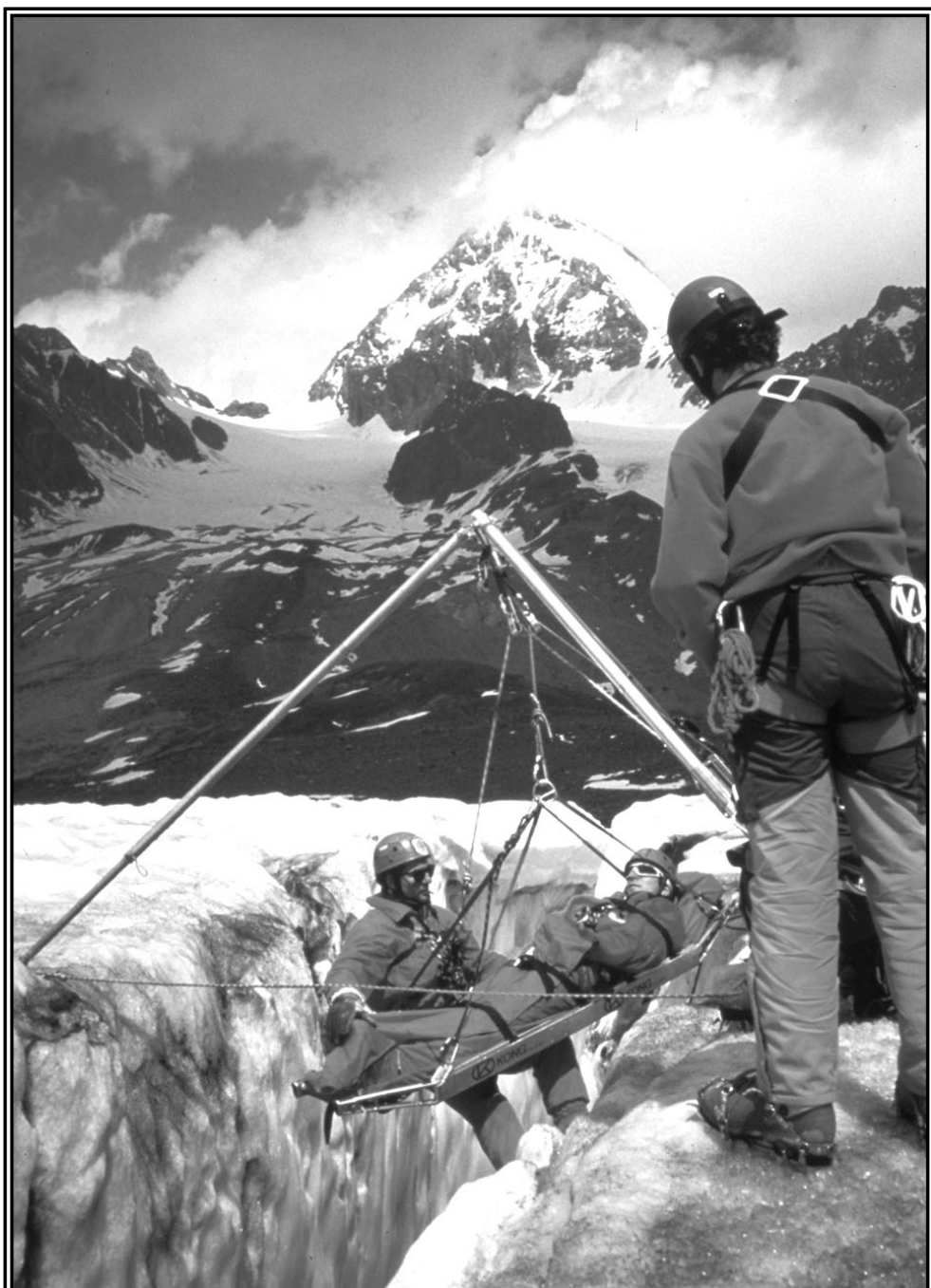




CEVEDALE
RESCUE
STAND



MAINTENANCE AND OPERATING INSTRUCTIONS OF THE "CEVEDALE" RESCUE STAND

The "CEVEDALE" rescue stand, together with a static textile rope with 10.5 mm diameter in conformity with the norm prEN 1891, is in conformity with the Regulation 89/392/EEC and with the norm EN 1496 as a device belonging to the class B.

