

BOOK REVIEWS



Das Letzte im Fels, by Domenico Rudatis. Translated from the Italian by Emmeli Capuis and Max Rohrer. 8vo.; 250 pages, including bibliography and index, with numerous route diagrams by the author. Munich: Gesellschaft Alpiner Bücherfreunde, 1936.

There have always been those who, for good or bad reasons, wished to grade climbs according to their difficulty. And, although the scale has undergone considerable alteration in the past ten years, peaks are usually divided into six groups, in which the first is the only one not requiring *Kletterschuhe*, and the last, in its conclusion, is best represented by a one-way ticket to the cemetery. According to the author, in the third grade "the best climbers may go without assistance, but it is better not to. Almost all descents by roping-off. Nailed boots practically excluded. This grade, fifty years ago represented the limit of possibility as, for example, in the Schmitt chimney of the Fünffingerspitze." More than half of the book is then taken up by examples of sixth grade acrobatics in the Civetta Group.

While such a method of gradation is doubtless an attempt to establish a standard, it will, in the opinion of this reviewer, always fail, since the many variable factors remain uncontrolled. Second grade may become sixth grade when a storm breaks, or seem so merely as the result of dietary indiscretion. And what will the author think of sixth grade, one day when a tractor with suction grip, loaded with first-grade climbers, comes steaming past him, as he blacksmiths his way up walls that once were best left alone?

J. M. T.

Lawinen, by Walter Flaig. 8 vo.; 173 pages, maps and illustrations. F. U. Brockhaus, Leipzig, 1935.

Snow Structure and Ski Fields, by G. Seligman. 8 vo.; x + 555 pages, diagrams and illustrations, bibliography and index. Macmillan and Company, Limited, London, 1936.

As winter travel in mountainous country becomes more popular, so the number of fatal accidents due to lack of knowledge of snow conditions increases. The vast majority of accidents due to ava-

lanches occur in the Alps since, during the last decade, an ever-increasing number of winter climbers and skiers have visited the higher Alpine slopes. In this country we are on the verge of discovering the pleasures of skiing but have as yet learned nothing of what may lie in store for an uninstructed ski party when venturing beyond the confines of what may be termed "backyard skiing." The two books under consideration are the result of years of investigation of the reaction of snow to physical conditions imposed by nature.

In *Lawinen* Mr. Flaig sets out to review the history of avalanches in the Alps in legend and in fact and goes on to discuss the various types and classes of avalanches to be encountered in mountainous country. It is interesting to see that the author accepts the classification of avalanches as suggested by Zdarsky and Paulcke, a marked contrast to that devised by the author of the second book to be reviewed. The book is beautifully illustrated and the author has taken advantage of the excellent maps of the Swiss Federal Survey to outline on them examples of the particular type of avalanche under discussion. The book concludes with two short chapters on protection against avalanches and methods to be used in searching for victims overwhelmed by them.

Perhaps because it is printed in the English language, but more probably on account of the meticulous care with which the author has treated the broad subject *Snow Structure and Ski Fields*, this book will be of great value to English-speaking skiers and mountaineers. The purpose of the book, the author explains, is to "attempt to describe and explain the prime causes of snow phenomena." The book is divided into three parts. The first, which comprises more than half the book is devoted to the structure of snow and to the physical and mechanical changes which occur in snowfields. Such a subject might at first glance appear to be one which the layman might shy at for fear of physical or chemical complexities. Such, however, is not the case as the author has gone to considerable pains to make his points in words of one syllable and yet delve into a study of the solid forms of water by means of photomicrographs which cannot fail to be of interest to the scientific minded. Considerable repetition serves only to impress the reader with the importance of fundamentals. Parts two and three are devoted to the mechanical factors at work in avalanches and to the different sorts of avalanches. The final

chapters deal with safety in the mountains and sound practical advice on behavior, should one be so unfortunate as to be caught in an avalanche, together with a perhaps all too brief summary of the types of snow apt to be encountered at different seasons of the year. In dealing with avalanche development Mr. Seligman arrives at a new classification based on the physical composition of the snow rather than on its age as suggested by Zdarsky and Paulcke. The author points out quite wisely that it is easier for the average mountaineer to determine the dryness or wetness of snow than to estimate its age. The book concludes with an appendix on weather conditions in the Alps by C. K. M. Douglas.

The book is profusely and well illustrated and each chapter concludes with a full bibliography of the material discussed. One feels perhaps that the author might have made use of maps to emphasize his points—not a single one is included in the publication, and the use of maps is too lightly put aside in a single paragraph which both encourages and condemns their use.

The book deserves the study and consideration of everyone whose hobby or vocation brings him into contact with snow in mountainous country and if it achieves this end it cannot fail to make inroads upon the increasing number of winter fatalities.

Two articles, contemporary to these books, deserve consideration. That of Rudolf Streiff in *Die Alpen* for February, 1936, pages 46-59, essays to cover in a few short pages the whole field of avalanche development. Necessarily the space prohibits anything like a full study, however, the article is of value appearing as it does in a publication which is so widely read by mountaineers and skiers, thereby reaching many who might fail to obtain a book on the subject.

The other article by Pierre Brunner in the *Revue de Geographie Alpine*, Fascicule 11 for 1936, pages 357-369, deals with the geographical factors contributing to avalanche development and the distribution and effects of avalanches in Switzerland. After discussing the meteorological causes of avalanches, Brunner goes on to consider how the physiography and geology of the country lend themselves to or hamper the development of avalanches as well as the effect of vegetation thereon.

After discussing the distribution of avalanches bearing out the foregoing, during which one learns that the phenomenal num-

ber of 17,500 avalanches fall each winter in the Swiss Alps, the author concludes with brief paragraphs on the damage caused by avalanches and preventive measures being carried out in Switzerland. A folding map of Switzerland is appended upon which the author has tried to indicate as far as possible each avalanche gully in the country. As the map is published on a small scale, it fails to give a satisfactory picture of the factors physiographic, geologic or cultural which contribute to avalanche formation and only a general idea of distribution.

W. A. W., JR.

Devil: The Life Story of a Chamois in the Austrian Alps, by Waldemar Schmidtman. Translated by the author. 214 pages, with numerous drawings by W. von Freyschlag. New York: D. Appleton-Century Co., 1936. Price \$2.00.

As a small boy the reviewer vividly recalls excursions in the Bavarian foothills, and especially days spent on the alplands of the royal hunting preserves near Kreuth. It might be a misty morning when one stepped out of the forest glade, no sounds save rushing water and the pattering of falling pebbles. The mist might lift and one would see an old buck chamois high on a point of rock, sentinel for those below; a sharp whistle and away they would race. Sometimes by chance one might encounter them at close quarters, and they would dash across the trail with all the rushing power of an avalanche. In later years we knew them in the Zillerthal and other Austrian valleys, silhouetted on little pinnacles against the rising sun; and there are recollections of a quiet evening in the Bernese Oberland, when a lonely buck stood besides the Strahlegg hut and would not go away.

Those who know their *Theuerdank* (1517) will be well aware of the adventures with chamois of Emperor Maximilian, and those who are fortunate enough to see publications of the Gesellschaft Alpiner Bücherfreunde (Munich) will recall their reprint of Adam Lebwald's *Damographia* (1750). In recent years, however, Baillie-Grohman and others have noted that, aside from Charles Boner's *Chamois Hunting in the Mountains of Bavaria* (1853), there are not half a dozen books in the English language dealing with the chamois. Schmidtman's book, translated by himself from his well-known *Der Alte vom Steinernen Meer*, is the thing we have been waiting for.