at an open corner in about 60 ft. Thirty feet to an interesting slab with a thin crack. A move left was made almost into the bounding chimney, and then the rib was crossed and a groove entered overlooking Pyramus. Easier up the groove to the crest and then a large platform. One hundred and eighty feet of good, interesting rock. Above, the buttress tapered to a narrow ridge and turned almost at right angles at the head of the left bounding chimney to finish at a cornice at the plateau.

Ninus, C. Bhrochain.-450 ft., Difficult. (1) R. Greig and J. Tewnion; (2) K. Winram, G. Dey, and M. Smith, 29th June 1952. Ninus is the very steep buttress on the extreme right of the corrie. Its left wall drops into Thisbe. A white rock scar at mid-height is visible from the Lairig. Two routes meeting at less than mid-height were made. The first started on a prominent rib low to the right of the buttress and gave pleasant scrambling to an inset corner pitch formed by a slab and a large block (belay). This was followed by a similar pitch, but more difficult. A depression was entered and loose rocks led to a thread belay in a groove against a flying ridge. Here the routes met.

The second commenced on the extreme left immediately in line with the bottom pitch of Thisbe. From a white ledge quite hard climbing led up a very steep wall, then up a groove with a loose flake hold to a steep nose and, in 90 ft., to a good belay where the steep section eased off. About 10 ft. higher an awkward step out to the right led to a long traverse again to the right across a glacis below the overhanging centre section of the buttress. At the end of the

traverse an upward move round a nose led to the depression and the jammed stone belay of the first route. Immediately above on the left is a steep chimney groove. Climb the groove and make an exit on the crest to the left. Follow the crest.

THE KINGDOM OF THE SNOW.

LEAVE the road where motors shuttle,

Climb the slopes an hour or so; Coming by gradations subtle

To the kingdom of the snow.

Enter, for you need no permit, But a little strength and skill

To defy the hoary hermit

Who is despot of the hill.

You will find a host of wonders, Forces that can overwhelm,

Cold that stabs and wind that thunders

In his brittle, brutal realm.

Yet the fury of the weather

Can achieve the sheerest grace.

See, a perfect snow goose-feather Modelled on each boulder's face. All is new and unexpected

In the kingdom of the snow :

Nothing here that seems connected

With the world you left below.

Men have dreams of lunar landing,

Nightmare journeys into space,

Flights beyond our understanding,

Hazards few would care to face.

But the Scottish mountain lover, All within his week-end range,

Winter wonders can discover

Every bit as rich and strange.

D. J. FRASER.

ON ANCIENT HILLS.

TEN thousand thoughts with pendent intent fade, Of previous men who on these tops have strayed. And suddenly the small

Tinkle of a mountain stream floats up, to recall Wind thoughts, guardian of secret things,

Offering the fragrance of which it sings.

'Tis here, 'tis here,

Ten thousand memories linger near.

JEFF MASON.



CLIMBING FRIENDS-LING AND GLOVER

Tom Weir

In Memoriam.

WILLIAM NORMAN LING, 1873-1953.

By the death of William Ling on 30th December 1953 the Club has lost one of its most popular veterans, a Past President and a distinguished mountaineer.

He had not been ill. He was on his way to the New Year Meet of the Club he loved most, had a sudden seizure at the house of the writer, and died within a few hours quite peacefully. In the manner of his passing there must be thankfulness that there was no lingering illness; it is just, one imagines, how he would have liked it to be.

He was born in 1873, the son of Christopher Ling of Carlisle, a one-time Mayor of that City, was educated at Winchester College and on leaving school entered the family business of grain merchants which he continued to run until his retirement a few years ago. For twenty-one years he acted as Chairman of the Carlisle and North Western Savings Bank.

Mountaineering in all its branches was the ruling passion of his life. A fortuitous meeting with H. G. S. Lawson on Helvellyn in 1894 led to their becoming climbing companions and to Ling attending the Yachting Meet of the Club in 1897 as Lawson's guest. He joined the Club the following year and at the time of his death had attended no less than 105 of its meets, a record of which he was justly proud.

He served twice on the Committee, was Vice-President 1914-19 and President 1919-22. During his long association with the Club he acquired an almost unrivalled knowledge of the Scottish mountains, and few men can have had a greater love of them.

He was particularly associated with Harold Raeburn in their great series of guideless climbs in Norway, the Alps and the Caucasus, their partnership showing a wonderful record of daring first ascents. Some have

felt that he may have been to some extent overshadowed by his brilliant leader and that, had it not been so, he could have gone further in Alpine ascents and in leading many of our Scottish climbs. Raeburn's book, "Mountaineering Art," is dedicated to his " climbing colleague W. N. L."

Small and wiry and tough, he was skilled in all branches of our sport and always ready for any climb that looked feasible on ice, snow or rock. He had exceptional staying power and was always trying to carry more than his load; cheerful in adversity and a little pillar to lean upon.

His climbing career covered so wide an area and his ascents were so numerous that it is not possible to list them here. They have practically all been described in the *Journal* from time to time (see Jubilee Number, page 75, and his article on Raeburn in the same number; also his article, "Meets, 1897-1950," in the April 1950 number, and, year by year, S.M.C. Abroad).

It is interesting to recall that practically all his climbs abroad were made with members of this Club—with H. G. S. Lawson, Glover, Raeburn, C. W. Walker, Geo. Sang, H. MacRobert, P. J. H. Unna, Robert Corry and J. M. Davidson. He was active to the last and, as recently as September 1953, with the writer he climbed Ben More Coigach, Ben Eighe, and walked from Glen Torridon to Coire Mhic Fhearchair and back.

It was late in life when he took up ski-ing, and he hated it. Uphill on skins and over icy ridges or cornices, finding his way in snowstorms across unknown country that was his forte—but he hated coming down.

He joined the Alpine Club in 1903, served on the Committee 1912-14 and as Vice-President 1929-30. In the light of his later eminence as a mountaineer it is quaint to recall that he was rejected by the A.C. in 1901 as insufficiently qualified!

It was Ling's great gift of sympathy and comradeship that so endeared him to everyone; of which there could be no greater proof than that to all the children of his climbing friends he became their loved Uncle Willie.

In Memoriam.

His death will leave a great blank among his large circle of friends; for not only did he keep up all his old friendships, but as time went on he made many friends of a younger generation who looked to him for help and inspiration and never in vain. To the older members of the Club the Meets will never be the same without him.

ROBERT JEFFREY.

GEORGE TERTIUS GLOVER, 1870-1953.

THE death of George Glover in his eighty-fourth year takes from us a popular veteran and ex-President whom we shall sadly miss. His heart was truly in the Highlands and, though he climbed in the Lakes, the Alps and Norway, none of them gave him the same joy of living.

His first contact with the Club was at Easter, 1898, when climbing with a friend, Collinson, the gully next the Curved Ridge of Buachaille Etive and traversing the north-east face from the Chasm to the Crowberry Tower. Later, Glover climbed the Crowberry Ridge with Napier. I met him casually in the train, shortly after the Meet, and so began a friendship which was to last for fifty-five years. We soon did quite a number of the difficult Lakeland climbs, and our lists were sufficient for both of us to be elected to the Club at the end of that year.

Together, we attended the Easter, 1899, Meet at Kinlochewe, in poor weather, but we had good climbs with H. G. S. Lawson on Liathach and Sail Mhor. Glover had a fine new climb by the Allt a' Mhuinidh waterfall with Inglis Clark and Gall Inglis. In the summer we climbed Engineer's Chimney on Great Gable —named after Glover. At Zermatt, with O. J. Bainbridge, we climbed the Matterhorn *couloir* of the Riffelhorn and (with guides) the Zinal Rothorn, the Weisshorn and the traverse of the Matterhorn in a week.

In August 1900 we went to Cortina in the Dolomites, starting at once after a long journey and climbing the Cinque Torri. Next day, on the way to the Venezia Hut

for the Pelmo, Glover was overcome by the heat and ordered a week's rest, after which we made a guideless attempt on the Croda da Lago, but only completed the ascent with guides two days later. Other ascents of that holiday were the Tofana di Mezzo and the Monte Cristallo.

We did a lot of climbing that autumn and winter in the Lakes and at the 1901 Easter Meet at Fort William. Glover joined me at Chamonix in August, when we climbed the Charmoz and Blaitière with guides. After I left Glover stayed on and traversed the Grépon. He was elected to the Alpine Club that year.

In 1902 he was at the Easter Meet at Aviemore, and later made the first ascent of Glover's Chimney on Ben Nevis with Dr and Mrs Inglis Clark. In August we were again at Chamonix, repeating the Charmoz and climbing the Dent du Géant with one guide, Ravenel. Thwarted by bad weather on the first attempt we climbed the Réquin on our second effort. Lawson and I then went to Courmayeur and traversed Mont Blanc, while Glover went to the bivouac for the Petit Dru. Driven back by a severe thunderstorm, he had an accident on the descent, slipping on a loose rock and falling 20 feet in such a way as to damage his back.

In the summer of 1903 he went to the Lofotens with some Newcastle friends and had some good climbing. After this his responsibilities prevented him from going abroad. He was at the 1906 Easter Meet at Ballachulish. In May 1907 we started our exploration of the Northern Highlands and had some grand times, duly noted in the *Journal*. He was at all the Easter Meets from 1908 to 1911. In 1912 he took up an appointment in Ireland and his next Meet was at Easter, 1914, at Fort William.

During the war he served in France as chief mechanical engineer with the rank of Colonel, and was mentioned in despatches. He was at the Easter Meet in 1921 and at all those from 1923 to 1928, in which year he became President of the Club, an honour which he appreciated very much. At Easter, 1929, he presided over the opening of the C.I.C. Hut on Ben Nevis. From that time onwards he attended most of the Meets until 1939, bringing his total up to thirty-five.

He retired in 1933 when he married and bought an estate in Cumberland near Brampton, where he spent the rest of his life looking after his property and taking an interest in local affairs. His last Meet was at Cluanie in 1939, but he continued to go north in the summer in a caravan with his wife, an ardent lover of the hills, to his favourite haunts in Torridon and Kintail, where he was so well known.

He was educated at Lancing and, after serving his time at the North British Locomotive Works in Glasgow as a mechanical engineer, he joined the North Eastern Railway Company as manager of the Gateshead Loco. Works. In 1912 he became chief mechanical engineer to the Great Northern Railway of Ireland, and so remained until he retired in 1933, with the exception of his period of war service in France.

He was a good companion on the hills, safe and reliable on rocks and ice, and always cheerful. He will be greatly missed by a large circle of friends. He had a very happy married life, and our sympathy goes out to his wife in her bereavement. W. N. LING.

HARRISON BARROW.

HARRISON BARROW of Birmingham died in February 1953 at the age of 83. He joined the Club in 1897 and was therefore one of our oldest members. As a boy he began climbing in the English Lake mountains and, as early as 1887, in company with his brother Walter and others, made his first visit to Switzerland, when they crossed a number of high Alpine passes. In July 1892, with his brother and Howard Priestman, he spent about ten days among the Skye Coolins and camped for a week in Glen Brittle. They were fortunate in having magnificent weather and did many of the best-known climbs, including the traverse of the Inaccessible. In July 1897 he, with Brown, Rennie and Douglas, formed a camp at the head of Loch Coruisk where they spent a fortnight

climbing, in record bad weather, as described in the *Journal* (Vol. 5).

He attended the historic Yachting Meet of Easter 1897 as his brother's guest, when they climbed Allival and Askival in Rum and Ladhar Bheinn and Luinne Bheinn from Loch Hourn. On the last day, the yacht being due to sail at 6 P.M., Harrison Barrow and H. C. Boyd left Inverie on Loch Nevis at 9.30 A.M. and gained the summit of Sgùrr na Ciche (after a 1,700-foot bealach and a dip to sea-level) at 2.20 P.M. Recrossing the Carnach River at 3.35 P.M., they reached the bealach in an hour and were hurried on by the ship's siren for the last mile, reaching Inverie just on time—truly a great performance!