(Device belonging to the class B - EN 1496)

.....
NOTE: Your life depends on your equipment. The user must know the story of his equipment (use, storage, controls). If the equipment is not for one's personal use (e.g. mountain centres, clubs, rescue stations etc.), we strongly suggest that the pre-use controls are carried out by an expert and qualified person and that they are recorded in the control chart given below. No responsibility for damages, wounds or death caused by wrongful use, nor for items which have been modified or repaired by non-authorized persons, will be assumed by Kong S.p.A. Before using any new device Kong S.p.A. suggest to carry out accurate practical tests in order to get a good knowledge of them and to verify in advance their perfect suitability for the specific use they have been designed for. As a matter of fact, neither the instructions nor the laboratory tests can reproduce all possible conditions of employment in case of rescue or emergency. Pay great attention to the resistance of all the anchor devices, whether they are natural or not (the latter can not surely be guaranteed by us, so we need the opinion of expert users to achieve a good safety degree). Please remember that the position of the anchor devices is very important, because it must guarantee the motionlessness of these devices when they work under stress. Kong technicians are at any time at your disposal for further information and suggestions on the correct use of any Kong items.

MAINTENANCE AND STORAGE

No maintenance is required. Just follow the steps given below.

CLEANING: In case of dirt, wash with lukewarm drinking water (max 40°) adding a mild cleansing product, if necessary (mild soap).

The drying must take place far from any source of heat. The cleaning after the use in saline environments is particularly recommended; in this case it is better to repeat the washing more than once.

DISINFECTION: If necessary, let the device soak in lukewarm water (max 20°) with the addition of a disinfectant, then wash it with drinking water.

STORAGE: After cleaning, drying and possibly disinfecting the device put it in its sack in a dry, cool and dark place (avoid ultraviolet radiation), which must be chemically neutral (avoid saline environments definitely), far from sharp corners, sources of heat, humidity, corroding substances or other possible harmful conditions. Do not store wet!!

LUBRICATION: If necessary, lubricate by using an oil containing silicone. The parts to be lubricated are the supplied connectors, the locking device mechanism and the pulleys. Never remove the winch drum (in case of problems contact Kong or the authorized dealer).

The life time of these devices is technically unlimited, provided that after an extended use, and in any case at least every two years, they are overhauled by persons authorized by Kong. The details of the overhaul must be written on the chart.



BEFORE USING THE PRODUCT YOU ARE REQUIRED TO FILL IN THE FOLLOWING CONTROL CHART

"CEVEDALE" RESCUE STAND			
Serial number:		Year of manufacture:	
User's name:		Buying place:	
Date of first use:		Buying date:	
Control date:	Remarks on correction operations:	OK(Y/N)	Signature:

Please take care of these devices and use them very carefully. It is not just you but also the people you are rescuing who rely on them.

As for safety, the use of the "Cevedale" rescue stand (which implies the employment of textile ropes only, both static and dynamic) makes the operation easier and much more flexible than any other technology employing steel cables.

The Cevedale rescue stand is made of aluminium alloys and assembled with stainless steel screws. The winch is manufactured with bronze and stainless steel components and the drum is made of anodized aluminium.

Light and compact, it can be carried on one's backs as well as placed in small-size helicopters.

Together with its fittings it weighs about 25 kg and its size is 200x45x30.

The telescopic legs can be lengthened from min. 190 cm to max. 290 cm. (there are holes for the spins at about 32 cm. intervals) and are equipped with anti-slip supports which allow a wide opening and a perfect standing on any uneven and inclined ground.

