

SKI-ING RANGES OF TYROL

By W. L. PAUL

TYROL is a land of soaring mountains, flanked by spruce and pine forests, grassy pasture lands, sparkling waterfalls, and blue-green glaciers; a land riven asunder by upthrusting chains of rock-peaks or by massifs capped by fields of everlasting snow; by swift flowing torrents and rivers; by narrow gorges and wide valleys. Tyrol is an old land, a land of song and story, and of myth and saga. Over its passes trod the legions of Rome to maintain frontiers of Empire along the Rhine and Danube. Their watch-towers and signal-posts still stand in ruin along the great valleys in company with the castles and keeps of the medieval knights and barons who succeeded the legionaries.

Although an old land, Tyrol has fallen heir to marked rejuvenation in modern times. With the development of mountaineering throughout the latter half of the last century, its mountains became magnets for cragsmen, mountaineers, hunters, and tourists; and beginning with the present century, the advent of ski-ing has brought about a great and growing influx of winter sportsmen in search of snow-fields. Thanks to an exceedingly favorable topography, and a snow-fall which permits the use of ski for a period of five months or more, winter in the Tyrol has become as great a drawing-card for ski-runners as, for example, the Province of Quebec to American motor tourists.

The Tyrolese are a race of poor but hardy mountaineers who have not as yet learned the art of self-advertisement, or their country might have won even greater fame as a mecca for ski-runners and winter mountaineers; but up to the present day the advantages and attractions of Tyrol have taken second place to those of Switzerland, precisely as the United States has more or less dwarfed Canada. Tyrol does not lay claim to possessing better ski terrain than Switzerland, but it should claim to rank on a par with it, as well as offering far more diversity. It is this advantage of diversity and variety which is swinging the tide of ski-runners eastward. The group of mountain ranges stretching from the Arlberg to Kitzbuehl have remarkable diversity one from the other, and undoubtedly constitute one of the greatest contiguous ski-ing ranges to be found on the surface of the planet. The Swiss Engadine, world famous for great centres of winter sport—Davos, St. Moritz, Pontresina—lies adjacent to this region and really forms a geographical continuation of the Austrian Ski Paradise. Or put the other way about, as the Swiss would prefer to have it stated, the Tyrolese Alps form the natural continuation of the great Swiss Ski Riviera. However, political frontiers matter not at all to ski-runners.

Beginning at the valley of the Upper Rhine, just west of the Engadine, a great conglomeration of mountain ranges sweep eastward through Switzerland and Austria to the vicinity of Vienna. Tyrol comprises the ranges lying between the Vorarlberg and Salzburg, throughout which region, and beyond, the mountains attain to high ideals of perfection for the use of ski.

At present the two outstanding and best known ski-ing centres of Tyrol are the Arlberg and the Kitzbuehler Alps. Their terrain is utterly dissimilar but each, in its way, is a region directly designed by nature for the use of ski. Between these well-known areas lie several other ranges as yet little known to fame but containing, every one of them, in some peculiar characteristic the potentiality of equal rise to greatness. For instance, adjacent to the Arlberg, southeast lie the Samnaun Group, comparatively little known to the general public for the simple reason that it is lacking in ski-huts. It is quite safe to predict that when huts are built and the new railway line through the Inn valley completed, the word Samnaun will become as equally classic to ski-runners as Arlberg, for the mountains of the former group are far more plastic and of much greater scope and area. The descents from the Furgler (9,900 feet) east to the Komperdell and west into the Installanz Valley are fully on a par with the best of Arlberg or Engadine runs, and the same is reported of the

Alps Bella and Trida in the almost Terra Incognita of the southern Samnaun, adjoining the Silvretta.

The valley of the Inn, on the east, divides the Samnaun from the mighty Oetzal Group the region of greatest glaciation in the Eastern Alps. Here is found a region admirably suited for glacier running and mountaineering with ski. The Rothmos Glacier near Obergurgl is a ski-ing classic. The climb requires three to four hours and the downward descent, almost a straight glissade, about seven minutes. In passing it may be mentioned that Obergurgl, altitude 6,340 feet, is the highest village in Tyrol. The Wildspitz (12,416 feet), second highest mountain in Austria and surpassed only by the Gross Glockner in the Hohe Tauern Range, is monarch of the Oetzal, but unlike the Glockner it may be ascended right to the summit with ski, and on the run-down, with the exception of a few hundred feet near the summit, the obnoxious rope may be discarded under favorable snow conditions. In the Woldspitz and Gross Venediger, a mountain of almost similar altitude in the Tauern Group, Austria possesses two of the greatest ski-ing mountains in the world, for it is seldom that mountains of such great altitude afford descents right from the summit. The Weisseespitze (Whitelake Peak, altitude 11,626 feet), another giant of the Oetzal, is a huge snow dome. On its moderately inclined slopes the writer last