Harrison Barrow attended other meets of the Club and in later life climbed extensively in the Alps and Dolomites.

He did much public work in Birmingham, as he was a member of the City Council for fifty years. When he retired from the Council at the age of 80 he had conferred on him the unusual honour of the freedom of the City. In addition to the many branches of his Council work he had done yeoman service for the Birmingham King Edward VI Schools, especially in connection with the erection in recent years of the new High Schools for boys and girls in Edgbaston, in close proximity to the University Buildings. WALTER BARROW.

HUGH JAMES CRAIG.

MANY of the older members of the Club, and especially those in the West, will feel that in the death of Hugh James Craig last May they have lost yet another friend.

Craig joined the Club in 1912. All his life he had been an outdoor man. He played rugby for Glasgow Academy and for the Academicals. He was a keen golfer, fisher and curler: but his main interests were on the moors and among the hills. Although he made no claims to be a rock-climber he enjoyed holidays in the Coolins to the full, and days among the hills of

In Memoriam.

Argyllshire, Perthshire and the Cairngorms were among his happiest memories. He was a member of the Committee of the Club from 1920 till 1922.

After a number of years in the Glasgow Highlanders he retired from the Volunteers, but, although near if not over the upper age-limit of those days, he rejoined his old regiment when war broke out in 1914. He went to France with the first contingent of the regiment and qualified for the Mons Star. After convalescing from a severe shrapnel wound he got a commission in the newly formed 18th H.L.I. and served with them in France until the end of the war.

He never quite recovered from his wound: but it could not lessen his fondness for outdoor things—and especially for the hills—nor affect his friendly outlook on life. Even during the long months of his last illness his cheerful, unselfish disposition and his keen interest in everyday affairs made his friends marvel and will remain with them an outstanding memory.

JAMES CRAIG.

JAMES McCOSS.

IT is with deep regret that we record the death of James McCoss, one of our Aberdeen members, who was naturally much more actively associated with the Cairngorm Club than with the S.M.C. He was a true lover of the hills and enjoyed camping in some of the wildest and most inaccessible parts of the Cairngorms.

He joined our Club in 1914 and served on the Committee from 1924 to 1926. Of the Cairngorm Club he was an Honorary Member and a Past President, having joined them in 1912 and becoming a Committee member in 1919, one of the pioneers who introduced rock and snow climbing, as compared with ordinary hill-climbing, to Club members, arranging snow-climbing meets and doing much to teach the correct use of rope and axe to younger members.

To our *Journal* he contributed articles on Cruachan, Glen Etive and Glencoe; the Lunar Mountains and also

notes on the Barns of Bynack, but most of his interesting articles appeared in the *Cairngorm Club Journal*. He also climbed abroad and found the Matterhorn no more difficult than some Lochnagar climbs, though involving a good deal more physical effort.

He had many other interests and accomplishments. No mean performer on the bagpipes, he often piped in the New Year's dinner at Braemar meets of the Cairngorm Club. He was a keen student of astronomy and, in an article in the *Cairngorm Club Journal*, "The Ascent of Mount Huygens," he happily combined astronomy and climbing. Though he chose a commercial career one could not help wondering if he would not have made a successful scientist, as he tackled many mathematical problems in astronomy with great accuracy. In the 1914-18 war he joined the North Scottish R.G.A. and was in action at Messines, Ypres and Vimy Ridge, serving also in the Army of Occupation. W. MALCOLM.

J. J. ST. CLAIR.

THE untimely death on 16th November of J. J. St. Clair came as a shock to a great number of friends. Among his many interests climbing took the foremost place, and during holidays available in a successful industrial career, he had climbed extensively throughout Scotland.

A sound climber, an erudite and cheerful companion, we who were privileged to share his company on the hills he loved so well will miss him sadly. To his widow and three sons our deepest sympathy is extended.

J. BENTO MILLER.

We regret to announce the death of the following members of the Club, the date given with each being the year of joining us: Herbert Tomkinson (1921), Cecil E. E. Riley (1923), J. Neil Orr (1933), and John E. Blow (1947). The first two lived in the south of England and seldom attended Club gatherings, but Neil Orr was often with us—a very likeable personality. C. G. Andrews of Perth, who also died within the past year, was a member from 1934 until a year or two ago. He did all the Munros and was an original member of the Perth J.M.C.S.

PROCEEDINGS OF THE CLUB.

EASTER MEET, 1953—TOMDOWN, CLUANIE AND KINTAIL.

THOSE present at Tomdown were the President, Dr G. G. Macphee, and Messrs Hartog, O'Grady, Campbell Steven, A. J. Young (members); and R. Hobhouse, R. Tyssen-Gee and Carstairs (guests). It was a grand meet, and Tomdown was most comfortable.

O'Grady (on the way) climbed to top above A'Chailleach (Glencoe) on Monday, 30th March, and Binnein Beag (Mamores) on Tuesday, 31st March.

Thursday, 2nd April.—Hartog and Hobhouse were on Sgurr nan Conbhairean and Creag a' Chaoruinn. Macphee and Tyssen-Gee arrived and walked in deep snow on Gairich.

Friday, 3rd April.-Macphee, Hartog, O'Grady and Tyssen-Gee climbed Sgurr Mor in a perfect afternoon.

Saturday, 4th April.—Macphee, Tyssen-Gee and Young, from Alltbeithe, climbed Am Bathaich and Sgurr a' Mhaoraich. Hartog and Hobhouse motored via Glen Moriston to Shiel Bridge and climbed the Saddle and three other tops. (A fine day.)

Sunday, 5th April.—Hartog and Hobhouse left, bound for Creag Meaghaidh. Steven and Carstairs arrived at midnight. The President visited the Kintail Meet and Cluanie.

Monday, 6th April.—The President took Tyssen-Gee to Invergarry, then caught up the main party, and five others from Cluanie, on the top of Gleouraich, then doing east top of Spidean Mialach in perfect weather.

Tuesday, 7th April.—Macphee traversed Gairich, up north ridge and down east ridge, through a storm at the top.

Those present at Cluanie were D. L. Campbell, Ross Higgins, B. H. Humble, D. H. McPherson, F. E. O'Riordan, Ian Roberts, Angus Smith and R. D. Walton (members); and J. F. M. Frew, D. G. Lambley, G. M. McGillivray and Marshall (R.A.F., M.C.) (guests).

Friday, 3rd April.-McPherson: A'Chralaig and Mullach Fraoch-Choire.

Saturday, 4th April.—Campbell, Humble, McPherson and Smith: Creag nan Damh, Sgurr an Lochain, Sgurr an Doire Leathain, Maol Chinn-Dearg. Higgins, Lambley, O'Riordan and Walton: Ciste Dubh. Frew and Roberts: Carn Ghluasaid, Sgurr nan Conbhairean.

Sunday, 5th April.—Campbell, Humble and Smith: Sgurr an Fhuarail, Aonach Meadhoin, Sgurr a' Bealach Dearg (Campbell and Smith did Saileag also). Frew, Higgins, Lambley, O'Riordan and Roberts: Creag a' Mhaim, Druim Shionnach, Aonach air Chrith, Maol Chinn-dearg. Walton: A'Chralaig and Mullach Fraoch-choire.

Monday, 6th April.—Campbell, McPherson and Smith: Druim Shionnach and Aonach air Chrith. Frew and Roberts: Sgurr an Fhuarail, Sgurr a' Bealach Dearg, Saileag. Lambley, O'Riordan and MacGillivray: Gleouraich and Spidean Mialach. Walton: Carn Ghluasaid, Sgurr nan Conbhairean, Tigh Mor.

Tuesday, 7th April.—Lambley, McGillivray, McPherson and O'Riordan: The Saddle by the Sgurr na Forcan ridge.

Wednesday, 8th April.-O'Riordan and Marshall: Sgurr na Carnach-Sgurr Fhuaran, and on Thursday, 9th April, Beinn Fhada.

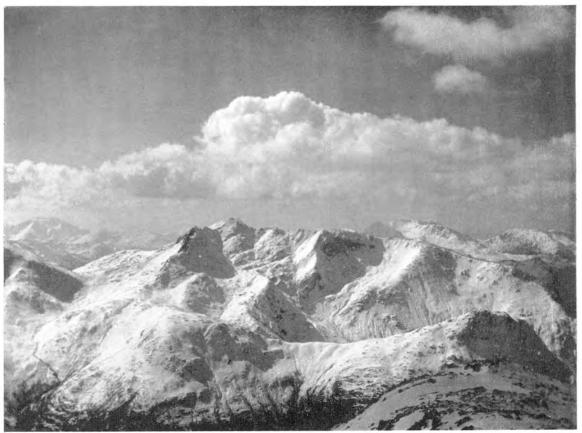
The following twenty members and one guest (John, son of ex-President Harrison) were at Kintail: Messrs Douglas Campbell, W. C. Carmichael, M. H. Cooke, R. R. Elton, Arthur Geddes (at S.Y.H.A.), Alex. Harrison, R. G. Inglis, J. S. M. Jack, J. N. Ledingham, W. N. Ling, A. M. MacAlpine camping with Dan McKellar, Duncan MacArthur, R. W. Martin, Myles Morrison, A. G. Murray, Theo. Nicholson (recorder), George Peat (Sunday only), T. Evershed Thomson and F. R. Wylie.

All four days were dry. Snow was down to 500 feet initially. Most days were sunny, especially Monday, 6th April. It was a most successful meet.

Thursday, 2nd April.—Inglis was defeated at about 2,200 feet on Faochag by deep, soft snow.

Friday, 3rd April.—The Harrisons arrived after a night spent in their car on Tomdown-Cluanie road, blocked by snow. They climbed Sgurr an t-Searraich. Cooke, Inglis and Nicholson climbed Sgurr na Ciste Duibhe. Inglis took Sgurr nan Spainteach too, and the others Sgurr na Carnach and Sgurr Fhuaran.

Saturday, 4th April.-Cooke, Geddes, Martin, Thomson and Nicholson went to Saddle by Forcan ridge, were delayed by heavy



Easter 1953

THE SADDLE from Sgurr na Ciste Dubh

T. E. Thomson

snow and descended Forcan to the south. Cooke and Nicholson returned over Faochag. Inglis and Campbell were on Beinn Fhada, Jack and Ling going part of the way. Carmichael, Ledingham, MacArthur, Morrison and Wylie did Sgurr an Fhuarail, Sgurr a' Bhealaich Dheirg and Saileag from Cluanie. MacAlpine, and son aged 14, with McKellar were on Beinn Fhada. The Harrisons were on Sgurr na Forcan.

Sunday, 5th April.--Inglis, John Harrison, Cooke, Campbell, Ledingham, Carmichael, Morrison, Wylie, Thomson, Martin, Murray, Elton, Jack and Nicholson were on Ben Sgriol from Arnisdale. Ling went most of the way. Peat and MacArthur went up A'Ghlas-bheinn. Geddes went roaming among crofts.

Monday, 6th April.—Jack and Ling ascended Sgurr na Moraich. Geddes, Martin and Thomson climbed Sgurr nan Spainteach and then went home. Cooke, Elton, Campbell and Nicholson went up Sgurr a' Gharg Gharaidh and the Saddle, including in all five tops. Ledingham, Carmichael, Wylie and Morrison climbed Beinn Fhada.

