THE TECHNIQUE OF ARTIFICIAL CLIMBING

By E. A. WRANGHAM

'It was strenuous, especially for one with too little practice in piton climbing.' The quotation comes from the Journal of a British mountaineering club, and reveals a very typical reaction to what is to many British climbers a new technique. In many of the magnificent new routes pioneered in the Alps since the 1930's, a section of the climb has been rendered possible by the use of a gradually developing technique of climbing with the aid of pegs (' pitons,' in French). The custom started with a twofold purpose : for belaying, to save time and add to security, where the rock was unco-operative (many Continental climbers now will use a peg in preference to a rock belay, even when the latter is easily available, considering rock belays unsafe) ; and for use as a hand or foot hold, in the momentary absence of a rock one. From these beginnings the stage has now been reached when there are some ascents in the Alps which require almost continuous use of pegs for direct aid from bottom to top. It is, of course, up to the individual to prefer one type of climb to another. Mummery preferred rock climbs, Smythe snow climbs ; Norman Collie thought the Cuillin of Skye a pleasanter climbing ground than the Himalaya ; and I have come across climbers who, having seen the Alps, still prefer to climb on the gritstone crags of Derbyshire. Similarly, one may find the entirely artificial climb rather monotonous, despite the considerable strain on muscles and nerves which it almost certainly entails. Personally, I find it as tedious as a long stretch of snow or ice, though in that tediousness there may yet lurk a certain satisfaction. On the other hand, for the climber coming to the Alps today with the idea of doing the biggest and best routes available, or perhaps of striking out on new lines of his own, there is no doubt at all that he will do well to master the art of pegging. It is altogether too easy to adopt the view : ' Pegs ? Oh, yes ; well I've got a hammer and some pegs ; when I come to the place, I'll just hammer the pegs in and climb up them.' Yet there are few who would march up to Zero gully on Ben Nevis, declaring : ' I've got an ice-axe ; all I've got to do is cut steps in the ice, and walk up them.' In an hour or two there would be fewer still.

Artificial climbing, like any other mountaineering technique, is sufficiently obvious in theory, just an enterprising use of common sense. But, again as in other mountaineering techniques, it is convenient to make use of the experience of others. That is where this article comes in, being intended as a potted version of what other people have found or declared in the realm of artificial climbing. It has, apart from personal experience and conversation with others, a number of

sources : the articles in *Cambridge Mountaineering* and *The Climbers' Club Journal*, and some of the Continental publications such as *Alpinisme* and the book on the west face of the Petit Dru by Guido Magnone. It is, I think, worth adding at this point that there are, both elsewhere and in this country, groups of climbers who are developing the technique of artificial. Thus this article will probably be out of date before it appears. Out of date it will certainly be in one respect : in America use has been made for some time of expansion bolts, Rawlplugs, as it were, inserted into holes drilled out with a star bit. I shall not concern myself with these, for two reasons. First, because I know little about them ; and secondly, because I have an entirely personal prejudice against their use in the Alps. As an eminent Alpine guide remarked : ' To use them is to make a ladder of the mountain.'

First, I must consider equipment. To my mind the question of weight is as important now as it was when aluminium collar studs, and sawn-off toothbrushes, were the order of the day. For most people, the pleasure of a climb is in inverse ratio to the weight carried. This becomes truer as the angle of the climb increases. If artificial climbing is envisaged it is necessary to carry some extra equipment ; how much will depend on the amount of artificial involved, and how often the climb has been done before. But if care is taken, and light-alloy equipment used where possible, the extra weight need not be very great. It is a mistake, for instance, to assume that when a guide book says 120 pitons, it is necessary to carry that number. It means, of course, that use is made of a peg 120 times ; and in a climb that has been done a good many times already, most if not all of these pegs will be already in position. With this in mind then, consider (but under no circumstances carry all of) the following :

1. PEGS, of which there are six main types in use, and many gradations in between :

(*a*) The peg of probably most general use has a tapering blade of steel five-eighths of an inch wide, 3 in. long, and a head about 2 in. long with a ring which is set in a plane at right-angles to that of the blade.

(*b*) A variation of (*a*) is similar, but shorter, and with a wafer-thin blade (in French, an ' extra-plat ').

(*c*) Another very useful peg, particularly in bad or soft rock, is a ' channel ' or U-section peg. Similar in general design to (*a*), it is rather longer, being perhaps 5 in. long in the blade ; and has a blade not of flat metal, but of angle metal shaped in section like a flat U (in French, a ' broche ').

(*d*) Of less general use, but still useful in conjunction with others, is the simplest peg of all : merely a flat strip of metal, tapering at one end, and with a hole at the other in the same plane as the blade.