Thanks to its simplicity it is easily placed and operated: three men are enough to place it and carry out any dropping or recovering operations.

The "Cevedale" rescue stand (fig. 1) is equipped with: two two-speed winding winches for textile ropes only complete with self-tailing, two hand levers for operating it, two ascenders, three stainless steel quicklinks, three oval connectors, two "ultralight" connectors, three H.M.S. connectors – all equipped with threaded locking rings -, two high capacity pulleys and 8 metres 9 mm rope for locking the legs.

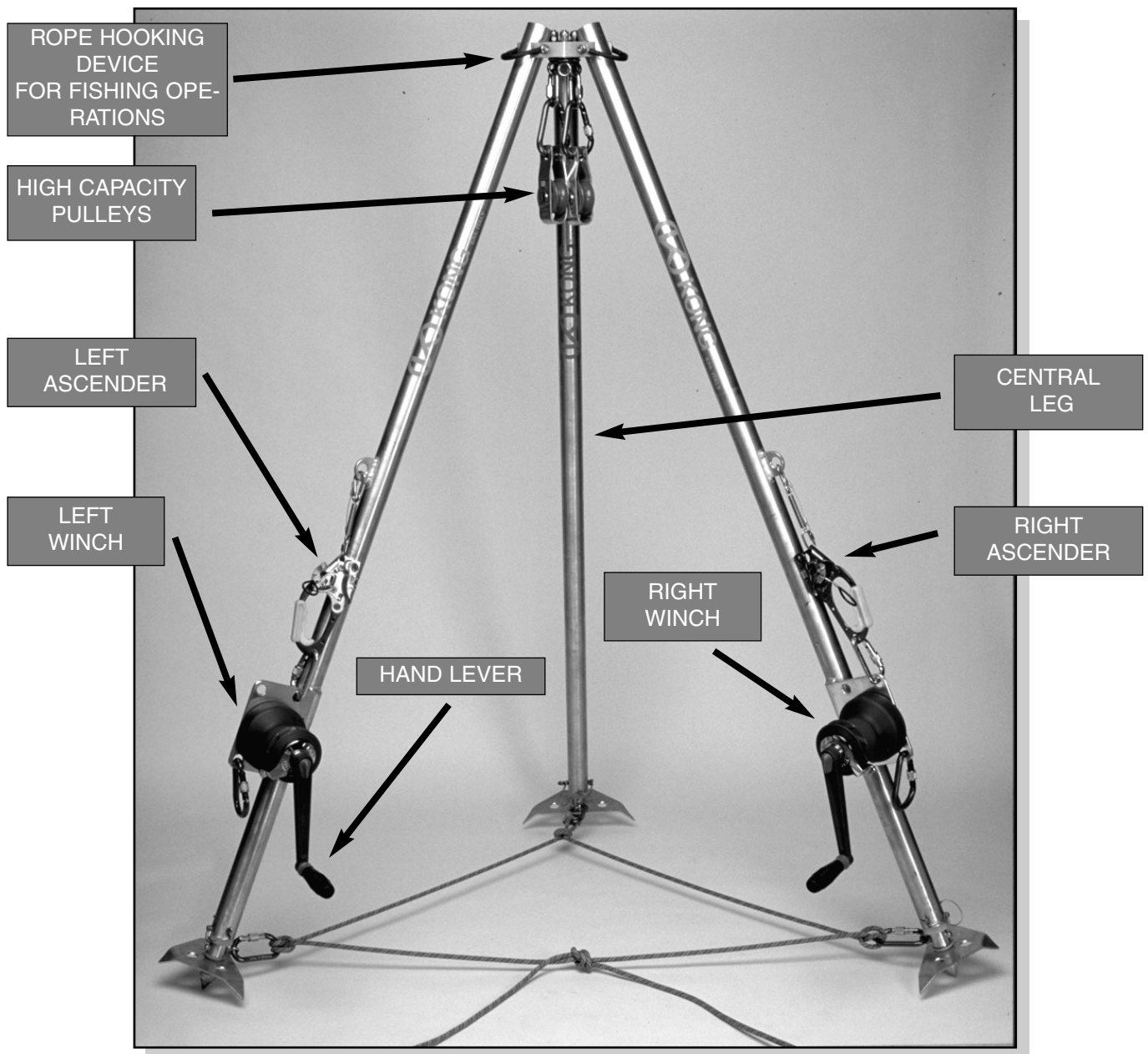


FIG. 1

NOTE: The winch is so designed that the drum always turns in a direction only, whether the hand lever is turned clockwise or counterclockwise.