SCHRAM KOGEL

May enjoined ten consecutive minutes of perfectly straight effortless glissading on a billiard table surface nicely coated with an inch or two of fresh powder snow. Of course such ski-ing is child's play, but the speed and thrill afforded by this run have left a never-to-be-forgotten impression. Further down, below the Rauherkopf Hut (altitude 9,185 feet), from whence we had gained the summit, we had to pay for our pleasure by descending two thousand five hundred feet roped, through vile soggy snow, over a badly crevassed glacier, carrying thirty-pound rucksacks and clumsy ice-axes. The average party have little practise at ski-ing together on a rope and when one man goes down the others are usually dragged off their feet as well. One carries several loops of slack rope in the hand to avoid this, only to end in getting oneself tangled up in the slack like a kitten in a skein of silk. At first it is amusing but rapidly it becomes exasperating, especially if, after you have jerked the man ahead off his feet, he keeps on asking why you did it. On this occasion, exhausted by numerous falls and tired out by the weight of our equipment, we emerged at last from the snout of the great Gepatsch Glacier vexed in body and spirit; and here we were treated to one of those quick transitions which the mountains yield only to wanderers from their high places. With a step we passed

from the depths of winter to the fulness of spring; from the bleakness of fields of eternal snow to the refreshing green of verdure. Throwing ski and rucksacks down on the sward we dropped down beside them and marvelled at the sight of spruce and pine trees and the countless wild flowers with which our meadow was dotted. Up from the valley came a warm scented zephyr of breeze, fragrant with a delicious aroma of spring and growing things. Lying stretched out at ease, after the strenuous exertions of the day, we thoroughly enjoyed simple things, familiar sights and sounds, from which we had long been absent, after a month's sojourn in the snow and ice world of the High Alps. Meanwhile, behind us the great ice-cap of Whitelake Peak, turning slowly to gold, saffron, pink and mauve, and going out like a candle on the last ray of light, warned us to be on our way. Such transitions and contrasts as the above are among the most beautiful impressions which the Alps yield to the wanderer on ski, and may be enjoyed by any glacier runner, in almost any valley in Tyrol into which he descends from glaciers in spring.

Passing further east, over the Oetz valley, we next encounter the Stubai Alps, a group which bears favorable comparison with the Oetztaler, except that its summits are less commanding. The ski-ing, however, is of the same general type and there is plenty of first-class glacier running. The classic run of the group is from the Wildeshinterbergl (Wildhinter mountain, altitude 11,100 feet). This mountain is glaciated right to its summit and yields four thousand feet of unroped downhill running. The swinging is all on broad open slopes, and over most of the descent one may indulge in straight glissades at tremendous pace. The short Sommerwand Glacier near the Franz Senn Hut is a gem of its kind. In both the Stubai and Oetztal glacier running is at its best in the spring of the year. The majority of the tours are long and call for from three to seven hours climb. Such tours are best undertaken in late winter and spring, when the days have lengthened out and the temperatures are milder. Another important consideration is that by this date in the season the skier has acquired the physical training and stamina necessary for climbs and run-downs of great magnitude, made to and from summits of high altitude.

Beyond the Stubai we reach Innsbruck and the Brenner Pass. Moving eastward we next encounter a group of mountains called the Tuxer Gebirge; a non-glaciated region much patronized by Innsbruckers but seldom visited by the general public, although there are many isolated tours affording excellent running. The completion of the new cable railway from Innsbruck to the Pascher Koffel will stimulate interest in this group. At the eastern confines of the group the mountains are broken by another great lateral valley—the Zillertal. The Zillertal leads south to a major group of mountains, the Zillertaler Alps. There is some excellent ski-ing in the foot-hills of this range and as it is heavily glaciated there must be excellent glacier running as well, but as the valleys of approach are avalanche traps in late winter and spring there is great difficulty and danger in getting into the heart of the range. As the peasants abandon their farms and alms during the winter, the problem of fueling and provisioning the many fine Alpine huts which exist in the Zillertaler range is of such difficulty that very few skiers have penetrated beyond the foot-hills. However, it is fortunate that such a first-class and prominent group of mountains as the Zillertaler still remain as new ski territory in Tyrol. Some day a cable car line will be built and an entirely new lot of splendid glacier runs opened up. In passing the Zillertal Valley, we may remark that it was here that the Alpine Yoddel first originated, or at all events from this valley have come its most noted exponents.