The following is an account of the doings of three parties in the Kintail-Tomdown region who failed the official records:--

J. S. Stewart with G. Waldie and G. Scott Johnstone (both J.M.C.S.) failed to get through from Tomdown to Cluanie on Friday, 3rd April; climbed Gleourach and camped near Bunchaolie on Loch Quoich. On Saturday, 4th April, they climbed Sgurr na Ciche, Garbh Chioch Mhor and Sgurr nan Coireachan, and on Sunday, 5th April, Aonach air Chrith and three tops westward. On Monday, 6th April, they climbed Sgurr a' Mhaoraich.

Dan McKellar climbed with A. M. MacAlpine and his son (aged 14), doing the Beinn Fhada ridge on Saturday, 4th April, Sgurr Fhuaran on Sunday, 5th April, and Sgurr na Ciste Duibhe on Monday, 6th April—all from Glen Lichd.

A "bothy" party consisted of D. Hutchison, G. S. Roger, D. Scott and J. F. Hamilton (members); and J. McNicol, M. Forester, A. MacPherson, K. Armstrong and F. Yule. MacNicol, Forester and MacPherson did the Saddle on Sunday, 5th April, and Creag a' Mhaim to Druim Shionnach on Monday, 6th April. Hutchison and Roger did the Five Sisters on Sunday, 5th April, and with Scott the Saddle on Monday, 6th April. Hamilton, Armstrong and Yule did both tops of Sgurr nan Ceathreamhnan on Sunday, 5th April.

The following chose the C.I.C. Hut as an alternative venue: Messrs I. G. Charleson, A. H. Hendry, A. Horne, G. J. Ritchie and W. Arnot Russell (members); and A. Muirhead (guest).

Saturday, 4th April.—Horne, Ritchie and Hendry turned back on Tower Ridge.

Sunday, 5th April.—All climbed Ben Nevis by the arête and also Carn Mor Dearg.

Monday, 6th April.—Horne, Muirhead and Russell (disregarding avalanche risk ?) went up Ledge Route on Carn Dearg, down No. 4 Gully, reascended by No. 3 and descended No. 2 Gully.

NEW YEAR MEET, 1954-CRIANLARICH.

WITH the exception of Ballachulish two years ago, none of us could remember any meet at which ex-President W. N. Ling was not with us. The moving news of his death at Stirling arrived during the course of the meet. The President gave expression to the deep sense of loss felt by us all. We stood in silence to remember him.

The weather was unsteady. Thursday was cold, and clouds swirled intermittently around the peaks. There was little snow, though what there was of it was compact and took firmly the impression of the nails. The wet mists of Friday and Saturday reduced the snow still further and softened it, but the patches froze to an icy surface in the winds of Sunday. Monday was a superb day of cold sunshine and cloudless sky, with views stretching from Jura to Creag Meaghaidh, and from Nevis to the Firth of Clyde. We were very snug in Crianlarich Hotel, and MacEwen added to our pleasure on Friday evening by showing us a large number of excellent colour slides, mainly of the Alps. To usher in the New Year an enthusiastic few stayed up on Hogmanay for the traditional dancing and blowing of pipes, to the detriment of a Vice-President's slumbers; and, considerably after midnight, the revelvy was still at crescendo when the official recorder went up to bed in despair.

Altogether forty-eight members and fifteen guests were present at some time during the week-end-generally for most of the time. A few were centred on Inverarnan, and three camped near Tulloch. The following were on the roll: *Members*—The President, Dr G. Graham

Macphee; Messrs D. S. Anderson, R. Anderson, G. Arthur, J. W. Baxter, J. H. B. Bell, W. Bennet, W. C. Carmichael, M. H. Cooke, W. M. Docharty, C. V. Dodgson, C. L. Donaldson, R. R. Elton, P. A. Fletcher, G. G. Freeman, J. C. Henderson, A. H. Hendry, R. R. S. Higgins, E. W. Hodge, B. H. Humble, R. M. G. Inglis, J. S. M. Jack, A. W. Laughland, J. N. Ledingham, J. Y. Macdonald, J. E. MacEwen, W. M. Mackenzie, T. D. Mackinnon, A. I. L. Maitland, W. G. Marskell, R. W. B. Morris, W. H. Murray, I. H. Ogilvie, F. E. O'Riordan, G. Peat, G. J. Ritchie, G. S. Roger, J. Russell, W. A. W. Russell, G. R. Speirs, W. B. Speirs, E. C. Thomson, T. E. Thomson, H. W. Turnbull, W. Waddell, G. C. Williams, J. D. B. Wilson, F. R. Wylie. Guests-J. E. Bowman, R. Boxall, E. Chapman, H. Convery, F. A. Evans, A. Gaunt, T. A. Hudson, C. G. Macdonald, D. Macphee, M. Moffatt, M. Piercy, A. F. Sidford, D. Stewart, J. W. Ward, J. Weir.

Expeditions.

Thursday, 31st December.—Macdonald and son: Beinn Chabhair. Bell, Chapman: Ben More. The President and his son: Ben Vane. Ogilvie, Ward, Baxter: Cruach Ardrain, Beinn a' Chroin, An Caisteal.

Friday, 1st January.—Bell and Chapman, Freeman and Bowman, Donaldson and J. Russell: Cruach Ardrain. Elton, MacEwen, Murray, W. A. W. Russell: An Caisteal. Arthur, Waddell, Williams, Baxter: Beinn Dubhchraig. Morris, T. E. Thomson: Beinn Chabhair. Fletcher, Hudson, Cooke: Beinn Laoigh Central Gully and Beinn a' Chleibh. The President, Turnbull, D. Macphee: From Clashgour to the col south of Meall Odhar. Hodge, Evans: Stob a' Choire Odhair and Clach Leathad. Inglis, J. Y. Macdonald, C. G. Macdonald, E. C. Thomson: Beinn a' Chreachain (C. G. Macdonald adding Achaladair). Higgins, Laughland, O'Riordan: Cruachan horseshoe. Ogilvie, Ward, Peat, Ritchie, Hendry: D-Gully Buttress and North Buttress of Buachaille Etive Mór, returning minus an ice-axe. Bennet, Gaunt, Mackenzie, Mackinnon, Weir: Stuchd an Lochain from Glen Lyon. R'. Anderson, Convery, Henderson: Beinn a' Chaoruinn from Tulloch.

Saturday, 2nd January.-J. Y. Macdonald, C. G. Macdonald, D. Macphee: Ben More, Am Binnein. Cooke, Fletcher, Hudson: Stob Garbh. Carmichael, Ledingham, Wylie: An Caisteal. Ogilvie, Ward: Am Binnein, Stob Coire an Lochan, Meall na Dige.

Peat: Meall Glas. Docharty, Dodgson, Inglis, Jack (part of the way): Beinn Chuirn (near Lui). D. S. Anderson, Morris, Sidford, Williams, Baxter: Beinn an Dòthaidh and (except Williams) Beinn Dòrain. Bennet, Mackenzie, Weir, Gaunt: Stob Ghabhar by gully to left of the Upper Couloir. Three parties climbed the Buachaille: Elton, MacEwen, W. A. W. Russell, Wilson, by Collie's Route, and down the Curved Ridge; Hendry, Ritchie, Chapman, the Serpentine route and Lagangarbh Chimney; Murray, Stewart, by the Curved Ridge. Arthur, Higgins, Laughland, O'Riordan, Waddell: Meall Ghaordie. Evans: Càrn Gorm from Glen Lyon. E. C. Thomson, T. E. Thomson, Turnbull: An Sgòr, Meall Garbh, Meall Luaidhe from Glen Lyon. R. Anderson, Convery, Henderson: Stob Coire Sgriodain, from Tulloch. Freeman, Bowman: Beinn a' Chreachain, Beinn Achaladair, Beinn an Dòthaidh. The President paid a visit to Lagangarbh and to the Clachaig Youth Hostel.

Sunday, 3rd January.—Arthur, E. C. Thomson, Waddell, Baxter: Ben More and Am Binnein. Three parties climbed Cruach Ardrain: Maitland, G. R. Speirs, W. B. Speirs; Hodge, Evans; Inglis, Jack (part of the way). Turnbull, Freeman: Beinn a' Chroin. Hendry, Elton, Chapman, Peat, Ritchie, W. A. W. Russell: Beinn Laoigh by the Central Gully. Higgins, Dodgson, Laughland, Ogilvie, Ward: Beinn Achaladair, Beinn a' Chreachain. Carmichael, Ledingham, Wylie: (The same). Three parties climbed Creag Mhór: Bennet, Marshall; Mackenzie, Gaunt, Weir, by snow gully on east face; Murray, Stewart, by a neighbouring gully. The President with D. Macphee went up Stob Ghabhar, and then alone took in three subsidiary tops. Cooke, Fletcher, Hudson: Cruachan horseshoe and main top. MacEwen climbed Meall Corranaich, carrying skis. Roger, Moffatt: Schiehallion.

Monday, 4th January.—Carmichael, Ledingham, Wylie: Stob Garbh and Cruach Ardrain. Roger, Moffatt, MacEwen: Beinn Laoigh by the Central Gully. E. C. Thomson, Baxter: Beinn Chaluim.

Lagangarbh Section.—J. Russell, C. L. Donaldson and W. H. Young were present, but ten J.M.C.S. members were staying in the Hut during this period. On 2nd January Hendry, Ritchie and Chapman visited the Hut, which became damp after their return visit from the Buachaille, but no one who has travelled in Chapman's Bentley could deny them a warm at the fire. The President also looked in. Conditions were very good on Sunday, Russell and Donaldson climbing on Buachaille Etive Beag and Young's party on Bidean. On Monday Young's party, on the way home, climbed Boomerang Gully and descended Forked Gully on Stob Coire an Lochan. Russell with A. Wallace (J.M.C.S.) traversed Aonach Eagach. On Tuesday, in normal weather again, the last inhabitants cleared two choked culverts between Hut and bridge before leaving.

Annual General Meeting.

THE 65th A.G.M. of the Club was held in the Central Hotel, Glasgow, on Saturday, 5th December 1953, at 5 P.M. Dr G. Graham Macphee, President, occupied the chair, and sixty-two members attended. Office-bearers' reports, already circulated, were accepted after a very brief discussion.

The Hon. Treasurer reported that the surplus of receipts over expenditure (without allowing £37 for net receipts from Glasgow clubroom fittings, consequent on a removal to new premises) was about £15. There were increases in costs of *Journal*, postages, stationery, etc. The balances in Hut funds had increased by £28 for the C.I.C. Hut and by £46 for Lagangarbh Hut. Expenditure on Guide Books exceeded receipts by £145, the balance being now £123 in debit, but it was hoped that this would be rectified next year. The report from Mr Kellock showed the Commutation Fund to be in a satisfactory state.

The Hon. Secretary reported the death of eight members —Harrison Barrow, J. E. Blow, H. J. Craig, G. T. Glover, James McCoss, C. E. F. Riley, J. J. St Clair and H. Tompkinson. At the October Committee Meeting the following five new members were elected and are now accordingly welcomed to the Club: Messrs Mathew P. Cunningham, William McK. Docharty, J. F. M. Frew, G. Scott Johnston and W. B. Young. The Club membership stood at 311.

The Hon. Editor reported on the issue of No. 144 of the Journal, costs again showing an increase at £329 but, in view of a plan to increase the circulation, 1,100 copies were printed. Mr G. S. Ritchie handled this plan (a) by offering copies to members of kindred clubs at rates now offered to the J.M.C.S. This resulted in extra sale of sixty-four copies; (b) by circularising libraries and sending specimen copies. This could only bear fruit in succeeding years. Advertisement revenue was about £63, as last year, and sales to J.M.C.S. and the public were also about the same. The overall cost of

the *Journal* to the Club funds worked out at about 8s. or so per member.