(*e*) Another peg has a spike rather than a blade (the cross-section being almost square), tapering as usual at one end, with, at the other, a wide movable ring. This can be rather tiresome to get into the rock

since the ring swings about and gets in the way, but it enables one to abseil from it without also leaving a sling behind.

(*f*) Finally there is the ice-peg. It has to be much longer than the rock-peg, the minimum length of blade being 8 in., and is shaped either as (*c*), or has a circular section (a sort of tapering tube).

Pegs are usually made of steel, though recently some thick ones of light alloy have been in use. These have the advantage of being softer and thus taking more readily the shape of the fissure into which they are being inserted. Points to watch are that the pegs should be of one piece (not welded), and that the ring is wide enough to take easily two snap-links.

2. WOODEN WEDGES (in French, ' coins de bois ') :

Where the available crack is too wide for pegs, it may be possible to use instead wooden wedges, either alone, or in conjunction with pegs. These are, of course, simply wedges of some fairly hard wood, about 3 in. or 4 in. long, and 1 in. or so thick, having a hole one end with a loop of rope through it ; and grooves either side from the hole to the head of the wedge, so that when the wedge is driven home, the rope loop is not damaged. The rope loops should be treated with suspicion by subsequent parties.

3. SNAP-LINKS (' Karabiners ' or ' mousquetons '), of which there are five types commonly in use :

(*a*) The most usual is a ring of steel, 4 in. by 2 in., in the form of two semicircles joined by two straight sides. One of the sides hinges inwards, the free end usually being dovetailed to prevent its jumping out under strain. While this is no doubt an admirable idea for snap-links when used as running belays, it is not desirable in artificial climbing. It may be necessary to open a snap-link under strain (to pass another rope through it) ; and in any case the jagged edges of the snap-link catch the fingers, so that in a long climb the nuisance becomes serious. I have seen the hands of a guide who had just taken a client up a three-day artificial climb, and they were a mass of jags and cuts from the dovetailed edges of snap-links.

(*b*) Another kind is similar to (*a*), except that it is shaped rather differently. The curves each end are of unequal size, that at the opening end being larger.

(*c*) A development of (*b*) is to have the snap-link shaped like a D, with a threaded sleeve to secure the opening bar. This has really no practical value in artificial, since it takes too long to open and close the sleeve, and the edges are dovetailed.

(*d*) In my own opinion the best type for artificial climbing is one shaped like (*b*), slightly larger, and made of light alloy. This would probably not resist a considerable shock loading (but of course in artificial there won't be one), but it is light, easy to use, and has no snags to catch the fingers. It is at present expensive.

(*e*) In the quest of lightness, a very small type of snap-link has been produced. Its small weight is a point on its side, but is more than offset by it being so ' fiddly ' to use.

The cardinal points about snap-links are that they should have smooth edges, light springs, plenty of room for two ropes, and be light.

4. Étriers :

There is no exact English equivalent of this French word, describing a piece of equipment developed principally in France and Italy. Literally ' étrier ' means stirrup, and originally it was not much more than this, a simple loop of rope. This has now been developed into something like a miniature rope ladder, with two, three, or more rungs. Opinions differ on what number of rungs is best, that of most general utility being in my experience the three-rung étrier. Thin rope is used, five-eighths nylon for instance (or its equivalent size in hemp, which has the advantage of not stretching), knotted at the top, for attachment to a snap-link. The rungs are of wood or light alloy, wide enough (about 5 in.) to admit a boot freely, with a flat surface an inch or so across. This latter is important. When an étrier is lying against a slab of rock, it is useful to be able to toe it out and so insert the boot, which can hardly be done with a circular or narrow rung. Also the relatively wide surface is more restful to the boot, and if necessity arises to the leg of the person sitting on it while belaying or bivouacking. The rungs are set about 18 in. apart, the exact distance varying according to the height the individual finds it convenient to step up. The top rung will be about 18 in. from the knot at the top.

5. Peg Hammer :

The only essentials for this instrument are that it should be extremely tough, and have a loop through its handle for attachment to wrist or waist to prevent it being dropped. The string or light rope used for this, should be long enough for the hammer to be held at full arm's stretch. It is perhaps worth mentioning in this connection that things attached to the waist loop will be found easier to move round to the other side, or otherwise manipulate, if they are attached to it by a snap-link ; a small point, but the struggles sometimes involved in changing the hammer to the other hand, while holding on, standing in étriers, etc., can be quite exhausting. The hammer should be as heavy as the user can tolerate, thus reducing the number of strokes needed per peg, an important point on a long climb. A type I have found satisfactory is the ' marteau-piolet ' manufactured in France, which has a small pick incorporated with the hammer head. The pick is useful for extracting pegs, ' gardening,' and cutting steps in steep ice.

