

RUSSIAN CLIMBING EQUIPMENT

BY M. J. HARRIS

A VISIT to the Caucasus during the summer gave us an excellent opportunity to see Russian climbing equipment and also to use some of it for ourselves on the mountains. Our own equipment was also a continuous source of interest to the Russians and the whole subject provided an unending topic for discussion.

Most Russian equipment seemed to us, who are used to using continuously evolving equipment in the Alps, to be rather heavy and outmoded. It reminded us of our own equipment twenty years ago. Most of it dates in fact from this period or earlier, as it was in the mid-thirties that the Russians last had contact with Western mountaineers. There appears to have been little development of equipment by the Russians themselves except for a few particular items. This apparent stagnation can easily be accounted for. Very little equipment is actually owned by their climbers. It is owned by the clubs, which are state supported, and even the most experienced mountaineers borrow their equipment, either from their club stores before they leave for the mountains, or from the club mountaineering camps established in the valleys. This equipment is all produced to a standard pattern, although there is frequently more than one type of each item. Such a system does not encourage the development of improved equipment. Even such personal items as boots and windproof clothing are normally borrowed and he is a very lucky Russian who owns, say, a sleeping-bag.

Russian boots are universally nailed with a form of Tricouni. These nails are rather heavier and thicker than the standard Tricouni; the Russians sharpen them with a file! The standard boots have wide welts and are not what we would regard as suitable for difficult rock climbing. Leather gaiters are often attached to the tops of the boots; they seem very effective for keeping out snow. Windproof clothing is effective; they use anoraks and overall trousers: but the material is heavier than ours and since they are mostly of the same dark colour a Russian party looks rather drab.

Hemp is the standard rope material but 'Capron', a type of nylon, is just becoming available. They claim that this material has a higher melting point than ordinary nylon. This seems to be available in the form of $\frac{3}{4}$ -wt. rope and of line. Since our technique of running belays was new to them the use of the line would seem to be limited.

The Russian karabiner is good. It is clear that some thought has been put into the design. It is triangular in shape and since the corners are fairly sharply curved, the strain from the ropes when under tension

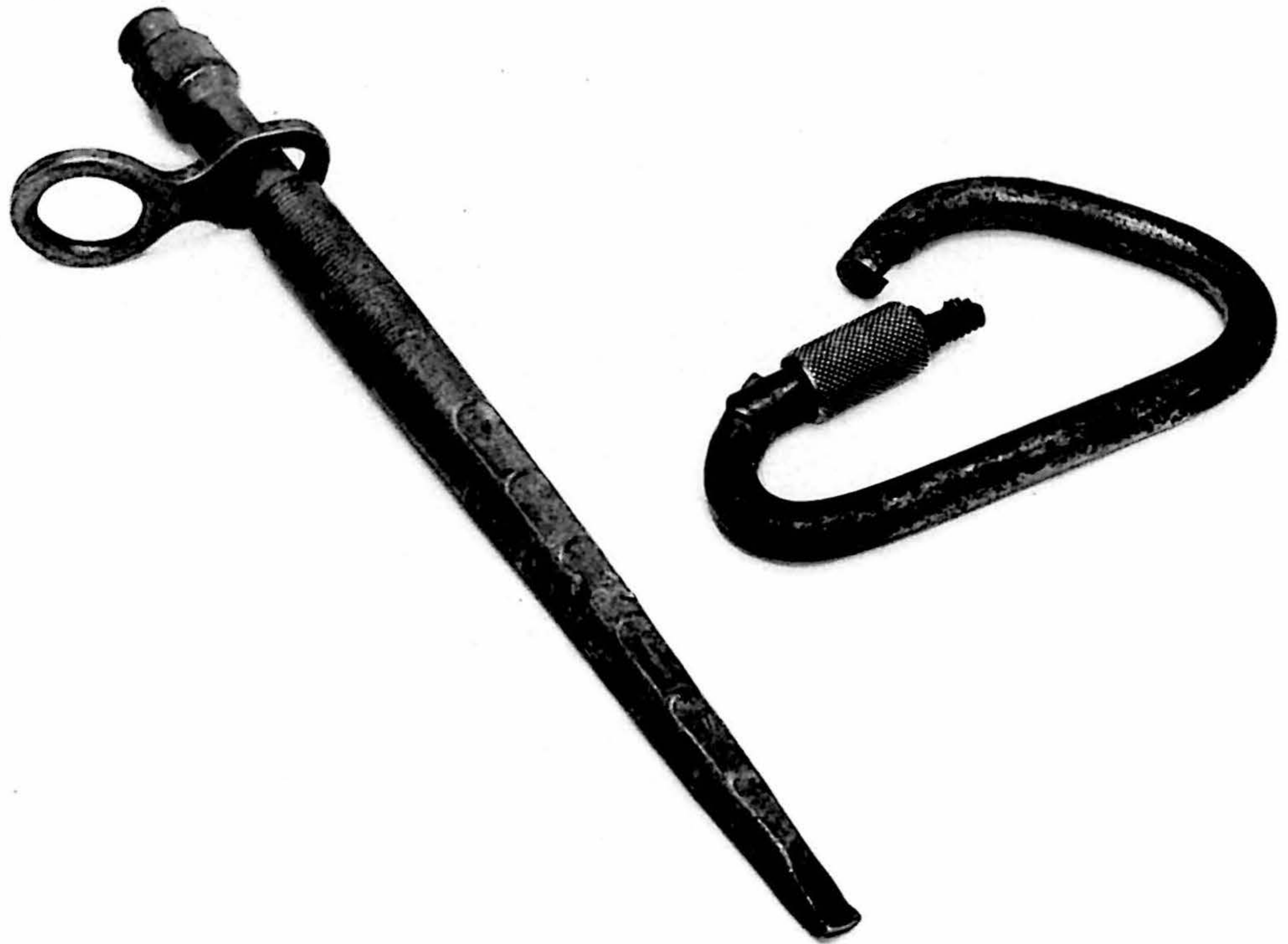
is almost in line with its long straight side. There is consequently quite a small force tending to open the karabiner, considerably less than with the Simond pattern, and probably less than with the Cassin. The gate is in the longer of the other two sides and when it is open there is much more room for passing ropes through it than with any other pattern. The gate hinge could usefully be slightly further from the corner and in fact, together with a shorter gate, this could give an even wider opening gap. It is made either with or without a threaded brass locking screw and it weighs 5 oz. compared to $4\frac{1}{2}$ oz. for the Simond and Cassin types.

