

up into the snows he will be rewarded somewhere by one of these moments of ecstasy. . . . And the memory of such moments is a precious jewel that he carries all of his life. His way may lead through dingy, sordid paths but with the mountains in his background he can never be thoroughly unhappy."

M. H. S.

"*Mountaineering*," Encyclopaedia Britannica, 14th Edition, 1929. Vol. 15, pp. 929-932 with 2 pp. illus.

This subject has been handled by the well-known authorities William Martin Conway, Arnold Lunn, and Howard Palmer. The article is divided into several parts. There are first, general definitions of mountaineering, its dangers, the methods used and outfits required. Then a brief history which touches upon the various districts with special mention of some of the more recent accomplishments. Palmer has covered the United States and Alaska; all else including the definitions is signed by Conway and Lunn.

The general definition of mountaineering is very well put indeed. Emphasis is placed upon the major subdivisions, rockcraft and snowcraft. Subheadings cover the various dangers encountered such as falling rocks, falling ice, snow avalanches, falls from rocks, ice and snow-slopes, crevasses, and weather. A brief and somewhat inadequate paragraph on outfits is complementary to previous scattered references. Under these headings, the treatment is essentially to define causes, and explain means of overcoming or avoiding the dangers which may be encountered. The positive as well as negative side is often brought in by frequent definitions of some of the technical requirements. One sentence might well be noted by all mountaineers—"The great principle is co-operation, all the members working with reference to the others and not as independent units" . . .

Following "History", are further headings such as "Alpine Climbing", "French Guideless Climbing", "German Mountaineering", and "The Canadian Alps". A random list of recent books on various topics is here included.

The development of mountaineering in the United States is traced from the founding of the Appalachian Mountain Club in 1876. The movement rapidly spread to Colorado in the late Eighties and to Canada in the Nineties. In 1902 the American Alpine Club was founded bringing together a nation-wide group devoted to the "kindred interests of alpinism and Arctic exploration" . . .

There is a general statement as to the nature of the mountain ranges of the United States, and reference to some outstanding peaks. It is stated that while a number of peaks have been climbed by difficult routes, there is always an easy side.

Mention is made of the chief western clubs, namely the Sierra Club, Mazamas, Mountaineers, and Colorado Mountain Club. With but very few exceptions, the climbing available in the United States is not strictly alpine in nature.

Alaskan mountaineering is said more to resemble Arctic exploration than ordinary mountaineering. The chief ascents to date in Alaska are Mts. McKinley, Logan, St. Elias, Blackburn, Natazhat and Wrangel. Each one of these climbs required weeks or longer for their accomplishment. "On no other mountains in the world must the climber live so long on ice and snow as in Alaska"

Altogether the subject is treated in a very readable manner and gives to the layman, as is intended, a fair, if necessarily brief, picture of the sport and pursuit of mountaineering.

H. S. H., Jr.

NEW EXPEDITIONS

FIRST ASCENT OF MT. SANGAI, ECUADOR

Mt. Sangai in Ecuador is an active volcano, which for many decades has borne the reputation of being one of the most violent in the world. Detached from the main chain of the Andes, it juts out into the Amazon basin, a lonely sentinel, 17,464 feet above sea level. Although only about one hundred and fifty miles south of the equator, the last half mile of altitude is covered with a crown of ice and snow, which precipitates millions of tons of water and ice down the steep slopes at times of the irregular major eruptions. It is not the altitude which has prevented the attempts on its summit during the past two centuries from proving successful. The cause lies in three things: first, the labyrinth of mighty ash canyons which circle it on the three approachable sides with 500 square miles of difficult terrain; second, meteorological conditions which maintain almost constantly a pall of mist and cloud over the whole area and render even the locating of the volcano difficult; and third, the superstitious fears of the native Indians who never explore the labyrinth of canyons and on whom one must depend for cargo bearers.