6. Rope :

At a pinch any climbing rope will suffice. Full-weight hemp, or even full-weight nylon, however, is most awkward because it is too

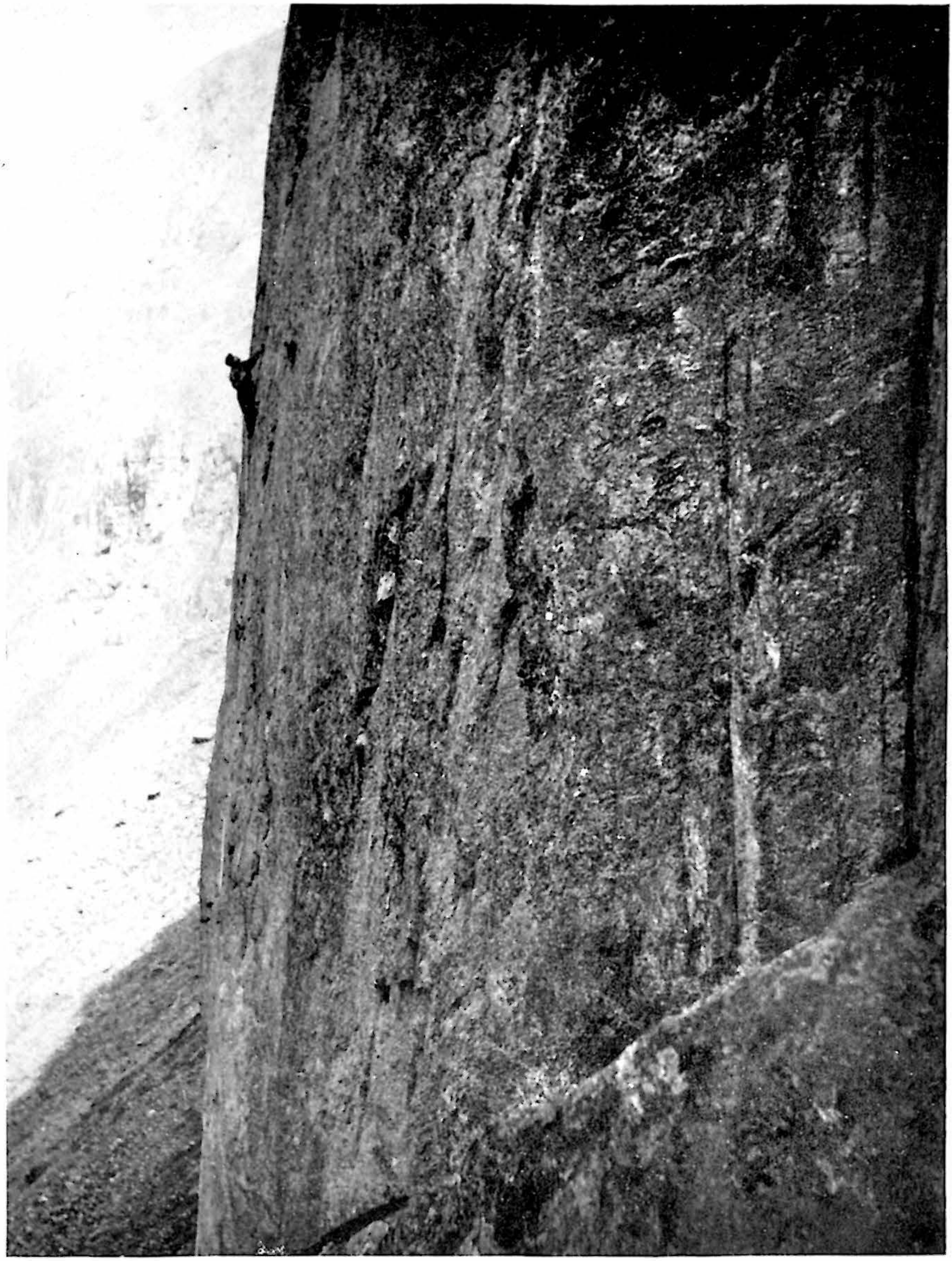


G. J. Sutton on Ai pitch, Daouda, Sahara. Pegs 1 and 2 in place, étrier on peg 1. Top peg being inserted is channel-section, suitable for this rather friable basalt. An 'extra-plat' protrudes from hip pocket.