The Guide Books General Editor reported the publication of "Munro's Tables" and "Islands," with "Northern Highlands" in the course of printing and since issued. "Arrochar" and "Ben Nevis" rockclimbing guides should soon be issued. "Skye" was now sold out, and "Cuillin Map" stock was low. A new map was now being planned, but "Skye" would be reprinted with an up-to-date appendix.

Convener, Huts Sub-Committee.—The C.I.C. Hut showed 494 hut-nights (an increase) with increased revenue and no major repairs. The occupation charge was raised during the year. Mr Sinclair of Rhu Mhor guest house now looks after keys. Lagangarbh Hut showed 706 hut-nights (a decrease). Revenue was less than last year but showed a surplus. The hut was in good condition, volunteer parties having been active and the Scottish National Trust repairing the bridge and the barn.

Librarian's and Slide Custodian's Reports.—During the year 107 books were borrowed (only one posted) and seven requests were met for slides. A library catalogue is in preparation, and a list of additions has been circulated to members. The slide collection has benefited from the private collections of J. H. Buchanan, the late P. J. H. Unna and action shots by D. D. Stewart. The new 2 by 2 inch collection is progressing slowly.

District Conveners' Reports.—In the east lectures have been held regularly with an average attendance of forty-six (mostly J.M.C.S.). In the west the lectures and slides were excellent and attendance good, also at the many informal bus meets. The library was well used, 112 books being borrowed. A successful photo competition was held along with the J.M.C.S. A week-end rescue exercise was carried out on the Curved Ridge, Buachaille Etive. It is intended to repeat this in winter conditions. The Glasgow Club Room was in regular use but, owing to change of ownership of the property, has had to be moved to different premises at 154 Hill

Proceedings of the Club.

Street, C.3. The London Committee, with only thirty members all told, were able to hold two meetings. Now joint meetings are being held in conjunction with London members of other mountaineering clubs. Iain Ogilvie and Angus Smith continue as Convener and Secretary respectively.

First-Aid Committee.—No new posts have been installed, but the northern area will soon have a post either at Dingwall or Garve (Police offices). The successful rescue exercise on Buachaille is mentioned above. Notices indicating the sites of rescue kits in Glencoe have been placed.

Meets.—It was decided to hold the New Year Meet, 1955, at Glen Clova and Lagangarbh and the ensuing Easter Meet at Kinlochewe and C.I.C. Hut.

Other Business.—The proposal to reopen the Commutation Fund on the scale recommended by the Committee was approved. Much discussion ensued on the reason why so few of the J.M.C.S. were coming up as candidates for Club membership. This was remitted to the Committee for consideration, with the emphasis laid on the influence of those members of the S.M.C. who were honorary officials of the J.M.C.S. (Names are given in J.M.C.S. Section Reports.) The meeting, after discussion, expressed a decided preference for informal dress at the Annual Dinner. The date of A.G.M. and Dinner for 1954 was fixed for Saturday, 4th December.

The new list of office-bearers, committee and subcommittee members appears at the end of this *Journal*.

Reception and Dinner.

Both functions were held on 5th December 1953 at the Central Hotel, Glasgow. At the Reception in the afternoon 105 members and guests were present. Tom Weir gave a magnificent show of colour slides depicting the Scottish Nepal expedition's experiences in 1952.

The 65th Annual Dinner was held in the evening, ninety-nine members and guests participating. The President, Dr G. Graham Macphee, proposed the toast of

"The Club " and L. S. Lovat " The Guests," to which Mr Arthur Duncan, Chairman of the Nature Conservancy, replied. Robert Grieve introduced Mr Winthrop Young by proposing the " Saving Grace," to which Mr Young replied in a moving speech. During the evening Mr Stuart Jack sang the Club Song, and he also proposed a vote of thanks to the President at the finish.

Following the Dinner, a considerable number of members and guests motored to Inverarnan for the night and had an excellent day on the hills on Sunday.

THE JUNIOR MOUNTAINEERING CLUB OF SCOTLAND.

Annual General Meeting, Dinner and Meet, February 1954.

LOCHABER Section, as hosts, selected Glencoe Hotel for this year's focal point. In previous years most members wanted to make the most of the New Year holiday for climbing, so it was decided to defer the A.G.M. to a week-end between February and April. All Sections had plenty of notice and, with the attraction of a weekend's climbing, a good turnout was hoped for. However, only Glasgow appeared in strength and the usual attendance of 20 was only increased to 24 at the Dinner and over 30 at the meeting. Glasgow Section bus ran a shuttle service up and down the glen, taking members back to camp, howff or hut. The attendance comprised 27 Glasgow members, 2 from Edinburgh, 4 from Lochaber and 3 guests.

The Hotel gave us an excellent meal, and members turned to the meeting in a pleasant frame of mind. The Chairman dealt expeditiously with the agenda and the business ended quickly. Lochaber produced an excellent badge and appealed for purchases in large quantity from the other sections. A proposal for a Newcastle-on-Tyne Section was turned down on the grounds that the Club was Scottish, although members south of the Border



QN BEINN LAOIGH

Proceedings of the Club.

should not be debarred. Following the meeting came an excellent show of slides by a member of the Climbers' Club, a record of a tour in various mountain districts of America. As no piano was available the traditional song and dance could not be held.

Sunday was a mixed day of snow and sunshine. Parties, on the Buachaille especially, were bogged down in deep snow with additional snowfall for most of the day. Even the tigers failed to cope with these conditions. At the Ballachulish end, however, were Alpine views and generous sunshine. A brief record of members' climbs follows:—

Wood, Dick, Johnson, Ford: Curved Ridge in two parties. Musgrave, Ream—Beinn Fhada. McCalman, Gold, Hall: North Buttress (Buachaille), uncompleted. Hollingsworth, Daniells: Sgor nam Fiannaidh. Barclay, Goring, Rennie: D-Gully, across Curved Ridge, down Easy Gully. Baillie, Robb: Gully in the Chasm, on snow shoes. Hamilton, Johnson, Lees: Lagangarbh Corrie to top and back. Goldie and others: D-Gully and Easy Gully. Mason, Aird and others: Sgorr Dhearg and Sgorr Dhonuill. Stark and others: Foot of Stob Coire nan Lochan. Burgon, Heron and others: Ski-ing on Meall a' Bhuiridh.

Edinburgh Section.—The Section continues to be very active, eighteen bus meets taking place to Lochnagar, Linn of Dee, Kinlochleven, Glencoe, Ben Nevis, Glen Clova, Killin, Dalmally, Blackmount and Aviemore, and much other climbing as well. Several parties visited the Alps in summer. The S.M.C. lectures were well attended and appreciated. Social meetings were held in the Arcade Bar, Cockburn Street; rather poorly attended. The Annual Dinner at the Peacock, Newhaven, was very successful. The membership stands at 71 with 3 associates. Honorary officials are George Ritchie (President) and C. L. Donaldson (Vice-President). The President is G. Hood and the Secretary J. R. Marshall, 1 Ferry Road Drive, Edinburgh.

Glasgow Section.—Successful bus meets organised by J.M.C.S. were held as usual; 14 meets planned and 5 cancelled because unsupported. Glencoe with 4 meets was most popular. On these buses there were, on the average, 16 J.M.C.S., 4 S.M.C. and 4 guests or prospective members. Two Committee men have retired to the S.M.C. and two new men have come in. A most successful dinner was held with a *Yeti* as guest of honour! The best meets were at Lagangarbh—two rock-climbing meets of which one was a training meet and one a rescue meet. The training meet will be repeated soon.

The photographic competition, along with the S.M.C., was most successful with a great preponderance of colour slides over other prints. Twelve lectures, along with the S.M.C., were most popular, some sufficiently so to warrant booking a larger hall. Several members were abroad in summer in the Alps, including Jugo-Slavia, with good expeditions.

The Section is solvent though with a slight loss over the year. The membership is 203 (180 paid up, 35 suspended, 10 resigned and 29 new members in). The Honorary officials are J. F. Hamilton (President) and W. Bennett (Vice-President). During the year President and Treasurer resigned from office. The new President is D. McCalman and the Secretary is J. Mason, 88 Brackenbrae Avenue, Bishopbriggs, Lanarkshire.

Lochaber Section.—Several members were lucky in climbing abroad this year, and a few skied in Austria. Because of poor snow at home ski-ing enthusiasm waned, but this made members use their climbing boots. Many week-end trips were made to all Scottish climbing areas. One member completed his Munros (P. L. J. Heron) within three years, surely a record and a fine achievement. Steill Hut has been much used, both by members and other clubs. It is hoped to make improvements soon. The Club badge is to be made and delivered early in 1954.

The membership now stands at 53, but most live outside the district. A few local members left to take up employment elsewhere, but others were enrolled to maintain the local strength. The honorary officials are J. F. Hamilton and J. Ness (Presidents) and D. G. Duff (Vice-President). The President of the Section is P. L. J. Heron and the Secretary is Alan Burgon, 4 Lochiel Road, Inverlochy, Fort William.

London Section.—The official monthly meets have received rather less support than last year, but many parties have been active in the Alps, Scotland, the Lakes, Wales and our own little London outcrops, which every year show an increasing standard of difficulty. A successful A.G.M. and Dinner were held in November, and prospects for the 1954 season, including finances, are good. The membership remains constant at nearly 70. Several stalwarts have gone abroad, but we hope to have them actively back with us after their term of duty. The honorary officials are C. Gorrie (President) and A. Smith (Vice-President). The Section President is Charles Ellis and the Secretary is E. C. Kemp, 31 Kendall Avenue South, Sanderstead, Surrey.

Perth Section has been as active as in previous years, holding monthly meets in various districts within 90 miles of Perth. Some members had an excellent week's climbing on the Island of Rhum. Two film shows were held during the winter, when some fine films on climbing were shown to a very good turnout of members and friends. Mr Alistair Cram, one of our founder members, home on a short leave from Kenya, attended our December meet. It was with regret we heard of the death of Mr C. Andrews, one of our original members. Over a period of nearly twenty years Chris Andrews rarely missed one of the Section meets—always ready to climb another extra top—a good companion on the hills and always ready to lend advice and help to new members.

The membership of the Section is at present 22, with prospects of more members joining.

The honorary officials are W. H. Murray (President) and J. E. McEwen (Vice-President). The Section President is J. Webster and the Secretary is J. C. Grant, **37** Burghmuir Road, Perth.

MOUNTAIN LOVER.

" BECKON me, ye Cuillins ? Aye, beckon as ye may—

For I'm tired of all your whisperings

And tired of all your ways.

Ye seek to claim me as your own And drench me with forgetfulness Of other hills I've known!''

"Ye beckoned me, ye Cuillins— I answered; tho' I vow I was but wand'ring hereabouts; That's why I'm with ye now."

The Cuillin hills are beckoning A slave, prone, at her feet. The Cuillin hills are reckoning The mood in which she'll meet The climber, gambler—whate'er he be—

Unknowingly a slave; Who'd seek her regal company On ridge and cliff and cave. A sunset with a golden gown Bewitched another day: And drug of sleep the barrier 'Twixt slave and Cuillin lay.

"Why should 1 clothe in best attire?"

The Cuillin hills did say.

"Come Mist! come Rain! Come Thunderfire!

Come Hail! and Blast this day!"

and the second se

" Beckon me, ye Cuillins ? . . .

Aye, beckon as ye may,

I'll ne'er forget your golden gifts

In mem'ry hid away: When we made friends

With Wind and Rain

On a sunny summer's day."

K. G. P. HENDRIE.

We regret to record the recent death of K. G. P. Hendrie (J.M.C.S., Edinburgh), the author of the above poem. He served in the R.A.F. in both wars, played Scottish rugby and was capped three times, still playing until 1953. In November 1951 he started climbing with Archie Hendry, doing Observatory Ridge of Nevis, Central Buttress of Buachaille, South Ridge of Rosa Pinnacle, etc. He climbed in Skye last September, two months before his death at the age of 55—a real man. A. H. H.