Pressing ever eastward from the Zillertal we reach our ultimate destination, the Kitzbuehler Alps. These mountains form a complete block extending east to Zell-am-See in the Province of Salzburg. However, for the sake of unity, the outlying portions should be considered as pertaining to Tyrol. The Kitzbuehler Alps are mountains of a different type from any we have hitherto described. They are grass covered and seldom exceed a height of seven thousand feet, although there are a few isolated rock-capped peaks above this average. The range takes its name from the village of Kitzbuehl, a hamlet

located near the heart of the group. Kitz, means little goat or kid, Buehl, signifies pastures, so Kitzbuehl signifies little goat pastures, and from this appellation the open pasture-land character of the terrain may be inferred. On the south these pasture-land Alps are shut off by the high range of the Hohe Tauern, next to the Oetztaler, the region of greatest glaciation in present day Austria. The Tauern play an important part in determining snowfall, for they condense the moisture out of warm southern winds, and this moisture falls at Kitzbuehl in the form of snow. The latter place and the Arlberg enjoy the greatest snowfalls on record in the Eastern Alps.

Despite the great average snowfall at Kitzbuehl, skiing lasts little later than the end of March, when snow leaves the valleys. Of course one may climb up, following the retreating snow-line and continue skiing at some of the Alpine huts until the first of May, but usually one uses the Kitzbuehler Alps for the winter season and progresses on to higher ranges for glacier running in the late winter and spring.

The Kitzbuehler Alps are at their best in January, February and March, and possess the tremendous advantage of constituting during this time the one and only Alpine ski-ing region that is absolutely safe as far as danger from avalanches is concerned. On the other hand, owing to the low altitude, Kitzbuehl is more exposed to thaws in winter than the average winter sport centres in the Engadine or on the Arlberg, which must be booked as a serious adverse factor.

From Kitzbuehl as a centre there are about one hundred different tours to be chosen from. Probably no other sport centre will ever be found in the world which can compete with "Kitz" in this respect. A commanding mountain, the Horn, alone affords ten different routes of descent and accordingly may rightly be classified as one of the finest of ski-ing mountains. On the opposite side of the valley from the Horn, the Ehrenbachhohe occupies an equally commanding position, offering five or more lines of descent. Following back the ridges on either side of the valley are many other prominent summits and so many "run-downs" that it requires years to make them all. In the winter of 1926-27 a new cable-car line will be in operation to the Ehrenbachhohe. By using the cable-car it will be possible to save a climb of two and one-half hours, for the car ascends in twenty minutes. Choice may then be made of a dozen different routes of descent and the run-down accomplished in times varying from twenty minutes to two hours according to the route selected. It will thus be possible to obtain two and even three descents a day, totaling six to nine thousand feet of downhill running. The completion of the cable line will place "Kitz" on the map as a rival, superior to Murren.

The Kitzbuehler Alps, classified according to their altitude, are what is known in Europe as "mittel-gebirg," or mountains of medium elevation. Strange to say, the average run-down in mountains of this character is more difficult than in the Higher Alps, where the snow-fields are more open and gently inclined. The Kitzbuehler Alps abound in obstacles in the form of dense woods, ravines, steep and difficult slopes and fences. The running is greatly constricted as a result of these obstacles. Certain innocent looking snowed-over mounds on the lower farm-lands, when analyzed by a header, often turn out to be fresh manure piles.