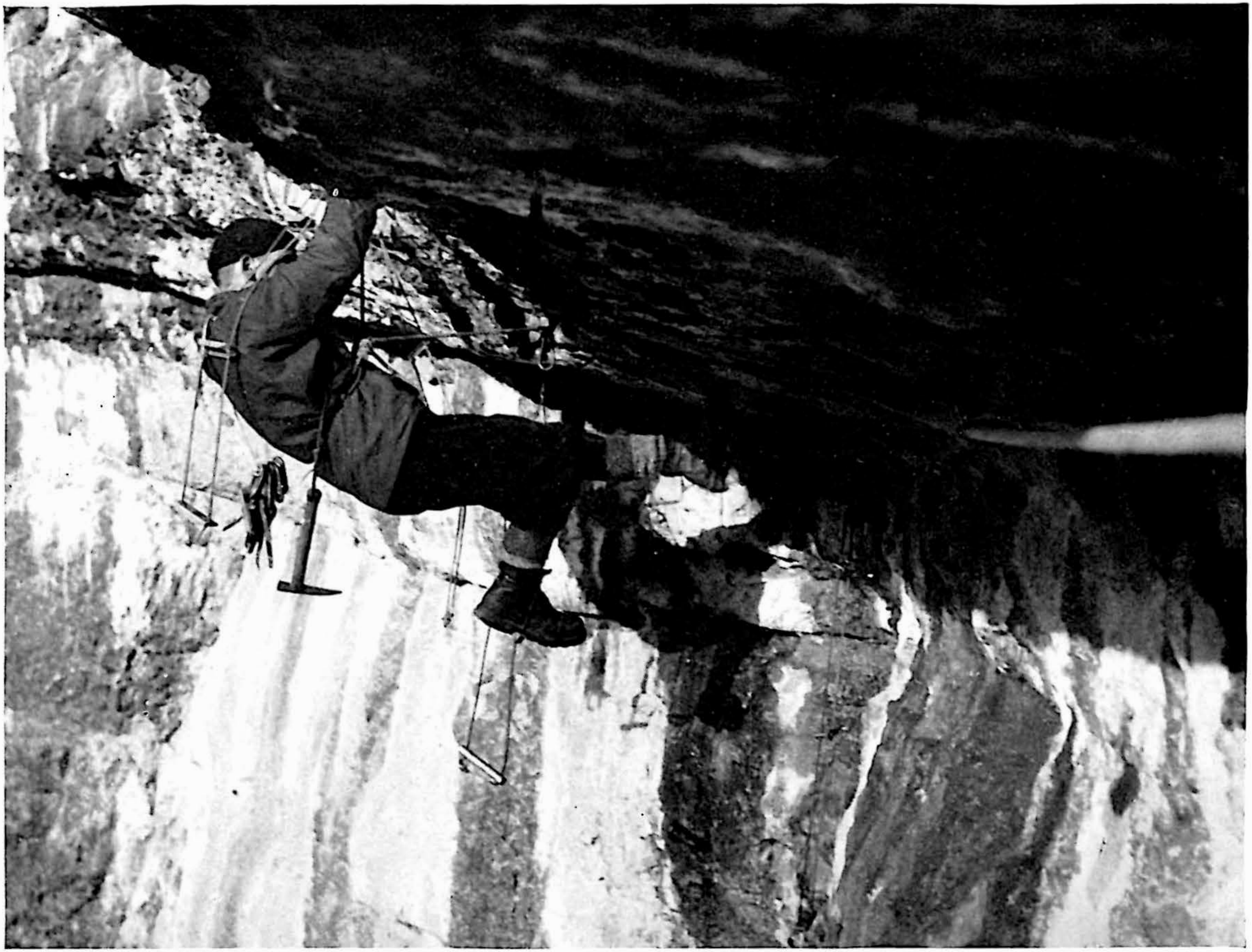
[*To face p.* 40.



J. Streetly on traverse of Bloody Slab, Clogwyn du'r Arddu. A type of diagonal abseil. The climber uses pull of rope with his right hand against side pull with left hand.



J. Brown on the wall between Chimney Route and Vember, Clogwyn du'r Arddu.



R. Moseley, Stony Middleton, Derbyshire. At least 4 étriers and doubled rope. Pegs clipped individually to snap-links on a sling. A 'marteau-piolet' hangs from his waist. The étrier over his shoulder has better rungs than the one his foot is on.

thick. The most obviously practicable rope is nylon 'medium' (seven-eighths of an inch); its only disadvantage is its elasticity. This is of course an advantage in free climbing, increasing its resistance to shock loading, and reducing the jerk on the climber. In artificial, however, it has the effect that the second can give his leader little real assistance, since his pulling when a doubled rope is in use (see below) is taken up largely by the stretch of the rope. Perhaps for this reason the French have a rope with a plaited covering, which has much less stretch. It costs nearly three times as much as English nylon. A 200-ft. length is advisable, being convenient for doubled-rope climbing and for abseiling. There should be one length for each member of the party, and one other 100-ft. length for sack hauling and abseiling.