S.M.C. ABROAD.

Non-European.

Mr G. G. Lewis writes: "In April and May of this year J. W. R. Kempe and G. G. Lewis (J.M.C.S.) took part in a most enjoyable climbing expedition to the Yalung glacier area of the Nepal Himalaya, an area which I had visited in 1951.

"We left Darjeeling on 23rd April with four Sherpas, including Mingma Gyalgen as sirdar, and a vast caravan of thirty-six coolies. After following the Singalila ridge we established our base camp at Upper Ramser on 10th May. The following day Kempe and I and the four Sherpas made an attempt on the 19,600-ft. peak of Boktoh and established camp at a height of 17,300 ft. on the south ridge. Leaving camp early the next morning we tried for the summit; after some interesting snow and rock climbing we were turned back about a thousand feet from the top by adverse snow conditions. We returned that night to Upper Ramser.

" The 13th was a rest day and, after much discussion, we decided with cautious optimism that Koktang might be climbable by the south-west ridge. Two days later we reached the foot of this ridge and it was clear that no easy route existed. We decided to have a look around the corner and, after crossing a high col and descending to the upper basin of the east Koktang glacier, we had a desultory look at the south-east ridge of the mountain. This, too, appeared to be extremely difficult. We then climbed through an interesting ice-fall to a snow plateau on the eastern side of the mountain and established camp at a height of a little under 19,000 ft. That night was the worst that either Kempe or I had spent on a mountain-at sunset a wind of at least gale force sprang up and we spent the whole night waiting for the tent to be blown away. Sleep was impossible, but, fortunately, the wind dropped with the approach of day. We had now only sufficient food for another two days, but decided to pin our hopes on a quick attempt on the north-east ridge before returning to base camp. We left camp at 6 A.M. and, climbing quite fast in crampons, were soon on the ridge, which was a sharply defined snow and ice arête. To save time, we were climbing on two ropes-Kempe and Mingma on one and Tashi and myself on the other. We were for a short time forced off the ridge on to the east face, regaining the ridge by a steep snow slope. An awkward ice bulge gave us some anxious moments and then, miraculously, we were on the 20,500-ft. northern summit of the mountain (first ascent). The view of the Everest-Makalu massif was superb. We raced down off the mountain, broke camp and returned to base, where much 'chang' was drunk in celebration of the ascent.

"Our appetites whetted by this success, we decided to go after bigger game, and the evening of 22nd May found us established with ten days' supplies at the foot of the west face of Kabru (24,000 ft.). The next morning we climbed a thousand feet of easy rock and then traversed on to the nose of a steepish glacier. We climbed steadily upward and finally camped for the night on a snowy easement at about 20,000 ft. We breakfasted (unhappily) on porridge and pemmican and were once more on our way by 7 A.M. We climbed through an interesting ice-fall. At a height of about 21,500 ft. I was forced to return to base owing to a severe attack of stomach cramp. Kempe, with Mingma and Tashi, carried on and, a thousand feet higher, camped for the night. The next day they climbed the north peak of the mountain. This was the second ascent of the peak and first from the west side (Cooke had climbed it from the east by the Kabru glacier).

"While Kempe's party were resting from their exertions, Pa Norbu and I explored the upper reaches of the Yalung glacier and prospected the south face of Kangchenjunga. But our holiday was almost over and, no matter how unwillingly, we had to return to Darjeeling. The last word on the expedition was with Kempe—as we were saying our good-byes at Dum Dum Airport he said, 'Boktoh's a nice mountain. We must have another stab at it next year.'"

W. H. Murray, accompanied by J. B. Tyson, spent the months of May to August exploring the range of Api in the extreme north-west corner of Nepal. On the main peak of Api (23,399 ft.) they were unable to find any climbable route, and the greater part of their exploratory work was done on the range running eastwards 35 miles into Tibet, and south-eastwards down to the great basin of the Seti River, lying between Api and Saipal ranges. This country had not previously been visited by Europeans.

A. L. Cram writes from Nairobi deploring the military measures against Mau Mau because, for the time, they forbid access to the Mount Kenya region. He adds, however, that he and Mrs Cram climbed Kilimanjaro last January, 19,340 ft. high according to a recent survey (400 ft. less than the former figure, although the drain on energy and the purse was even greater than before). In icy conditions they cut steps up the jagged north ridge of Mawenzie on what seemed to be a first ascent, the mountain having been neglected on this side since the days of the German administration. "A notch leading to a ledge may give access to the fabulous east face more than half-way up, which face is severed from the opposing rocks by unique rifts about 1,000 ft. deep which cannot be crossed." They also reconnoitred the group of great campanile at the other end of the main ridge—a mountain of entrancing possibilities.

I, H. M. Smart writes from Tranquille, British Columbia: "I had the good fortune to spend most of June and July in the Canadian Rockies. Following an introductory period in the area around Lake O'Hara the time was split between three regions as follows:

A visit to an unmapped area at the head waters of the Cline River on the eastern fringe of the Rockies. From a base camp on a lake we climbed three peaks of about 10,200 ft. in perfect weather, all apparently first ascents, two of them shapely and difficult. From Jasper the most interesting event was the second south to north traverse of Mount Colin. The final period was in the Kananaskis game reserve, south of Banff, a little-climbed area with a good variety of serrated limestone ridges. Of three attempts on different peaks two were unsuccessful.

On 25th August 1953 the writer, P. D. Baird, together with Jurg Marmet, Association of Swiss Guides, climbed what we believe to be the second-highest peak in Baffin Island, 7,100 ft.: "The highest, 40 ft. higher, a dozen miles to the north, is a comparatively uninteresting ice-domed plateau—our peak rises spectacularly and with graceful lines from the deep-cut Pangnirtung Pass. Its base here is only a few hundred feet above sea-level. We have proposed the name Mount Queen Elizabeth for this Arctic Circle monarch.

"The climb was thoroughly enjoyable in perfect weather. Starting on the south-east face of the mountain, a long, stony gully brought us to the foot of the middle cliffs which were turned by a traverse across a scree slope above boiler-plate slabs. This gave access to an upper snow slope, scarcely a corrie, which narrowed to its bounds of two rock ridges, each ending in a tower. A little step-cutting took us to the southern ridge, then came two rock pitches which called for the rope and we were on the final snow dome. From here we had a magnificent view over all Cumberland Peninsula, whose mountainous area is comparable in size to Switzerland. The ascent and descent took just under twelve hours."

Arthur H. Read writes from Harvard, U.S.A.: "During July and August I climbed in the Selkirks, British Columbia, with an expedition organised by the Harvard M.C. and led by W. L. Putnam. On 18th July we crossed Columbia River by rubber dinghy about 65 miles downstream from Golden. After much heavy work, cutting a trail through dense forest and brush, we camped at timber line near the edge of Granite Glacier. We climbed widely amongst the surrounding mountains, and I took part in the ascents of Mount Sir Andrew (9,800 ft.) and the east peak of Mount Wotan (about 9,500 ft.), both previously unclimbed.

Later we made a long pack march across the Gothics and Adamant Glacier to our second main camp at about 6,000 ft., near the foot of Mount Sir Sandford, on the Silvertip moraine. This peak (11,590 ft.) is the highest of the Selkirks. Climbed first by Howard Palmer in 1912, and again by Sterling Hendricks in 1946, it was one of our main objectives. Our group explored two new routes, the north-west ridge route being climbed to the summit. I myself was on the other route by the north-east ridge, but we were turned

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back at a point about 700 ft. below the top by bad snow overlying steep rock. Other climbs were made from the Sir Sandford camp, and I took part in the ascents of Mount Citadel and Ravelin Mountain (possibly a first ascent), and an attempt on Mount Redan, from which we were driven by a thunderstorm."

Alastair Hetherington writes: "A. H. Read and I made an unsuccessful attempt on Mount Washington (6,288 ft.), in New Hampshire, at New Year. We were defeated by quantities of fresh snow and intense cold. (Read made a successful ascent at Easter.) At Easter I cut my way to the top of a number of peaks in the vicinity of Mount Mitchell (6,684 ft.), in North Carolina : the chief equipment for climbing in that district is a hatchet, because most of the trails are now blocked by dense undergrowth. In May I had two weeks in the Front Range and Never Summer Range of the Colorado Rockies, which were still under snow but not difficult. They are like the Cairngorms, but with some small glaciers. The best tops were Hallett's Peak (12,725 ft.), Flattop (12,364 ft.) and Mount Lady Washington (13,269 ft.). In July I also did Mount Alice (13,310 ft.) in the same area. In California, in June, I walked in the Santa Lucia Range, which, although it rises to 5,000 ft. immediately above the Pacific Ocean, is dry and dusty."

Spain, Alps, Norway.

Mr B. S. Fraser writes: "In August I spent eight days in the Picos de Europa in northern Spain. My companion was rather unwell and the weather misty, so I achieved less than I had hoped. In the western massif we worked from the Vega Redonda Hut, attained from Covadonga. Alone I climbed Cotalba and Requeson (2,210 m.), a pleasant scramble. A joint attempt on Peña Santa de Castilla (2,586 m.) failed and continued as a solo effort to climb Peña Santa de Enol. I chose the wrong one of three chimneys. Next day, with a guide, we had a grand cross-country route through the Hoyo de las Pozas to the Vega Huerta Hut, and by the Canal de Burro to the inn at Posada de Valdeon. Next day we climbed by the Collado de Remoña to the Collado Jermosso Hut in the central massif, from which I climbed Palanco with the guardian to the lower top. Next day he took me to Tiro Tirso (2,635 m.), but left me to the final ascent alone, on a pleasantly exposed ridge of good rock of no great difficulty. Then our guide led us down to the Canal de Asotin and so to the Poseda de Valdeon. Our last day took us through the amazing gorge of the River Cares (between the two massifs) to the road at Puenta de Poncebos and Arena de Cabrales. I was told that a new hut neared completion at this, the northern end of the central massif, near Naranjo de Bulnes, which will make the peaks much more accessible, if completed, especially useful if provisioned."

Mr and Mrs A. Gold were at La Bérarde in Dauphiné at the end of July. Owing to intense heat they only got a few tops, but recommend the centre for all grades of climbers.

The following are the Alpine expeditions of G. J. Ritchie and A. H. Hendry (S.M.C.), J. H. Marshall (J.M.C.S.) and Ian Oliver (E.U.M.C.). After bad weather at Chamonix, climbing started on 29th July when Ritchie and Hendry climbed the Forbes arête of the Chardonnet. Marshall and Oliver on the same day climbed the north-north-west arête of the Blaitière. Hendry now had to go home. The others continued as follows:—

On 31st July the Mayer-Dibona arête of the Réquin, with a traverse to the Refuge d'Envers des Aiguilles, from which they climbed the Mer de Glace face of the Grépon on 1st August, returning by the Nantillons glacier and Montenvers to the same hut, latterly in a thunderstorm and darkness.

The 2nd of August, scheduled for the Ryan-Lochmatter route on the Plan, enforced a retreat to Chamonix in bad weather. Ritchie and Marshall went to the Couvercle on 4th August, and on 6th August climbed the Graham Brown-Smythe rib to traverse Les Courtes, lunched at Couvercle, collected crystals, had tea at the Réquin Hut, encountered an ice avalanche in the Géant ice-fall and dined after nightfall at the small hut on the Col de la Fourche—capacity eight persons but contents sixteen, with lodgment mostly inside but partly within reach of a 600-ft. drop to Italy! The old Brenva trail started soon, a series of parties setting out at intervals and preventing sleep, amid a chaos of equipment.