There are some long straight runs on high levels above tree-line in these typical Mittel-Gebirg, but on the whole one cannot take the average slope straight, as in Canada one might run a Laurentian hill. The speed would soon rise beyond control and consequently one is forced to rely on a swing to check the velocity or to avoid the many natural obstacles. Swinging technique here becomes of the first importance and to enjoy a good run a skier must develop complete mastery of control of his ski in the difficult art of downhill turning. All this calls for considerable training and a quite different sort of technique than is required in Canada, but it gives to ski-touring a greater impetus than at home, for the sport develops to a science and the adept to an artist. Even good jumping ability fails as a certificate of mastery of this branch of the sport as is attested by the results of downhill races where, as a

rule, specialized jumpers fail to place. In good snow the art of continuous downhill turns in unbroken tempo valleywards is not difficult for a fairly well trained runner, but it calls for training and adaption of ski-ing ability to Alpine topography. Naturally the conditions met with in the Alps have developed a new school of ski-ing adapted to the local requirements, and anyone who does not take pains to measure up to these requirements, no matter how well he may have placed elsewhere, will hardly ever get much enjoyment out of Alpine running.

Another art, and it is an important one, which must be cultivated in Tyrol is snow-craft. It is an essential in order to get full enjoyment out of an Alpine winter, for in high mountains snow is extremely variable owing to the difference in angle at which a powerful sun strikes the snow. In planning a tour it is essential, in order to get good running, to take into consideration the time of day at which the descent will take place, and the sun-exposure of the slopes to be run-down. For example, the Steinbergkogel at Kitzbuehl furnishes magnificent ski-ing, but the best run-down, over the Kiglin Alps, faces southeast. However, the southeast slopes lose the sun in midwinter before noon. As a consequence, if a party is not off from the summit before noon they



FIMBERTAL, DESCENT FROM THE SCHNEEJOCH

will be sure to run into breakable crust, for the morning sun will have melted the surface, and once in shadow the surface crust will have frozen again. As the Steinbergkogel requires a four-hour climb to surmount, a little tardiness in getting an early start will inevitably result in about the same amount of "misery" as required in packing a sixty-pound canoe over a four-mile portage in Canada. The simile should be comprehensible to Canadian readers. Several thousand feet of downhill running in breakable crust is one of the least desirable things to be met with in the Alps. The only things that count in crust are weight and strength. There is advantage in being heavy enough to break through with both ski and in sturdiness to withstand the terrific strain on the legs. The jump-turn originated as an excuse for downhill turns in breakable crust and there is no doubt that it serves the purpose admirably, at times, but more than often the patient dies from the effects of the cure.

People who have no knowledge of snow-craft often affirm that the snow in the Alps is poor; but once able to judge snow conditions according to the time of day, exposure of slope, and prevailing weather conditions best suitable for the run-down in question, there is no reason for not making every tour in first-class snow unless a general thaw or storm prevails. In the Alps it is

generally bad judgment to plan a certain tour on a certain date. On the contrary on the day in question it is best to consider where the snow should be best under the given conditions and go there. Of course there are some days when the snow is good everywhere, but as a rule one should plan the run-down over slopes which inference and experience indicate as best under the prevailing conditions. If one's judgment is wrong one pays for the error in real misery. Three thousand feet of breakable crust on ski, with a fifteen or twenty-pound rucksack on the back, will bring anguish and loss of poise and temper to an archangel. Fortunately, the Kitzbuehler Alps are so well supplied with inns that one can always find solace at the finish of the worst punishment.

In the lesser Alps it is only necessary to study snow-craft in relation to the most favorable conditions for the run-down, but elsewhere its study becomes of the first importance in judging of the safety of snow-slopes and avoidance of avalanches as well as the conditions under which they occur. A certain slope may be as safe as Mount Royal at 10 a.m. and an avalanche trap an hour later, when thoroughly scorched by the sun.

Outside the immediate surroundings of Kitzbuehl there are two somewhat isolated regions in these Alps, that furnish running over such magnificent slopes that it is a difficult question to decide whether they should not be given preference over the former centre. Sallbach, a hamlet in a lateral valley, not far from "Kitz," but three hours from the railroad, affords splendid descents over shorter slopes, but slopes which are very much more open and unconfined than anything to be found at the main centre. The Schelchenrain, a region at the head of the third great valley to the west of Kitzbuehl, and reached from Hopfgarten and Kelchsau, well merits the name of a small scale Arlberg, to which it is often likened. The difficulty of obtaining comfortable accommodation at both these places is at present the drawback which hinders their general recognition. The names, Schelchenrain and Kelchsau, have a common derivation which should be of interest to Canadians. The German word for Moose is Elch. Kelchsau literally translated denotes moose meadows and Schelchenrain likewise signifies moose grazing-land. The prefixes of both words are corruptions from the word Elch and lead to the inference that, at some time in the not far distant past, moose dwelt in the forests and highland pastures of Tyrol.