7. SLINGS:

Although their role is less obviously direct in artificial climbing, slings will be found invaluable. I favour slings of nylon 'line,' though other sizes are also commonly used. They have many uses: for holding one into the rock when resting; for holding pegs and snap-links; for use when abseiling, and so on.

8. FOOTWEAR:

The present standard Alpine footwear of Vibram-soled boots is the best, though some may prefer the lighter Italian type of suède half-boot which is also soled with Vibram. A stiff sole is almost essential, anything else being very tiring to the feet after some time standing in étriers.

9. BIVOUAC EQUIPMENT:

I feel a word or two should be added here about equipment desirable in case of a bivouac, for many of the harder Alpine routes are almost impossible to complete in one day, and artificial climbing is liable to be a slow business. Here the crucial matter, again, is that of weight. The most important consideration is food and drink. What food is taken will depend on the taste of the individual; it must, of course, be as concentrated and light as possible. Packet soups, and tea with sugar, also pemmican for those that like it, are useful as combining food with drink. A small stove (very light ones burning petrol or Meta fuel are available) is a boon, and may be necessary to melt snow for water. But hot food is cheering rather than a necessity.

As regards clothing a compromise between warmth and weight must be arrived at. The key material is undoubtedly down or 'duvet.' If weight is not too critical, a sleeping bag will be found the best; otherwise a duvet jacket, weighing about a pound, together with duvet socks and gloves will be fully adequate except in really bad weather conditions. A pair of women's nylon stockings will be found well worth their small weight, in terms of warmth.

Having spent, I fear, rather a lot of space on equipment, it is perhaps

a bit of an anticlimax to consider that one might actually use it for climbing, and it is possible that the reader may have been daunted by the quantity of stuff mentioned. To carry it all around one would need two or three Sherpas. Fortunately one can pick and choose, once one has selected the climb, those pieces of equipment most suitable. It will be noticed that, as I have tabulated the items of equipment above, so I will tabulate the techniques below. This may make them seem separate, whereas in reality they merge into one another ; any pitch may be a combination ; they are considered separately for the sake of clarity.

1. PEGS ALONE :

The most elementary and obvious form of artificial is to insert a peg or wooden wedge as a hold, in the absence of a rock one ; or where there are no holds for some distance, a succession of pegs. Also, a peg being rather awkward to hold, it is convenient to clip in a snap-link, and hold that. So the technique becomes simply : insert pegs 1 and 2, one above the other ; clip a snap-link into 2 ; holding it, stand on peg 1, and insert peg 3 ; clip in another snap-link, and so on. It will be obvious that the scope of this process is limited, since no real rest is possible. But before going further, let us consider briefly the business of inserting the pegs, which is the very basis of artificial climbing.

The selection of the right peg for the right hole is largely a matter of practice, as is the selection of the best crack among the usual unpromising-looking collection. Try not to fumble hastily for the nearest peg, and start hammering it wildly into the first crack you see ; either the peg will jump out at the first blow and tinkle merrily away down the cliff, or it will go in about half an inch and then bend, so that the next ten minutes are spent straightening it out. It pays to prod around in the crack with the peg, to see if there is any depth to it ; if there is and the peg fits well, the ting of hammer hitting peg will gradually rise in note as the peg sinks further and further home. Any flat note or hollow sound should be treated with suspicion, the more so if the peg has been inserted behind a flake. In these circumstances the peg can act as a splitting wedge, and it is considered bad form to drop large rocks about on a climb. Provided a peg is really firmly in, it does not matter too much whether it is sloping downwards, or even upside down. It is probably advisable to test the firmness of a peg before use, though I remember once nearly coming to grief when testing a peg which was not firm. Pegs left by others one should treat rather as one would rock of uncertain quality, with delicacy and discretion ; though in an artificial pitch it is unlikely to matter much if one peg does come out, since one is probably secured by several others.

2. DOUBLE ROPE :

Since the physical effort of climbing vertical or overhanging rock is so great, particularly when one has to insert one's own holds, the use of the double rope came in to enable the second to be of some positive