Plans for the Brenva were dropped. The hut, however, had provided an unexpected meeting with old friends—J. Wilkinson (F.R.C.C.) and I. McNaught Davies (C.C.). So on 8th August the united party left for the Pear Route on the Brenva face of Mont Blanc. They were forced high on the traverse of the Great Couloir by the depth of the runnel and reached the foot of the buttress after dawn. Ice spinnacles were already streaming down and speed was necessary. Despite ice and new snow they moved together on two ropes up the east side. As they left the *stalk* an ice avalanche swept the west side. There was ice to the Aiguille de la Belle Étoile and thence to the summit, but an escape was made into the séracs, above which they joined a French party making an even more direct route on the Route Major. The time was about eight hours from the Col de la Fourche to the summit.

Marshall then joined Oliver, and they climbed the north-west ridge of the Blaitière on 10th August and made the traverse of the Droites from west to east on 12th August.

Charles E. Wood (J.M.C.S.) and Desmond Stevens (Wayfarers' Club) were at Chamonix on 18th July. They report as follows: "Bad weather held us till 20th July when we crossed the Col du Géant to the Torino Hut. On the 21st we traversed the Tour Ronde

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to the Col de la Fourche Hut. Leaving the hut at 3 A.M. on the 22nd we were at Col Moore at 4.30 A.M., started on the Sentinelle Route and were at the Red Sentinel at 7.30 A.M. and foot of the Twisting Rib at 10.30 A.M. Here we rested and ate, as most of the objective dangers were past. (Our times throughout were slow. Future parties should try to reach these points much earlier.)

"Easier climbing to the right on the Twisting Rib—about very difficult—led to the Staircase. Above this point route-finding was complicated by heavy mist, and ice slowed us up. The exit was passed at 10.30 P.M. in darkness. Here we bivouacked. We crossed Mont Blanc to the Vallot Hut at 6 A.M. Rising wind and snow held us there till the 24th, when we descended by the Grands Mulets glacier to Bossons and Chamonix."

T. W. Patey and J. M. Taylor (C.G.C.) enjoyed ten days' climbing at Chamonix in July. Weather conditions were favourable but most of the routes were only just coming into condition. The opening climb was the Ryan Lochmatter route on the east face of the Blaitière. On the descent the party were enveloped in a thunderstorm which curiously rose upwards to meet them out of the Chamonix valley. Later the north-north-east ridge of the Aiguille de l'M. and the République Arête of the Grands Charmoz were climbed—the latter a fine rock climb of fourteen hours' duration. Then, from the Charpoua Hut they traversed the Verte by the Arête Sans Nom, descending the Whymper Couloir to the Couvercle (ascent thirteen hours, descent five hours). The arête carried somewhat more than its usual quota of snow and ice. To round off the holiday the Cardinal was ascended by moonlight, returning to the hut at 5.30 A.M.

D. C. Hutchison and P. Cunningham spent three weeks from 19th July in the Zermatt and Chamonix areas in poor weather. With J. MacLaurin and D. Kinloch (G.U.M.C.) they traversed Monte Rosa by Dufourspitz and Zumsteinspitz to Margherita Hut. Cunningham and Hutchison went now to Chamonix and climbed the Réquin by the north-east ridge. Then they joined L. S. Lovat, climbing the M. by the north-north-east ridge when weather improved. The three then joined two members of the Irish M.C. and climbed the Aiguille de Roc from the Envers Hut (Mer de Glace face).

L. S. Lovat climbed, at the start, with J. M. Johnstone, the Réquin, the Moine, did the traverse of the Aiguilles Ravanel and Mummery and Mont Blanc, the first climb including D. McCalman (J.M.C.S.). Lovat then joined Hutchison and Cunningham in early August on the Aiguilles de l'M. and Roc, as above mentioned.

T. A. Reynolds (J.M.C.S.) climbed in the Alps with A. Thorburn in mid-July in mixed weather. They climbed the Aiguille de l'M., Pointe Albert, Aiguille.du Plan, Dent du Réquin and the Moine. They traversed the Nonne and Les Courtes. They then went over the Col du Géant, Col Grand Ferret, Col Fenêtre and Grand

St Bernard to Orsières and thence to Arolla where they traversed the Aiguilles Rouges and climbed the Pigne. In bad weather they returned to Chamonix and spent their last day on the Aiguille de la Perseverance.

Charles L. Donaldson writes: "I was at Chamonix with George Hood (J.M.C.S.) during the first half of July. Snow fell almost every day at some time. We climbed Pointe Albert and traversed Petits Charmoz and Aiguille de l'M. Two attempts on Grands Charmoz were repulsed by a barrage of stones in an icy couloir, and an ice avalanche on Nantillons glacier obliterated all tracks. From the Couvercle we climbed the Moine and were defeated on the Évêque by ice and *verglas* on rocks, having to rope down. One blanket per person is not enough in the Couvercle, and the solid rubber footwear provided is not a good idea."

R. I. McPherson (J.M.C.S.) was in the Alps from 13th July to the end of the month with the following itinerary: From Orsières to Fionnay over Col de Lana. To Chanrion Hut with a day on Bec d'Epicoun and an attempt on Ruinette from Col de Lyrerose to 500 ft. short of summit, descending by Col de Seilon to Arolla. Ascent to Bertol in poor weather, and crossing by Tête Blanche and Col d'Hérens to Schönbühl Hut in good weather. Ascent of Pointe de Zinal and so to Zermatt and Täsch Hut, thereafter crossing Allalin Pass to Saas Fee. Later, from Chamonix to Couvercle Hut, from which climbed Moine. Moving to Réquin Hut, climbed Plan. After bad weather climbed Aiguille de l'M., finally returning to Martigny over Col de Balme, Trient, Col d'Arpette and Champex.

During May D. McKellar, J. E. MacEwen and Ian MacNicol did a ski mountaineering trip over the Haute Route from Zermatt to Chamonix. The weather was, on the whole, good, and Pierre Maurice from Montana was guide.

From Zermatt to Theodule Col, followed by ascent of Breithorn and descent to Schönbühl Hut. Then up to Tête de Valpelline and so to Arolla. From Dix Hut they climbed La Luette and returned. Ascent of Pigne d'Arolla and descent to Chanrion Hut. Ascent of Mont Gélé and return. Ascent of Ruinette and descent to Dix Hut, followed next day by ascent of Mont Blanc de Seilon and descent to Seilon barrage. Ascent of Rosa Blanche and so to Cabane de Mont Fort. Descent to Verbiers, bus to Champex and so to the Glacier d'Orny and the Trient Hut. A day's blizzard occurred here, after which they climbed Aiguille du Tour and descended to Chamonix.

Charles Tilly climbed with Carswell in the Zermatt region for two weeks from about the end of July. Starting with the Trifthorn from the Triftjoch, a pleasant first day, they next climbed the Zinal Rothorn by the Rothorngrat—a delightful climb. Bad weather drove them to Zermatt, following which they went to the Schönbühl Hut to look at the Zmutt. Bad weather continued, and, in continuous snowfall, they found the traverse of the Pointe de Zinal very hard indeed. Continuing bad weather drove them to the valley and round to Zinal by rail and bus, and so to the Tracuit Hut, which was crowded. They traversed the Diablons from there and, on the next day, climbed the Bieshorn. They had hoped to tackle the north ridge of the Weisshorn but rocks were heavily iced.

Dr R. L. Mitchell could only fit in three days' climbing in the course of a short trip to Switzerland. These (17th to 20th August) were spent at the Weissmies Hut with Toni Biner, who brought along his young wife, Margrit, for her first roped ascents—in order, so he said, to convince her how safe a guide's job is. The first lesson was the south-east face of the Jägihorn, a short exposed climb on good rock, the second the Fletschhorn-Laquinhorn traverse and the third the Jägigrat by the south-east wall—Grand Gendarme and all. Toni was a hard taskmaster, for on the last the rope of three was kept strictly in place among the other guided ropes of two on the narrow ridge.

The Hon. Editor with Mrs Bell, Ian Charleson and Charles Gorrie were in the Lötschental from 27th July onwards. Training climbs on the north side of the valley were the Hockenhorn and the Resti Rothorn, the latter giving an interesting rock climb. Along with George Dwyer and his two boys they then went to the Mutthorn Hut over the Petersgrat. Bad weather only allowed of the ascent of the Tschingelhorn in a fine interval.

Returning to Kippel the party split up. Gorrie and Dwyer went to the Bietschhorn Hut and climbed the Bietschhorn over much new snow by the west ridge, following which Gorrie had to go home.

The others crossed the Baltschieder Joch to the Baltschiederklause Hut and climbed the Grubhorn next day. Then Charleson and Bell climbed the south ridge of the South Jägihorn, the best rock climb of the area. Next day Mrs Bell and Charleson climbed the Nesthorn. All three traversed the Bietschhorn on the following day, ascending by the Ostsporn, a fascinating, difficult ridge, in ten hours, and descending by the north-east ridge to the Baltschiederjoch, with an awkward icy stretch, in the late afternoon, and so to Kippel at 10 P.M. —an eighteen hours day.

W. Arnot Russell was in the Alps along with Mike Blake, Ian Lawson and David Ross. Starting from Vent in the Oetztal on 8th August the first week's expeditions were a traverse of the Wildspitz from Breslau Hut to Vernagt Hut; a traverse of Fluchtkogl to the Brandenburger Hut; the ascent and return from the Weisskugel; descent to the Gepatsch Hut; ascent of Glockturm with descent to Riffljoch and Hohenzollern Hut.

They then descended to Pfunds and went to Pontresina and thence to Boval Hut on 16th August. Next day they climbed the Piz Bernina by the south ridge. Proceeding on the 18th to Diavolezza Hut they climbed the three peaks of Piz Palü and descended the

Spinasgrat. Lawson went home and the others landed at Kippel, Lötschental, on 23rd August, proceeding next day to Bietschhorn Hut from which they climbed the Bietschhorn by the west ridge on 26th August.

Maurice Cooke, P. A. Fletcher and A. Harrison went to Mayrhofen in the Zillertal on 31st July. After a day's bad weather they went to the Furtschaglhaus in the Schlegeistal. After another bad day they went over the Schönbichler-Scharte and Schönbichler-Horn to the Alpenrose Hotel in the Zemmgrund, about 500 ft. below the Berlinerhaus. The next day was fine and they went up the Schwarzenstein, the top of which was crowded. They next went to the Gross Venediger Group. On being advised to approach this group from the south, they went over the Gross Glocknerstrasse to Lienz and from there to Matrei. The Austrians have spent vast sums of money on roads and hotels so that tourists can view the Gross Glockner with comfort.

They traversed the Gross Venediger from the Neu Pragerhaus to the Kürsinger. The traverse was easy and attracts many people. Although warned of great difficulty and danger, they decided to go over the Maurer Törl to the Maurertal. No special difficulty was encountered and, on the other side, they found the Rostocker Haus most pleasant and uncrowded. After descending to Matrei for a bath they returned next day and did two expeditions, first to the east top of the Simony Spitzen and then to the west top, the latter being approached over the Reggen Törl. There were several attractive tops near the Rostocker Haus, but time was up and they returned to Innsbruck by the quicker route through Brenner Pass.

G. G. Freeman was with a Climbers' Club party in the Oetztal Alps based on Vent from 10th to 20th August. Lewis Sancha, Paul Armstrong, John Denton and he climbed the Finailspitze and Hauslabkögl from the Samoar Hut. Moving to the Brandenburger Haus via the Vernagt Hut and Fluchtkogl, Freeman, Sancha and John Evered climbed the Vordere, Mittlere and Hintere Hintereis Sp., the Weisskugel by the north ridge, descending by the east face, and the Weiss See Sp. on successive days; mainly following a rope led by John Watson. Sancha and Freeman climbed the Partschweg route of the Wildspitze and joined Watson's rope for the descent by the north ridge and Rofenkarferner. The snow routes proved more rewarding than the rock ridges, which were mostly broken and unstable. The final ridge of the Finailspitze and the north ridges of the Weisskugel and Wildspitze were interesting owing to hard snow or ice and some exposure, but the difficulties were quite short.