Leaving the Kitzbuehler Alps and retracing our steps westward to the boundaries of Tyrol, the "White Arlberg," as it has been designated, is another of those great regions where nature has providentially designed mountains of ideal configuration for the use of ski. Indeed, the topography of the Arlberg is so perfect that it has produced the greatest school of ski-ing in Europe) and one of the greatest ski-runners of all time in Hannes Schneider. To watch this man run is a revelation, for his running combines the daring and sureness of the crack jumper with the ease, grace and swiftness of a swallow. There are many younger men who can now outjump Hannes and outrun him in a cross-country race, but not one of them can match him, or outclass him, on a pure downhill descent; and the champions who now defeat him (since he has broken his leg) appear as clumsy tyros as regards poise, grace and deftness in the manipulation of ski.

Schneider is one of those rare masters whom nature seldom produce in any art or practise based on skill. Combining perfect mastery of the downhill swing on slopes of any degree of steepness, Schneider possesses such sureness and nerve that he sails out into the air over every boulder and natural jump that his quick eye can detect in the course of a descent. Schneider films have also popularized the Jump Turn, and what was regarded as a "stunt" a few years ago is now considered a manœuvre of prime importance in Alpine ski-ing. It is hardly an exaggeration to state that Hannes runs down a mountain almost as much off snow as on it.

Naturally a prodigy of this calibre gave rise to a new school, but fortunately one based on scientific interpretation, for the slow-motion camera caught and recorded every manipulation of his ski to the discredit of every text-book ever written on ski-ing. Anyone can realize the difficulty of recording

on paper how a certain manipulation of ski is accomplished, and the better the runner, the more deftness he exhibited, the more difficult it became to analyze his technique. No one could until the slow-motion camera unerringly showed how it was done. Analysis of films gave the scientific foundation to the Schneider method, which has knocked old fashioned ski-ing on the head and given rise to a flourishing new school that is spreading all over Europe from Tyrol.

The Schneider method goes back to fundamentals and bases all turns on the old fashioned snow-plough or stemming turn. The downhill Christiania turn of which Schneider was the great master, no matter how different it looked in execution, was shown by the slow-motion camera to be governed by the same principles of stemming and weight distribution on the ski as applied to a correctly executed snow-plough. In fact, the famous Schneider "Christy" turned out to be nothing more or less than the snow-plough executed with lightning speed and dexterity. In Schneider's method not much emphasis is put on the old narrow spoor obsession; on the contrary, pupils are taught to run over rough terrain with their ski well apart. Likewise the old stiff upright bearing is abandoned for the crouched position with bent knees and loose joints ready to shock absorb bumps and inequalities of terrain. The downhill Telemark turn is also quite out of favor in the new school. Schneider believes in standing on two legs instead of one and of doing so at all times no matter what the depth of the snow, and has demonstrated that the Christy is just as easy of execution in deep snow as the Telemark. Although the Swiss, too, are abandoning the old methods for the new, they still use the Telemark for downhill turns and, when on a visit to Arosa last winter, I was amused to see Swiss instructors teaching raw beginners who could not manage a simple stem to do Telemarks, run with a narrow spoor, with stiff knees and arms held stiffly backward from the shoulders. It was an object lesson in how much ski-ing had progressed since the days when these methods were universally held to inculcate correct form. The Telemark undoubtedly is of use in certain varieties of snow and to those who cannot manage the Christy in deep or heavy snow, but the new school has shown that it is the very last thing for a beginner to learn. The Schneider School has also brought the Jump Turn to the fore, and it is now regarded as the easiest and best method of getting downhill in certain states of snow. The Turn has lately developed to the point where it is executed with both sticks and both arms, thus greatly reducing fatigue. It is an astonishing fact in the progress of ski-ing that what looked like a tiring, cumbersome and showy stunt a few years ago is now executed with ease by the younger generation, and has attained to general recognition and tremendous popularity.