assistance to the leader. The procedure is as follows : the party ropes up with two lengths of rope between each man (either two distinct ropes, or one rope doubled), and possibly with another length attached to the leader for hauling up the sacks ; this latter must not be passed through any of the snap-links. It is convenient to be able to differentiate between the two ropes, by colour, size, age, or material, to facilitate directions from leader to second. I will call them A and B. Insert peg 1 at waist level (higher if using étriers, see below), and clip into it with a snap-link rope A, making sure that when one is above it the rope will still run freely. Direct the second to pull on A. You are now held into the rock. Insert peg 2 above and if possible to one side, this latter because if peg 2 is directly above peg 1 the ropes will be even more liable to become tangled. Clip two snap-links into peg 2 and into one of them rope B. Direct second to pull on B and slack on A. (less easy than it sounds for the second ; if the second is belayed to a peg, he will find it easier to hold the two ropes through a snap-link clipped to the peg, rather than round his body). Whilst the second is pulling in rope B, you can step up on to peg 1, holding the free snap-link on peg 2, and insert peg 3. Into this go two snap-links, and rope A, ' slack on B, pull on A,' and so the process is repeated. It is as well to remember to detach and take with you one of the two snap-links on each peg, or your supply may run out before the end of the pitch. The theory is not very complex, yet it is astonishing how after you have gone a foot or two, you find you are standing on the ropes, which have anyway twisted in the snap-links behind your back, the situation being made no better by the fact that the second, despite your frenzied instructions, is doing his best to pull you off backwards. Whilst extricating yourself desperately from this, you drop several pegs and/or the hammer, whereupon the second drops both ropes to fend them off. The secret is of course, practice, care and a cool head. It will probably be found that even if the ropes are not twisted through the snap-links, 80 ft. is about the maximum before friction gets the better of you.

3. Double Rope and Étriers :

When the rock passes too far beyond the vertical, it becomes essential to have some better support for the feet than a peg ; it is also possible that the gap between ' peggable ' cracks is more than the climber can step up. For both of these situations the étrier is designed. Consider our formula as in the last paragraph. Pegs 1 and 2 are in place. You are standing on peg 1, with rope B in peg 2. But peg 3 will only go in a long way up, further than you can reach while standing on peg 1, and you cannot stand on peg 2 without something to hold on to. So an étrier is clipped into one of the snap-links on peg 2. Make sure that it is clipped into the snap-link *underneath* the rope ; if it is on top it will jam the rope when you stand on it. Now standing on the highest rung of the étrier, with rope B holding you in to the rock, you can just reach high enough to put in peg 3. Clearly the gap between pegs 2 and 3 is going to be too great to span with one stride, so another étrier has to be

put on peg 3. ' Slack on B, pull on A ' ; and having established yourself on the second étrier, do not forget to take with you the first étrier with its attendant snap-link, for possible use higher up. The other members of the party will each have two étriers and can fend for themselves. The extreme application of this technique comes in the overcoming of pronounced overhang or roof (in French ' toit ').[1]

4. 2-Étrier Technique :

If there is a great deal of artificial work in a climb, as in many Dolomite climbs for instance, the use of a double rope may take too long. It is better still to rope up on a double rope, in case it may prove momentarily necessary. The climbing then proceeds as in 1, but using an étrier on each peg in turn, detaching the lower one each time a move up is made (again each member of the party has two étriers). If a rest is required, clip the rope and both étriers into a peg, and sit or stand in them, with a mild tension on the rope from the second holding one into the rock. This position may also have to be adopted if it is necessary to break a long section or artificial into pitches (or even to bivouac !). A sling attached to the peg will support the body in the absence of rope tension from the second. The technique is rather similar to sitting in slings under the Great Flake of Central Buttress, Scafell.

5. Traversing :

Hitherto only ascent has been considered. But much the same techniques are applicable to traversing. Once again progress is made on a succession of pegs (as hand-holds only, of course), equipped with snap-links, and possibly étriers, these last depending on the angle and smoothness of the rock. A double rope may be found convenient, though less obviously so than in ascent. But traversing in this way is slow and laborious, and it may well be that it is possible to adopt instead quicker methods (or ' peggable ' cracks may be absent) :