The hand lever **clockwise** rotation gives a 1:4.5 ratio (one drum turn = four and a half hand lever turns), the power is 1:30 (1 kg force applied to the hand lever allows to lift 30 kg weight). Normally used when the weight to be lifted is considerable.

The **counterclockwise** rotation gives a 1:1 ratio (one drum turn = one hand lever turn) and the power is 1:7. To be used when the weight to be lifted is lighter: higher speed = bigger stress.

A full drum turn (360°) corresponds to about 23 cm recovered rope.

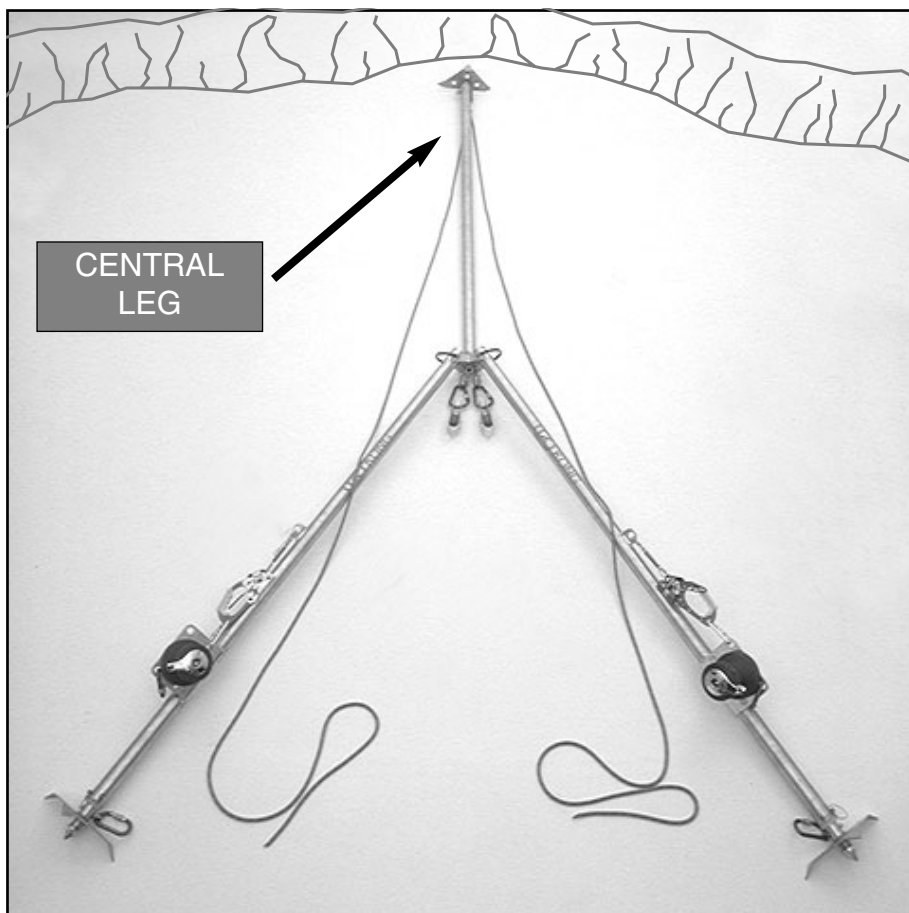
The Cevedale rescue stand has been designed and tested for dropping or lifting two persons at the same time; standard weight: 150 kg for each winch (factor of safety and inspection 1:10 under static conditions and 1:1.5 for the functionality).