The Arlberg slopes are as classic as the school of ski-ing that has evolved upon them. The mountains range to around 9,500 feet in altitude, their slopes are broad and open, the gradients of all pitch, and the general character of the terrain Alpine, although practically unglaciated. St. Anton, located on the Arlberg railway, is the chief centre of the group, but its altitude is comparatively low, so that to obtain the benefit of altitude and shorten the climbs it is best to sojourn at St. Christoff, Zuers or Lech, which are really only isolated inns that have been expanded to accommodate winter sportsmen. From the latter resorts most summits may be obtained in three or four hours of climbing. The run-downs from Valluga (9,250 feet), Kalte Berg (9,545 feet) and from summits of slightly lesser altitude—Mohnenfluh, Hasenfluh and Madloch Joch, constitute descents over great open snow-fields combining all those qualities which bring a region fame as ski-country. Scenically, the run-down from the Valluga through the Paziell Valley to Zuers affords an Alpine setting as rugged and wild as might be imagined in mountains of the moon. Two rows of wild and fantastic sabre-toothed peaks stand guard like the bayonets of grotesque and immobile sentries over the confines of this narrow and gruesome valley.

The Mohnenfluh at Lech is one of the finest of pure ski-ing mountains and should have been located in Canada or Norway, for Norwegian technique is all that is required on the run-down. The mountain is built up in a series of short level benches and the intervening slopes may be taken straight. The impetus gained on each downward "shoot" carries one on over the level to

the brow of the next descent and one shoots down the Mohnenfluh in so short a time that although it takes three hours to climb the mountain it seems scarcely longer than a Laurentian hill.

Ski-ing on the Arlberg lasts until the middle of May, in which month an annual jumping competition is held at St. Christoff. March and April are usually the best months of the season. About the middle of March "firn" snow (pronounced "*fearn*") begins to make its appearance on the slopes facing south. Firn is hard packed snow, the surface of which has been melted, frozen and remelted. It is the easiest and fastest of any snow to run on as it affords a sure and solid footing, and when the sun has melted the upper layer of crust into granular crystals an inch or less in depth, the ski bite is sufficiently for guidance. Swinging on firn snow is almost effortless and of course far easier than on the powder snow of midwinter where the foundation, the depth and the consistency of the snow are constantly varying, even in the course of a short descent.

Although the danger from avalanche is probably no greater on the Arlberg than any other range of mountains of equal altitude and snowfall, it is a source of danger which must be taken into constant consideration. After the powder avalanches of winter are down and mild air temperatures have brought down the first slab avalanches and cleared the mountains of their great winter snow accumulation, the danger is practically over, as the ground avalanches of late spring only come down on certain localized slopes which may be given a wide berth or crossed at a safe time of day. In spring when the snow is hard frozen and in shadow one may climb or cross the worst avalanche slopes with impunity.

For many years the Arlberg ranked foremost among Austrian ski reviers. However, there is a greater region to the South. The Silvretta group lies partly in Tyrol, partly in Vorarlberg and partly in Switzerland. Geographically the group belongs to Tyrol, the boundary following the crest of the range, but the great interior glacier basins and ski-ing fields, with the exception of the Silvretta glacier, lie on the Austrian side of the border. Topographically the Silvretta is far and away the greatest pure ski-ing country the writer has ever visited. A good Canadian runner would feel himself at home here at once, provided the running of ten hills like unto "the big hill at Shawbridge," placed one on top of the other, afforded him the necessary thrill. Canadians who have run the big hill at Shawbridge can visualize the terrain of the Fimber Tal by picturing Shawbridge surrounded by fifty such hills, roughly ten times as high. An Alpine Club Hut, the comfortable Heidelberger Hut, is located in the upper Fimber Tal, and may be reached from the Arlberg railway at Wiesberg by a six-hour sleigh drive to Ischgl, followed by a three hours safe and easy climb on ski. The Fimber Tal is located in the extreme section of the group and differs from the western sections in being less Alpine and more like Laurentian or Norwegian Hills, highly magnified and thrust into a superb Alpine setting. From the pure ski-ing standpoint the slopes of this remote valley represent such ultimate perfection that it will probably forever remain unduplicated by any other region in the world.

Although one may never tire of Fimber Tal slopes, curiosity will eventually cause one to venture westward over the Kronen Scharte to the Jamtal, the most parallel valley. Here one of the most sumptuous of Alpine Club Huts commands the apex of a great fan-shaped area of glaciation. The glaciers are of great extent, moderately inclined, and in spring the crevasses are usually so well bridged that the rope may be disregarded. The running in this section of the Silvretta is, of course, of a totally different type than in the Fimber Tal. Easy glacier running of great perfection is the type of ski-ing encountered throughout the entire western section of the group. Some of the mountains are glaciated right to the summit and others afford a final interesting rock climb.