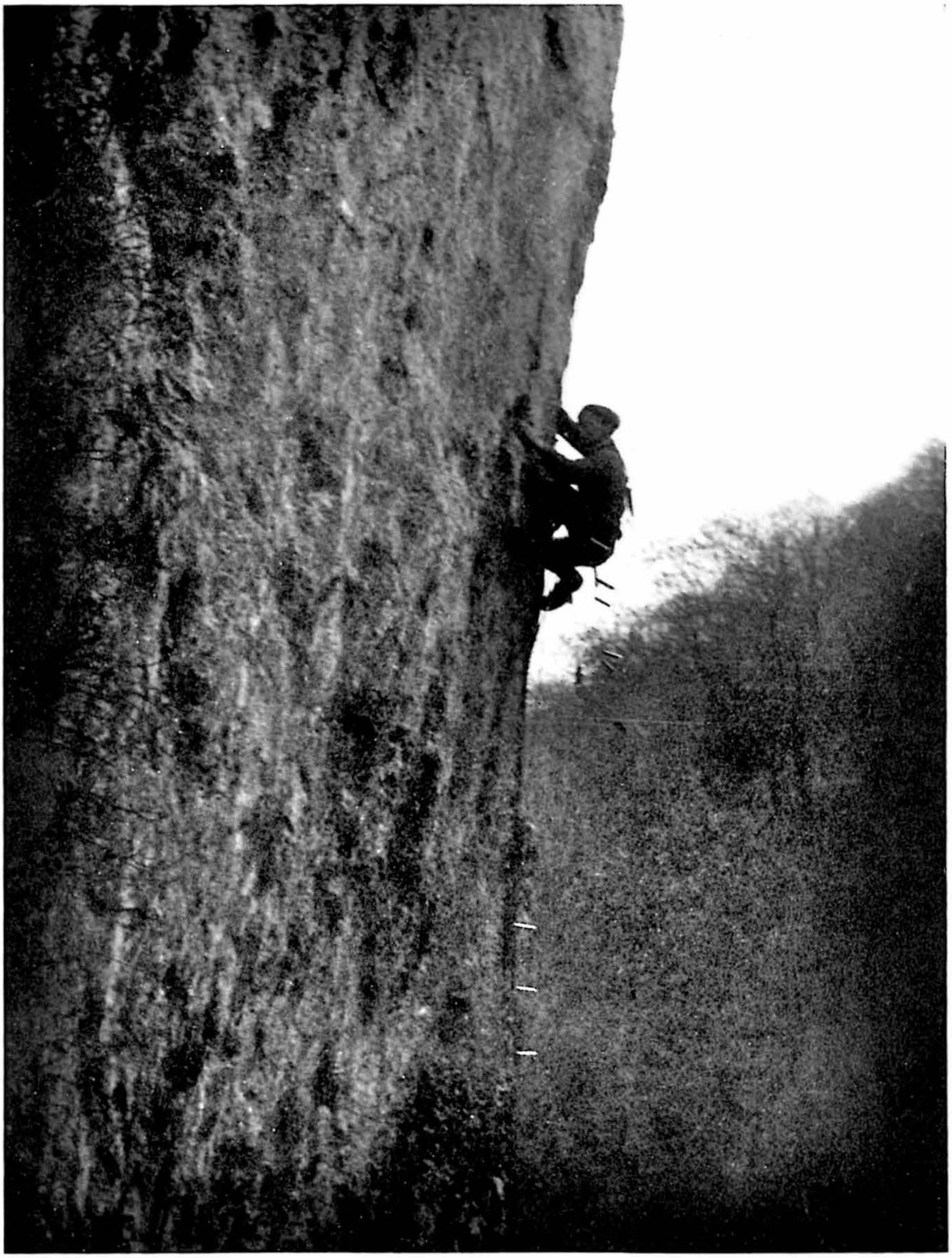
(*a*) The Diagonal Abseil (in French, ' pendule ') : ascend above the line of the traverse as high and far over as possible and there fix a peg and snap-link (or a sling, if there is a rock projection), threading through it an abseil rope. It should now be possible to abseil diagonally in the direction required, by leaning sideways and using what holds there may be. An alternative I have known adopted (but not tried myself), is to abseil down till level with the desired point of arrival, the other side of a smooth slab, and run backwards and forwards till sufficient momentum has been gained to reach holds the far side.

(*b*) Lassoing : it may be possible to lasso a projection the other side of the hiatus. Having hooked it, it will be necessary either to fix the rope (and so abandon it), or, for the last man to swing across free. If adopting the latter manoeuvre, pad yourself well against the shock of arrival, and also remember the elastic qualities of nylon rope (practice can be had on Rope Wall, Milestone Buttress, North Wales).

[1] There is a good diagram illustrating this overhang technique on p. 42 of G. Magnone's *La Face W. des Drus*.

J. SUMNER ON KILNSEY CRAG, WHARFEDALE. DOUBLE ROPE AND ÉTRIERS. THE CLIMBER RESTS IN A SLING, HOLDING ON TO AN ÉTRIER.

[*To face p.* 44.



R. Moseley on Ilam Rock, Dovedale. The climber is using 5 étriers, those not in action being clipped to his waist-loop.

6. DESCENDING :

If it should prove necessary to descend an artificial pitch of a climb, owing to storm or some other emergency, it is fairly certain that the climber will want to abseil. It is worth considering briefly what snags may crop up :

(*a*) Overhanging Abseil : it is clear that to abseil straight over a pronounced overhang will leave the first man dangling like a spider in mid-air, an unenviable position. The first man down should therefore descend via the pegs of ascent (let's hope they have been left in), thus keeping himself close into the rock. Provided the party is abseiling roped together, the rest of the party can be pulled in by the first down.

