

scientific toys, that he still wants to run barefoot and turn somersaults in a field." He is most convincing in this, even if at times one feels one can hardly bear to think of yet another bivouac on an exposed ridge in a snowstorm.

It is hard to single out any one of the chapters of this book for special comment: they are all so exciting. The writer takes us up the north faces of the Grandes Jorasses, Badile and others in the Bregaglia, and the Lavaredos in the Dolomites, the latter in winter. In his home district of Mont Blanc he has explored all the major routes, some of them alone, and bivouacked on most of them. He has travelled widely: with the successful Italian expeditions to K2 and Gasherbrum IV and also in the Peruvian Andes and the practically virgin territory of the mountains and glaciers of Patagonia. In spite of his almost superhuman feats, his descriptions are often humorous and always intensely human; he loves every aspect of his mountains from the sublime to the ridiculous, and he is violently opposed to such "fancy" aids to climbing as expanding pitons. The story closes with the tragic account of the storm on the Fréney Pillar on Mont Blanc, where four of Bonatti's friends and companions in 1961 lost their lives. This is definitely a worth while and absorbing book by a very real personality.

URSULA CORNING

Entre Terre et Ciel, by Gaston Rébuffat and Pierre Tairraz. Paris: B. Arthaud, 1962. 183 pages, 104 black and white photographs, 6 color plates. Price 28 N.F.

Gaston Rébuffat has written the story of the filming of the motion picture *Entre Terre et Ciel* which received the Grand Prize of the Italian Alpine Club at the 10th International Festival of Mountain and Exploration Motion Pictures in Trento, Italy. The film, and the pictures in the book, are the result of collaboration between Rébuffat and the photographer Pierre Tairraz who, in characteristically alpine manner, is the fourth generation representative of the Tairraz family in the photographic business at Chamonix. Going beyond this, the young Pierre has become an accomplished pilot and rock-climber; pausing on a pitch, as Gaston tells us, to produce his camera.

The introduction, written in vigorous and warm prose style used in *Starlight and Storm*, describes Rébuffat's love of climbing and the genesis of his collaboration with the Tairraz *père et fils*. The production of the film, which is narrated on the next 87 pages, together with chapters describing the climbs, lasted through two summer periods, each of four months. The picture taking involved four traverses of the Matterhorn,

three of Mount Blanc, three ascents of the south face of the Aiguille du Midi and three of the Bonatti Pillar of the Dru. The result, shown in this book, is a series of magnificent climbing photographs of breath-taking clarity . . . how does Gaston manage to keep that beautiful sweater so clean and neat at all times, on cornice and on wall? The book concludes with a series of descriptions of climbing routes on the Matterhorn, on the Aiguille Verte (with the account by Whymper), on the Aiguille du Midi (with the account by Baquet), on a traverse of Mount Blanc and on the southwest pillar of the Dru. Only one omission was detected; the credit for plate 32 is not listed.

Entre Terre et Ciel is recommended for its beautiful photographs and for its clear, vivid and dramatic prose.

THOMAS H. JUKES

François Matthes and the Marks of Time. Yosemite and the High Sierra.

Edited by Fritiof Fryxell. San Francisco: Sierra Club, 1962. 189 pages; ills. Price \$7.50.

François Matthes knew mountains with an understanding that few of us can ever attain. To him a mountain presented at a glance a clear record of ages of up-building, dislocation, alteration, and sculpturing by ice and water. Not content with understanding these things himself, or even with making contributions to the records of science, he had a burning desire to explain to laymen, particularly to young people, the exciting story that he saw written in the mountain landscape. Thus he was ever ready to lead groups into the field in Yosemite and in Sequoia and to respond to the calls of editors, particularly of the *Sierra Club Bulletin*. Both in his informal talks and in his writings he had the rare gift of enlivening and entertaining without ever departing from a strict adherence to the disciplines of science. "The Geologic History of Mount Whitney" is an outstanding example. With this as a background, one may share with François his statement: "Indeed, the more fully I comprehend its story, by dint of repeated visits to and flights around and over Mount Whitney, the more venerable, the more precious seems that bit of flat land on its lofty summit. Upon it I have never set foot without a certain sense of reverence."

It is particularly appropriate that these essays should be introduced by a fellow geologist, Fritiof Fryxell, a member of the American Alpine Club, as was François Matthes, in a comprehending and well rounded biography. The book is beautifully produced, with excellent illustrations. Altogether it is a work of the highest order and should have a favored place in all mountain libraries.

FRANCIS P. FARQUHAR