On leaving the Jamtal, one crosses over the Oxen Scharte and descends the eastern Fermunt Glacier to the Wiesbadener Hut in the Fermunt Valley. The hut enjoys, scenically, one of the finest locations of any hut in the Eastern Alps, but unfortunately, the location is all that atones for the barn-like qualities of the hut itself. Our party were incarcerated here for five days by dense fog. Piz Buin (10,910 feet), monarch of the Silvretta, commands this region of the

group. After the fog cleared we ascended through the fantastic ice-falls of the western Fermunt Glacier and climbed Buin over ice-coated rocks that lent a thrill to an otherwise easy rock climb. From the summit of Buin one obtains an all embracing view of the Silvretta, the Oetztaler Alps, the Ortler group, formerly in Tyrol, now in Italy, the Muenstertal Alps, the "silver" Bernina range, and finally one may look down westwards to Klosters and identify many familiar ski-ing mountains about Davos. A visit to the Wiesbadener Hut does not by any means complete a survey of the Silvretta. There are still three other huts in the extreme western section of the group, but they command a very



"THE SNAKE OF LARET" ST. MORITZ, SWITZERLAND
MADE BY W. R. RICKMERS—1905

much more limited area, less tours and fewer summits than the districts heretofore described. After a three-hour climb, through the bizzarely carved ice-falls and upper reaches of the western Fermunt Glacier, one crosses a pass, the Fuorcla del Confin, and descending on the Swiss side a magnificent run opens out over the Silvretta Glacier to the Silvretta House. From the Silvretta House one may descend to Klosters, or by retracing one's steps a short way up the glacier, cross over the Roth Furka to the Saarbrueckner Hut or run down the Klostertaler Glacier to the Madlener House and return to Austria. Either way completes a traverse of the Silvretta group from east to west. Considered from the triple standpoint of sport, scenery and shelter, this traverse

takes first place as the most ideal long distance journey on ski ever carried out by the writer.

Throughout the mountain ranges of Germany and Austria, the German-Austrian Alpine Club have built a system of huts which thoroughly cover entire regions. The Alpine Club is divided into local branches or sections; at present there are four hundred sections with a membership of two hundred thousand. One or even more sections exist in every city large enough to organize a branch. As soon as a local section can raise funds it selects a site and builds a hut in some locality favored by the members. Usually a site is chosen in a new group, or a hut is built to complete or augment a chain already in existence. The respective huts are named after the city or section building them, but are open to all members of the association on equal terms. The huts are also open to non-members, as it is impossible to exclude strangers seeking shelter in the Alps. In fact, the only exception that is made for non-members is that they pay double fees and are not entitled to beds if there are not enough to go around. In some of the larger cities, such as Munich, Berlin and Vienna, more than one section may be organized. For instance, in Vienna there are several sections—sections Austria, Vienna, etc. This policy enables everyone to join up with the Club by selecting a local section suitable to his or her social and financial status. The success of this great organization can be seen in the admirable chain of huts, thanks to which alone the greater part of the Eastern Alps have been made accessible to mountaineers and ski-runners.

Canada is a country in which a similar organization and policy might be most advantageously inaugurated. A chain of huts, within a short day's run of one another might be erected so as to cover a large extent of Laurentian territory. In Tyrol, one may pack a rucksack at Innsbruck and, traversing four major ranges, descend at Davos in the Engadine, finding shelter along the entire route at Alpine Club huts. The Canadian Ski Association in combination with the Canadian Alpine Club might together inaugurate an organization for the purpose of building permanent camps or huts at strategic points in the Rockies which would serve as bases for mountaineers in summer and ski-runners in winter. Some of the great glaciated regions of the Canadian Rockies, such as the Columbia Glacier Field and the Freshfield Range will undoubtedly in the near future be discovered to yield excellent glacier running in late winter and spring, but ski-ing in such exposed regions, just as in the European Alps, will be dependent on adequate shelter.

From November until June the ranges of Tyrol lie deeply buried in that purest of elements, which as a form of water in the shape of snow, we ski-runners may surely elevate to the dignity of a special element; for it insures us manifold joys—the thrill of speed, vigorous exercise in ozone laden air; and cultivates in its devotees a true appreciation of beauty in nature such as the great panorama of mountain landscapes in winter afford.