Much Russian climbing is on snow and ice and it is not surprising that ice axes and pitons have received attention. Although it weighs 9 oz., their ice piton is ingenious and the idea would be well worth developing further. It consists of a solid round steel bar, with a tapered square section providing the point. A narrower section holds a loose ring beyond which is a larger hexagonal section, and finally a circular head. The total length is 10 inches. This solid object is driven into the ice in the usual way and a karabiner clipped through a second hole in the loose ring. The piton is then firm and it is then necessary to be able to remove it. For this a spanner is used on the hexagonal head, the head is given half a turn and the piton is lifted out. The Russians provide themselves with a spanner key having a hexagonal hole in the adze of their ice axes. The whole system seems particularly good; the pitons have little tendency to split the ice and their removal is a matter of seconds in contrast to the time normally needed to cut away the ice from around a well-placed piton. Apart from weight, another snag is that after some use the hammered head of the piton swells so much that the ice-axe spanner can no longer be fitted.

Apart from the hexagonal hole often provided in the adze, ice axes are of a normal pattern but rather heavy (2·2 lb.). Many of their climbers, particularly those doing the harder expeditions, have ice axes with a hammer head instead of the adze—and a hexagonal hole in the hammer head. A further fabricated version had the appearance of a battle axe.

Crampons are heavy (2·9 lb. per pair). Their single model is made in a small range of sizes and is adjustable in length. They normally have ten points (although twelve-point crampons are made), the front pair of points being slightly shorter than the others. The Russians claim that this gives a good grip on four points on steep ice. The four forward points of the Grimel twelve-point crampon are more effective. The bindings are very poor and they have no quick release versions. Special boots with built-in crampons have been used by the Russians for high-altitude expeditions in regions such as the Tien Shan.

Rock pitons are of the normal varied types. There seemed to be



RUSSIAN ICE-PITON AND KARABINER.

many home-made versions. Channel pitons and étriers were new to them. One interesting device might be mentioned. This is a simple wire 'sky-hook' which replaces the knot of a Prussik sling. It is very easily attached and removed—perhaps too easily.

Mountaineering in Russia usually involves several bivouacs and for these the Russians normally use tents. They have evolved a technique of pitching their tents without poles or tent pegs, with the result that only the tents themselves have to be carried. They have two sizes, the smaller one will take four people and weighs about six pounds. This tent is lighter than our tents designed for 2-3 people. The roof and floor are made of a waterproof balloon-type fabric (the floor is of rather heavier material than the roof), while the side walls and ends are made of a light tent cloth. They are pitched by using four ice axes tied together in pairs to make the poles at each end and by using either crampons and ice pitons to hold the guys if it is pitched on snow, or boulders if it is pitched on rock. The side walls are quite high, which is important for snow camping, but they have no snow flaps. Altogether these tents are excellent for their purpose. They feel quite spacious inside and are capable of sheltering a party in a storm with relative comfort. After a four-man expedition with a Russian tent and a two-man expedition with a tent sack, both taking several days, one felt the need for some compromise between the two. The Russians also have a number of designs of tent sacks.

Of other bivouac and camping equipment there is virtually nothing to say. Light down clothing is unknown to them, sleeping bag patterns are normal, rucksacks are large without frames, petrol stoves are normally used on the mountain, although they do have meta fuel. There seem to be no lightweight or dehydrated foods made specially for camping or expeditions. The Russians ate food which was available in ordinary shops.

We undoubtedly had much more to show the Russians that was new to them than they had which was new to us. But some of their items of equipment are interesting and good and these ideas could be worth copying or developing further.