Tom Weir spent three weeks in Yugoslavia, first in the Dinaric Alps of Dalmatia then a fortnight in the Julian Alps of Slovenia. The best climb was the east wall of Jalovec from the Tamar Hut, a good rock climb of some 1,500 ft. of severe or hard severe standard, finishing through a remarkable hole in the mountain. The climb was led by Dr F. Avcin and Mr Daro Dolar, two of the most noted Alpinists in Yugoslavia. Descent was made on a staircase of pitons and fixed cables, quite normal fixtures on the natural routes in the Julians.

Crossing the Sleme Pass, Weir joined L. G. Duff and Dr J. Kerr of the Glasgow J.M.C.S. They had some interesting climbing, first an abortive attempt on the Horn Route on the north wall of Mojstróvka by trying to force it direct, then a "prepared" way on the north face of Prisonjnk where the route had not only been pitoned but blasted by explosives.

From here the party crossed south by the Versic Pass to Zlatorog, and up to Triglav—the Ben Nevis of Yugoslavia, height 9,396 ft. Weather was mixed, with much rain, but a traverse of Triglav was made from Dolicu to Planika, and Kanjavec was climbed from the Hribarice Pass.

Bad weather spoiled the crossing from this region to the Valley of the Seven Lakes, but Ticarica was climbed *en route* to Bohinjsko Lake. A final return to Krangska Gore was made for a visit to Martuljek and the wonderful cirque of peaks which make up the Spik group. No tangle of ironmongery yet defiles these mountains on the north side.

Costs were in the region of 10s. per day, and the huts were found to be good with simple meals laid on. Average height of peaks climbed was around 8,000 ft.

G. Barlow and his wife were once more in Norway at Sloevra Fjord, arriving from the north after visiting Kirkenes. Their most memorable ascent was again that of Higraven on a day late in August. In consequence of the dry spring and summer, said to be the finest for eighty years, the mountain was almost denuded of snow and, for once, the climb was made on rock throughout. For almost the whole ascent they were accompanied by a dainty and most friendly "roiskatt" The route had been a long one and we lingered on the (stoat). summit to enjoy the superb views at sunset. Much of the descent had to be made by faint moonlight, taking the easiest way available. This led us to another branch of the fjord where we were separated by a stretch of difficult and dangerous coast from our boat. It was then midnight, and we rested by a wood-fire and made tea, intending to start at dawn, but the arrival of a rescue boat, guided by the fire, gave a happy ending to this enjoyable expedition of fifteen hours. A few days later a terrific rock fall occurred near the dangerous place mentioned.

In July 1953 W. Young (President) and D. McCalman (Vice-President) and G. Sutherland of Glasgow J.M.C.S. visited Chamonix district along with R. Buckland (S. Africa M.C.). Defeated by bad weather on N.N.E. ridge of the M, they went to Couvercle and did the Moine by south ridge. Then from Torino Hut they had no luck and party split up. Young and McCalman climbed Mont Blanc by Gouter route. McCalman later joined Lovat's party on Réquin.

NOTES.

Scottish Mountain Accidents, February 1953 to January 1954 inclusive.

17th March.-John Simon, Oxford U.M.C., lost control when glissading on Ben Nevis; fracture and dislocation of right shoulder. Rescue party out.

1st April.—Peter Smith (27) (E.) and David Monro (24) (E.), both experienced climbers, did not return to C.I.C. Hut after a climb. R.A.F. and large local search parties out for six days. Bodies found 19th April roped together (rope unbroken) near foot of South Castle Gully, Ben Nevis. Presumed avalanched.

10th April.—M. Smiddy (22), Durham U.M.C., fell in Twisting Gully, Stob Coire nan Lochan, Glencoe; fracture of skull and spine. Rescue party out.

24th May.—Derek Tasker (23) (E.) fell when climbing on Central Buttress, Buachaille Etive Mor; dislocated ankle. Rescue party out.

27th May.-John Morrow (22) found unconscious in Easy Gully, Buachaille Etive Mor; died in hospital. Stretcher party out.

31st May.—Andrew Wilson (20), one of several novices climbing unroped, on the Sugach Buttress of Creag Tarsuinn (Arrochar), fell from the region of the "Pulpit" most of the way down the buttress, receiving multiple injuries. Stretcher party out.

21st June.—Peter Bain, Falkirk M.C., leading Ash Wall, Ben A'an, Trossachs, fell 30 ft. or so from crux; unconscious, laceration of head and face and minor damage to a leg. Creag Dhu members and Falkirk party improvised stretcher and effected rescue inside 2 hrs. to ambulance. Detained 10 days in hospital.

9th July.—George Edgar (16) fell while climbing on Meall an t'Suidhe; severe lacerations. Rescue party out.

11th August.-John Attwood (E.) fell 40 ft. in Clachaig Gully, Glencoe; knee injury. Rescue party out.

16th August.—William Stewart (21) killed while climbing with roped party in Parallel Gully B, Lochnagar; rope broke. Stretcher party out.

19th August.—Joseph Hutton Mackay (45) fell near summit of Sgurr nan Gillean when ascending by the tourist route; killed instantaneously. Stretcher party out.

11th November.—Kenneth Grassick (18) and Hamish Bates (18), both Aberdeen U.M.C., injured when climbing on Comb, Corrie Fee, Glen Doll. Rescued by own party, head injuries and injuries to back. Recovered.

5th January 1954.—Samuel Heron (23) (N.) slipped on steep snow when climbing Ben Nevis; killed instantaneously. Body found in Coire Leis. He was wearing *worn* rubber soles. R.A.F. Rescue Unit out. 7th January 1954.—Martin G. Sayers (25) (E.) lost control when glissading on Ben Fhada, Glencoe; killed instantaneously.

17th January 1954.—Maureen Monro (16) slipped and lost control on steep snow on Sgurr a' Mhaim (Mamores); fracture of skull and spine. Rescue party out overnight.

24th January 1954.—The R.A.F. Mountain Rescue Team was carrying out routine training on Ben Nevis. One of three parties was in No. 2 Gully, when two bodies fell past within 30 yds. and came to rest 300 ft. lower. They were John Heap (Edinburgh U.M.C.) and Peter Rack of London Hospital, who had been attempting Comb Gully. This is a hard climb, only thrice done so far, and demands respect even in perfect conditions. On the date of the accident it was unjustifiable. Both victims suffered head injuries, though Heap was able to walk. The presence of the R.A.F. team saved one life at least, using the C.I.C. Hut stretcher.

NOTE.—Thanks are due to the R.A.F. Rescue Unit in the preparation of this list. *Contractions Used*; U.M.C. means University Mountaineering Club, (E.) is English and (N.) a Novice. In many cases details are scanty.

Midwinter Ice and Boots.

Certain conditions of the later winter months which are found typically on the south-east (or Carn Mor Dearg) arête of Ben Nevis deserve renewed consideration. The most recent tragedy with loss of a promising life emphasises their importance. It may be noted, too, that men of the widest experience have in the past come to grief at this season and in this place, for the unexpectedness of terrain and surface can catch out even the most wary.

The slope is comparatively easy and broad, so that in clear weather in summer it is most pleasant and the panorama superb. Occasionally in winter it is deceptive. On either side is a steep declivity, to the north-east the floor of Coire Leis is 1,250 ft. below and to the southwest Coire Eoghainn drops 1,500 ft. The arête gets the sun directly and, by January, after many alternations of freezing and thawing, of snowfall and rainfall and condensation, a tough dark ice may form, in which even the largest boulders are submerged. A smooth, dangerous surface results, which may be wet in mist and on very cold days may have an inviting but very thin frosty crust which flatters only to deceive our tricounis.

In descending from the Observatory the general direction is southeast (magnetic), but at first one goes more easterly. If one holds this too long, even before the edge of the corrie is obvious, one may enter a gently sloping scoop in which a quiet and unhurried slide into the top of a gully followed by a drop to Coire Leis is easy. The surface is too hard to make an impression on, unless with sharp crampons. There is no hope from rubber soles. Ice-axes, even in expert hands, have been useless and lost from hold. Two such, lost years ago, have

not yet, so far as I know, been found. There was then, most fortunately for their owners, a thick cushion of soft snow in Coire Leis.

Lower down, as the slope eases off, one must bear more southerly, and here I have found myself sliding with almost imperceptible acceleration, unable to develop any friction, though spread-eagled, and only held from the downward swoop to the boulders in Coire Eoghainn by steering over an isolated boulder top which projected about two inches through the ice. To traverse the slope on small holds in a high wind was difficult, since it took about a dozen kicks with edge tricounis to make each inch-deep hold.

My feeling is that we may be too easily captured by the comfort and good insulation of rubber soles, and that without metal adjuvants they will frequently be dangerous in Scottish winter climbing. It will be understood of course that the ice covering described is only occasionally to be found on the Ben and less frequently elsewhere.

D. G. DUFF.

Cornwall.

Climbing on the Cornish cliffs is climbing with a difference, writes C. E. Willes Johnson (J.M.C.S.). You walk, scramble down or swim to the base of the routes, instead of toiling up to them; warm sunshine, even in the depth of winter, is as common as mist and blizzard on the Scottish hills; you may pleasantly vary your holiday with not too energetic hill walking. The views of moor, tor and sea are magnificent, although the altitudes seldom exceed 800 ft. If you go in summer you may indulge in less arduous delights of sun-bathing, botanising on the cliffs or 'surf' riding on the spacious beaches. Returning to boyhood haunts I spent fourteen days' holiday in Cornwall last November and enjoyed weather that would have done credit to the Highlands in an amiable May, never wearing more than one sweater and basking in sunshine on the stances between the pitches.

The best climbing is, most likely, on the promontories of Bosigran and Rosemergy Castle, a few miles from St Ives. At Rosemergy I found a fine 300-ft., ascending, gendarme-studded knife-edge, on which I used to scramble as a youth, now named Commando Ridge, and a metal plaque to commemorate the fact that Commandos were trained here in mountain warfare. There is opportunity for climbing on firm granite all along the 40-mile stretch of coast round the *toe* of Cornwall from St Ives to Mousehole. Most ascents are short, but longer ones may be found, with lavish scope for girdle traversing. Another specialty is ascending the numerous island stacks and pinnacles, approachable by non-swimmers at low water. I attempted the steep Wicca Pinnacle near St Ives but, after a narrow escape from pounding waves, decided it was not for the solitary climber.

The Climbers' Club Hut at Bosigran (no resident warden) is a solid stone building in desolate but beautiful surroundings. Close

Notes.

by on the rocky moorland is a deserted engine house of an old tin mine. Inland rises tor-crowned Carn Galva, the rocks of which, as seen from the road near St Ives, have a remarkable resemblance to the Cobbler in miniature. There are also nearby farm houses which put up visitors, but many climbers will prefer the delightful old fishing town of St Ives, whence there is a good bus service to the best cliffs. (For information about use of C.C. Huts by S.M.C. or J.M.C.S. members, apply to respective secretaries.)

Glencoe Rock-climbing Guide.

A new edition of the guide is planned for next year. Will members and others please write to W. H. Murray, Lochwood, Loch Goil, Argyll, and let him know what errors and omissions they have noted in the first edition—errors of fact, of judgment in classifying climbs, estimating heights, describing routes, or any matter whatever. Such suggestions may lead to improvement of the guide and will be gratefully received.

Presidents, Munros and Ben Nevis.