Winter in Tyrol is a vista of white shining mountains, or of mountains colored saffron, salmon-pink, golden-cream or mauve under the rays of a declining sun. Distant snow-fields often assume a tone of deepest blue from which may sparkle the brilliant green of glacial ice. Only an artist in paints may do justice to the great color symphony of the High Alps in all their change-fulness and fickleness of mood. From out the valleys dark conifer forests clothe the lower flanks of the mountains and changing, higher up, to grey, snow-clad, gradually merge to the white of the upper snow-fields. Afar up, red and black rock peaks and cliffs cap the snow-fields. Looking down from above the valleys are lost in a maze of blue and violet shadows.

Enconed on a summit one may look out afar over a world—a literal sea mountains, range upon range, tier upon tier. Sometimes one stands in clear sunshine above a sea of cloud and looks down upon a vast ocean of leaden mist broken only by rocky islets where the greatest mountain massifs rise above the clouds.

Down in the valleys are quaint villages, the overhanging roofs of whose chalets are typical of Tyrol and Switzerland. As an architectural adaptation to the needs of a snow country they are as typical as the thatched roof to the

rural landscape of England. In these quaint villages are shelter and a degree of comfort satisfactory to any sportsman. Not many Tyrolese villages boast grand hotels as in Switzerland but this is a development which is bound to come in time. Unfortunately—for at present jazz bands and lounge-lizards are not prevalent outside of Kitzbuehl.

The Tyrolese themselves are a race of simple mountaineers. Their lives are frugal and they must work hard to scratch a meagre living from a scant and rocky soil. In Soelden and Vent in the Oetztal, I have seen peasants carrying soil in baskets on their backs up to the higher pastures from where every year avalanches carry it down again in spring. Nevertheless in summer the indefatigable peasants restore the soil and actually succeed in raising crops. Such conditions breed men, and the Bavarian and Tyrolese Highlanders have in them many of the sturdy qualities of the hardy Scotch Highlanders whose intrepidity and hardihood conquered the furthest recesses of the Canadian wilderness. The Tyrolese are not only a sturdy people, they are essentially a kindly people, albeit slow and conservative, as is the case of every people shut off from the greater world by mountain barriers. These people are not as yet spoiled, as are the Swiss, by a stream of easy money and gold of foreign tourists. The Tyrolese are Catholic and as deeply religious as are the French-Canadian Habitants. Their shining virtues are cleanliness and fortitude combined with a rough gayety. Among a people of this sort in a country where glittering mountains grasp the sky, any Canadian ski-runner will quickly feel at home.

A SKI JUMP

By GEORGE MARVIN, in "The Outlook"

YOU see him first away up in the afternoon sky, above the snowladen pine-tree tops, a lonely figure suddenly silhouetted against the blue—a brother of the crescent moon, unacquainted with fear. Over the edge of the platform he hobbles, then, transfigured, drops eastward, swooping towards the take-off. At that fraction of a second when, at fifty miles an hour, his long skis leave the "lip," his crouching figure springs into full stature as he gives himself on outspread wings, like a great sea-bird, to the air.

Thus seen it is not a jump. It is a flight, a triumph. A man in spiked shoes has jumped twenty-four feet over cinders, and a horse can leap less than ten feet farther over hurdles or pasteboard boxes. On skis men soar through the air one hundred feet, one hundred and fifty feet, sometimes two hundred feet over the snow, picking up white terra firma again at a speed even greater than when they left it.

Down swoops this big bird out of the sky, and "ke-flum" his two skis close together slap the steep surface of the landing slope as, in a cloud of snow-dust, he is hurled away out of your latitude into the valley below. For less than two seconds—it seems half a minute—he is in the air over you, standing forward beyond the perpendicular like a flying vengeance, greater than man's size, passing through your neighborhood with a rush as of wings. In less than two seconds more, there, far away, he reappears, reduced ten diameters, gliding erect through a white land made of black Lilliputian spectators, to turn at the end of the "run-out" with a graceful "Telemark" swing and stand motionless.

A moment's hush of all that life, in tune with the breathless enchantment of winter. Then, with the applause of the spectators warming his cold ears, he slips back to the foot of the hill.