

Coming of Age — Ice Climbing Developments in North America

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SINCE the flowering of the Yosemite School of Rock Climbing in the 1950s until the present, the world mountaineering community has gradually become aware that the best American rock climbers had achieved at least a parity with the best schools of European climbing. Aside from psychological factors this was due in part to the conditions in Yosemite Valley. New materials and techniques emerged, became refined, and later widely accepted throughout the country.

Ice climbing in this country, quite deservedly, has enjoyed no such distinctions. As recently as two years ago Pinnacle Gully in Huntington Ravine on Mount Washington in New Hampshire had never been climbed without chopping steps. Indeed it was not uncommon to witness ascents of this five-pitch gully that required over ten hours.

There have been tremendous changes in the last three years in the technique and technology of ice climbing in this country. This article will only deal briefly with the changes and is in no way intended as a complete technical treatise. Additional complete treatments by others more qualified will no doubt follow shortly.

The temptation to draw parallels between the development of rock climbing and ice climbing in this country is overwhelming. John Salathé developed the first hard steel piton for his great pioneering climbs in Yosemite in the late 1940s. These were the precursors of the chrome-moly pins which began to be widely distributed in this country in the early 1960s. Before that time almost all technical hardware was imported from Europe. Outside of California, rock climbing techniques were also imported. The same situation existed here prior to 1968 with reference to ice-climbing hardware, almost every bit of it was imported.

Interestingly enough there had been almost no innovation in European hardware in several generations. The crampons available in the 1960s were hardly different from the early Eckensteins and in some important ways inferior. Ice axes had not changed significantly in over 30 years, except in shaft length. One of the only innovations was the Russian development of an ice screw. Unfortunately, this resulted in the widespread sale and

distribution of the notorious Marwa "coathanger." Unbelievably this particular item is still being carried by many mountaineering stores in this country. One has to assume that anyone still stocking this item is ignoring the possibility of a products liability law suit.

Before the late 1960s there had been little importation of technique. Austrian front-pointing was known but became a hair-raising experience when practiced on the hard water-ice common to the major ice-climbing areas in this country while wearing the usual available ill fitting, soft steel, hinged crampons. Modern French ice climbing technique was almost considered a myth. One truly American technique did emerge on Mount Washington. This technique employed the longest-shafted, heaviest ice axes available and might be described as the "2 handed stand and hew" method.

Into this obvious vacuum stepped Yvon Chouinard, certainly one of the leading American mountaineers and the most important American technical-equipment innovator since Salathé. Chouinard became interested in ice climbing and began working on a chrome-moly, fully adjustable, unhinged crampon. In 1967 along with Layton Kor he made the first American ascent of the north face of Les Droites and Les Courtes in Chamonix. This was the first time Americans had climbed a really difficult ice route in Chamonix of the kind pioneered after World War II. Chouinard's experiences on this climb convinced him that he had the right design concept for crampons and he also became convinced of the necessity of mastering the French technique. Step-cutting was out of the question on the *grandes courses*. While safe, step-cutting introduced an unacceptable element of objective danger due to the time required. Front-pointing had the great virtue of speed, but the constant strain on the legs made long climbs exhausting and in the end, even risky for all but the most superbly conditioned climbers. French technique presented some difficulties. In fact, the apparent difficulty in mastering the technique led Alan Blackshaw, in his excellent treatment of technique in *Mountaineering*, to dismiss the French method as not being worth the effort. However, the lack of physical strain even on fairly high-angle ice, combined with safe descent methods, proved an irresistible lure and Chouinard set out to master the method under the general tutelage of the master of the French school — André Contamine.

As he became initiated, Chouinard realized that the traditional French *piolet* (axe) was inadequate for the demands of *piolet-ancre* on high-angle water-ice. On an experimental basis he began reforging the heads of Simond axes giving more droop to the pick and flattening the adze. He found out that the correct droop gave an excellent grip on water-ice even at the extreme limits of *piolet-ancre*. While engaged in this experimenta-

tion Chouinard began proselytizing the French technique on both the east and west coasts. His brief instructional booklet was widely distributed and provided a tremendous impetus to American climbers interested in ice climbing. As his own mastery grew and as he undertook more difficult climbs, he became aware of the inherent weakness of the French method. *Piolet-ancre* became impractical on ice over 60° degrees in steepness. Beyond that one had to go on front points.

Chouinard often comments that he is not a fanatic. By this he means he is not doctrinaire. The official French school disdained front-pointing while the Austrians refused to consider anything else. Scottish climbers, true to their own heritage, pretty much ignored both. Unburdened by ideological considerations, Chouinard saw no reason not to combine both methods. He found that front-pointing with one foot, while planting the other foot flat against the ice and then alternating, made a highly effective, even synergistic, compromise. At about the time he came to this conclusion, a survey of the members of the Groupe de Haute Montagne revealed that most of the top European climbers did, indeed, prefer the front-pointing method for steep ice.

One difficulty remained. Drooped-pick ice axes provided excellent security on ice of about 60°, but beyond that, even a 40 cm-shaft became unwieldy. Ice daggers and ice pitons driven in by hand proved to be ineffective on really hard ice. Chouinard's solution was to forge piton hammers with long drooped picks, which, when held by the shaft and driven into hard ice, provided amazing security. Using one hammer in each hand it now became possible to attack ice pitches verging on the overhanging.

These technical advances coincided with the development of reliable protection. Salewa tubular ice screws have been available for several years but were unsuitable for hard, water ice, since the tube clogged. The most recent models are slitted and the ice core can be more easily removed. In 1969 Charlet ice screws of the "coathanger" variety became available here. These represented a tremendous advance over the treacherous Marwas since they could actually be relied upon to stop a fall. In 1970 Salewa marketed a drive-in ice piton, sometimes referred to as a "wart hog". For hard ice this piton offers unsurpassed protection, although it does have to be chopped out by the second man. Finally, the "super screw" designed by Ed Nester, offers excellent protection in certain conditions with the convenience of hammer drive-in and screw-out removal. Armed with these tools and techniques a small but rapidly growing number of American ice climbers are busily engaged in a great game called "Find the Ice." In the last two years truly challenging climbs have been discovered in the Pacific Palisades, the Northeast and the Canadian Rockies.

The adventure begins.