All the Munros have been completed by our own President, Dr G. Graham Macphee, who has, in the same year, celebrated his 100th ascent of Ben Nevis and his 100th night in the C.I.C. Hut really a quadruple event when effected in the presidential period!

Mr James S. Anderson of Dundee, Past-President of the Grampian Club, has completed all the Munros and Tops.

Our member, Mr Graham S. Ritchie, whilst President of the Grampian Club, has completed the Munros. Mr P. L. J. Heron, now President of Lochaber J.M.C.S. has also completed them, within three years.

Shielings in Glen Lyon.

E. W. Hodge sends this note, in continuation of one at page 161 of the 1949 Journal, on shielings at 2,000-ft. level in Gleann-da-Eig on Lawers. He has since then examined the corries of Glen Lyon and found the largest collection, in Gleann a' Chobhair, of no less than twenty-nine of long rectangular type and two small circular huts -in about six groups at altitudes from 1,300 to 1,700 ft., none of them indicated on 6-in. map, and all within 50 yds. of the main Internal width about 6 ft., never more; doorways very stream. narrow to keep out cattle. One had six stone cupboards. One or two complete gable ends, ridge pole height 6 ft. and 4 ft. at eaves. There is also a peat-road running downhill west of Invervar burn. similar to one near the Lawers burn. Such roads are laid out on a convex open slope, in wide curves with a pitched foundation and embanking, distinguishing them from other tracks. The thatched cottage at Lawers, inhabited in 1949, is now a ruin. There is a book

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at Crianlarich Hotel, "Reminiscences and Reflections of an Octogenarian Highlander," by Duncan Cameron (1911), which contains much of interest on Glen Lyon, its shielings (their rights came to an end between 1840 and 1850) and the history of the decline of cattle and home spinning in these parts.

Guide Books.

Rock-climbing Guides to Ben Nevis and Arrochar will shortly be ready at 7s. 6d. and 3s. 6d. respectively. Members of the S.M.C. *only* may obtain one copy of each Guide at preferential rates of 6s. and 2s. 6d. respectively, if applications are received with remittance before 31st May by the Guide Books General Editor (S.M.C.), 19 Dalrymple Crescent, Edinburgh, 9.

Mr Humble, Editor of the Arrochar Guide, remarks that this Guide is the first to be produced in co-operation with another club—the Creagh Dhu Mountaineering Club. It describes ninety routes in all, sixty-three being on the Cobbler. No less than thirty-four routes are at least severe in classification. Diagrams illustrate practically all routes.

Rescue Kit, **Ben A'an**, **Trossachs**.—There is an R.A.F. Kit at Callander. Apply, if necessary, to Police Office.

New Climbs in Wales or Cornwall.—If any members or other Scottish climbers do new routes in above areas they should send accounts to Mr E. C. Pyatt, 113 Burton Road, Hampton Hill, Middlesex, who collects them for the *Climbers' Club Journal* and Guides. This is a mutual arrangement. We receive and publish from the C.C. accounts of their new Scottish routes.

Reporting New Climbs.—Our space is limited and costly. We try to cover all new routes on Scottish mountains. It makes dull reading when there is too much detail, and it leaves too little to the route-finding skill of the next party. Be precise about the location of start, general line, and finish. Mention striking pitches and landmarks. We shall not publish belay positions nor pitch-by-pitch accounts unless quite essential. Please send accounts on separate sheets for each route (as a rule), well spaced out, and on one side only of the paper, with proper names in block capitals. It saves editing and corrections and correspondence. Add any supplementary detail in a separate paragraph and report the use of any pitons or mechanised aids (see also p. 292).

Sailcloth Climbing Garments.—Messrs Bowker & Budd, Bosham, Sussex, now make these in various colours, alleged to be untearable. The Editor is trying them out.

LIBRARY, BOOKS AND JOURNALS.

A list of additions to the Library was issued to members before the Annual General Meeting. This brief list only adds to the former one and mentions several more recent books, all or nearly all of which are in the Library. 'At the same time we express our thanks to kindred Clubs for the numerous mountaineering journals which we receive by way of exchange—to our benefit if they were more widely read.

The Conquest of Everest, by Sir John Hunt (Hodder & Stoughton, 25s.), needs no recommendation to climbers.

The Story of Everest, by W. H. Murray (Dent, 15s.), in its latest edition has a new chapter on the final successful 1953 Expedition. (Presented by the author.)

Mountain World, 1953, by Marcel Kurz (Unwin, 25s., from the Swiss Foundation for Alpine Research, 220 pp., 60 plates, 12 maps), is well produced and deals with outstanding climbs. It is intended to produce it annually in English.

Mountaineering, by T. A. H. Peacocke (3rd edition, A. & C. Black, 8s. 6d. net, 216 pp., 16 drawings, 8 plates), is a welcome re-issue of a good textbook. (Presented by the publishers.)

In the Hills of Breadalbane, by V. A. Firsoff (Robert Hale, 18s., 260 pp., 45 photos, 21 line illustrations) is a most readable book. It is of great interest to the hill walker and skier. Botany, geology and mythology are well handled, and the illustrations are excellent. Many lesser hills are described as well as the massifs of Lawers, More and Lui. (Presented by the publishers.)

Camps and Climbs in Arctic Norway, by Thomas Weir, one of our members (Cassell, 15s.) is beautifully illustrated and a readable story of good climbing days.

Rock Climbs in Sunmore, from the Norway Travel Association (20 pp., illustrated), is a useful guide.

The Northern Highlands S.M.C. Guide Book, edited by E. W. Hodge (15s., 162 pp., 35 half-tones, 12 line drawings). This new and much enlarged edition should be in the hands of all Scottish climbers. It is very well got up and illustrated. It records an immense amount of new climbing and will doubtless stimulate a good deal of further exploration in that fascinating region.

The Mountains of Midnight Sun, by Showell Styles (Hurst & Blackett, 18s., 208 pp., end map, 24 photo illustrations), has been received from the publishers too late for more extended comment.

Kintail, Balmacara, and Falls of Glomach, by G. Scott-Moncrieff, has been received from the publishers, The National Trust for Scotland, and is available, price 2s. 6d., from their office-5 Charlotte Square, Edinburgh. Tom Weir has contributed a chapter on mountaineering.

Victorian Mountaineers, by Ronald Clark (B. T. Batsford, 18s., 232 pp., 45 illustrations). A well-written work, received from the publishers. 292 The Scottish Mountaineering Club Journal.

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Communications.—Distribution queries to Mr P. E. MacFarlane, 217 Crofthill Road, Glasgow, S.4; advertisement queries to Mr G. J. Ritchie, 31 Warrender Park Terrace, Edinburgh, 9; Club affairs to Mr R. R. S. Higgins, Hon. Secretary, 430 Sauchiehall Street, Glasgow, C.2; articles, illustrations, and notes for the *Journal* to Dr J. H. B. Bell, Hon. Editor, 3 Park Place, Clackmannan. Send as much as possible by October, and all but the last short items before New Year.

S.M.C. Abroad.—Belated accounts from summer 1953 continued to reach the Editor in February 1954. This is shameful. When a party is concerned, please depute one person to report to the *Journal*, and get it done before October. Also make it short, unless it is something unusual—and put all proper names in block capitals.

All new rock routes should reach the Editor before New Year (see also note, p. 290).

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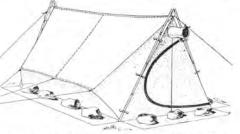


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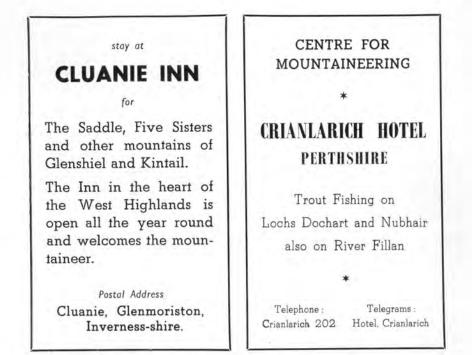


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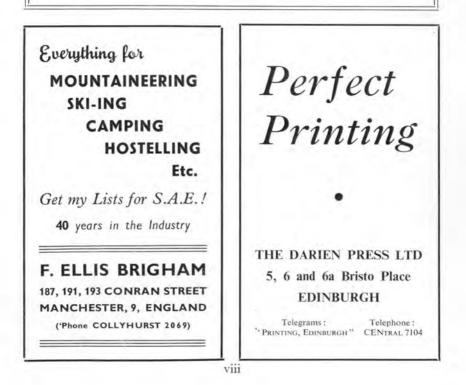
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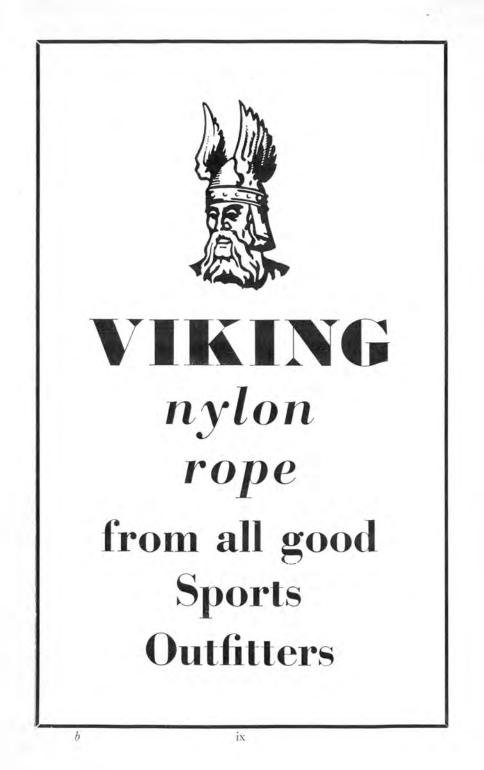
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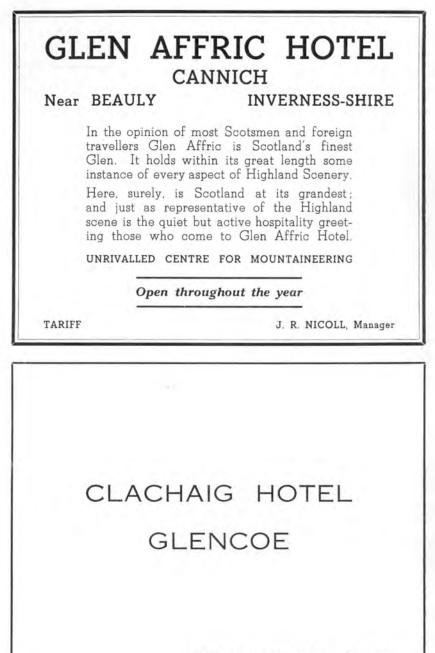
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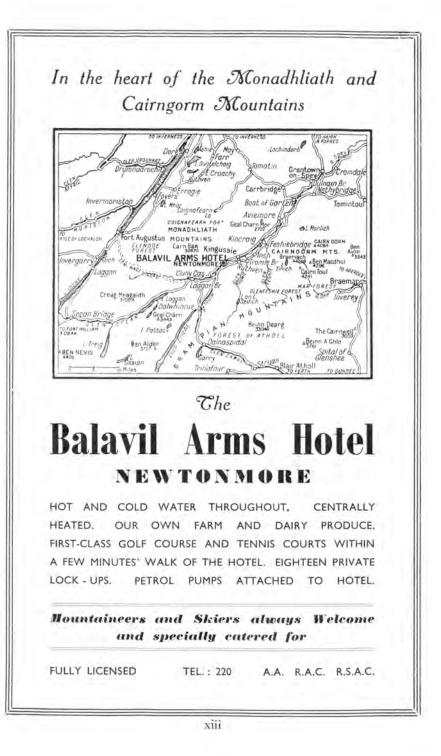
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