(*b*) From Peg to Peg : where during a descent there are not enough stances or a rope long enough to abseil from stance to stance, one has to create an artificial stance. Abseil down until near the end of the rope, select a crack and with the free hand insert a peg ; the stance can be improved in detail by using an étrier, putting in another peg for the next abseil, and so on, before the next man arrives. The whole process is made immeasurably easier if abseiling from a snap-link, or better still a ' descendeur ' (made by Allain, of Paris). With this abseiling gadget, which is clipped into a snap-link as when abseiling from a snap-link, one need only use one hand to control the descent (which is painless and undestructive of clothing), and can stop by winding the rope round the descendeur or tying a knot, thus freeing both hands for the possibly tricky business of inserting the peg.

7. ARTIFICIAL ON ICE :

Artificial climbing has been practised on ice as well as rock, though not by me since I have never had sufficient confidence in the stability of pegs in ice. I would trust them more easily for a downward pull than for an outward one. There seem to be two important points to be observed in their insertion. First, they should be put in at right-angles, not to the ice-slope, but to the anticipated line of pull ; this may entail cutting a step first, and then inserting the peg downwards at the back of it. Secondly, they should be given ample time to freeze in, before being subjected to strain. Ice varies a lot, and the brittle kind, such as the water-ice often found in Scotland, is not suitable for pegging. Once the pegs are in, the procedure is similar to that on rock. Crampons will no doubt be worn.

Now, to tie up all this stuff about equipment and technique, let us imagine that we are actually going out to do a climb. The two of us are at the Torino hut, where we have been confined during a spell of bad weather. But the clouds broke up yesterday evening, and there seems to be the chance of a good day tomorrow. We are anxious to do some of the big climbs in the area, but of course they will need a day or two to come into condition, and anyway we need some practice in artificial climbing before tackling them. Also it so happens that

neither of us has ever climbed the Aiguille du Géant. So we have decided to try its south-face route. Old-timers may shake their heads, but the route on the north side will be iced-up, the ordinary route is a mass of fixed cables and will be crowded out, and the east face is too difficult for us.

The climb being a short one we do not have to worry about bivouac equipment, nor is weight likely to be critical. We see from the guide-book that there is a good deal of artificial climbing, including some stretches of A2. (A1, A2, A3, are the grades of artificial in the Vallot guide). This means we must be provided with étriers, but since the climb has been done quite a few times, most of the pegs should be in place. So we take two étriers each, a 200-ft. length of rope, four or five assorted pegs (just in case), about 20 snap-links, and a sling or two. The leader will take 12 or 14 of the snap-links, leaving the rest with the second ; it is a great mistake to leave yourself short of these invaluable gadgets. We each have a peg-hammer, besides the usual axe and crampons. Arrived at the ' salle à manger,' at the base of the Géant itself, it is noticeable that the top of the Géant overhangs the starting point for the south face ; partly as a result of this (and partly because it faces south) the face is quite clear and even looks dry.

After a few feet of easy rock, it gets steep. This is supposed to be a pitch of V1 (VS by English standards), but it turns out that one can progress from peg to peg, with one wooden wedge, as in technique No. 1. The pegs are all in place. This leads to the top of a pillar, and above there is a bulging overhang. A few feet to the right can be seen the line of pegs, unevenly spaced. This time étriers are needed. The leader clips in an étrier to a peg at full arm's stretch, then clips in the rope with another snap-link, and sets off, the second taking in the rope as his leader advances. The pitch is short, but leads to the foot of a more impressive overhang. Here étriers are again in evidence, and the leader makes use of the double rope, getting his second to give him slight tension while he rests half-way. Still all the pitons needed are found in place. After this a little free climbing is encountered for the next 80 ft., giving place to a little traverse left using a peg, and involving the rather delicate use of a decayed wooden wedge. This wedge has split, so that the rope loop in it is ready to fall out. Free climbing assisted here and there by pegs follows (only one of the two ropes clipped in, in case a sack has to be hauled up). Then we are at the foot of a long passage of artificial climbing, said by the guide-book to be about 130 ft. The leader sets off, using the occasional étrier, and taking a rest supported by tension from the second at intervals, but does not seem to think it as hard as the A2 the guide gives it. After about 70 ft. he reaches a sloping platform, where he stops, belayed to and supported by a peg. The second then follows, detaching the snap-links left behind by the leader, in one place having to climb down an étrier to recover one left out of reach below. The remainder of the pitch follows in much the same way, and the party arrives on the summit ridge, considerably exercised by the strenuous work below.

The summit on this day is a mass of people, and the queue for the descent down the ordinary route is such that it takes almost as long to descend this way as it did to climb up the south face. We see thankfully what we have been spared by being round the corner from this 'autobahn.' Now we feel we are all set to try the hardest climbs in the neighbourhood—but wait : will the weather hold ?