The rescue stand can be used under the climatic conditions normally borne by the man, with static textile ropes, which are in conformity with the norm prEN 1891 and have an elongation factor type A, or in case of emergency with dynamic ropes always CE certified.

The static acceptance tests have been carried out by wrapping around the winch drum 5 rope turns.

The following assembling, placing and operating instructions concern the employment of the rescue stand in cracks, but the Cevedale rescue stand may as well be used in wells, crevices, ravines etc., where the dropping and recovering operations are exactly the same.

The user can operate the rescue stand only after self-insuring himself by his own means (not supplied with this device). These means shall be assigned to this specific function and in conformity with the specific national or European regulations.



Take the "Cevedale" rescue stand off its packing and lay it on the ground. Open it with the leg without the winch (the central one) towards the crack. Pull the double rope fastened below over the other two legs (fig. 2). We suggest to insert the rescue ropes already knotted.

FIG. 2

Lengthen the legs as required by unscrewing the threaded pin at the end of the pole holding the wing nut fast (fig. 3).

Slip the internal leg as long as required (fig. 4), mate the two holes and insert the threaded pin again.

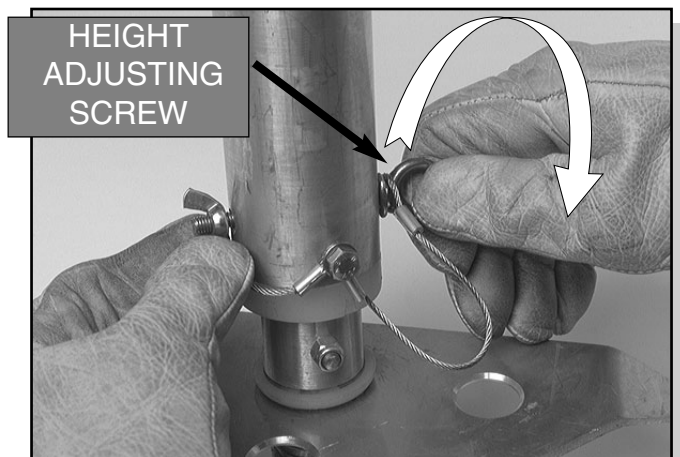


FIG. 3

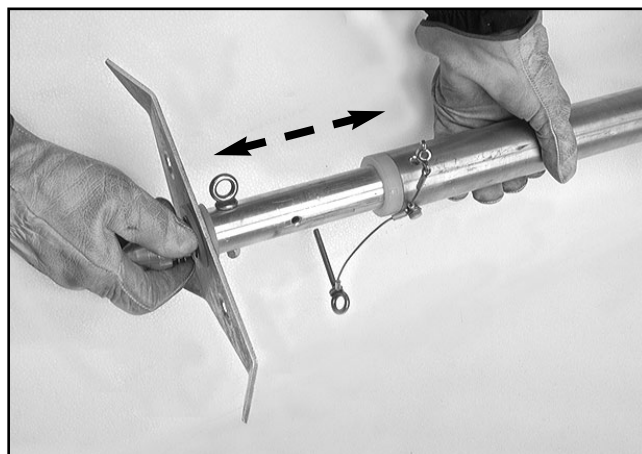


FIG. 4

As a general rule the elongation of the legs must correspond to the width of the crack plus about 50 cm. Two operators will lift the two poles with the winches and hold their rescue ropes (if inserted) (fig. 5), while a third operator keeps the central leg lifted, which is capsized back by the double rope fastened to the pole foot (fig. 6).



FIG. 5

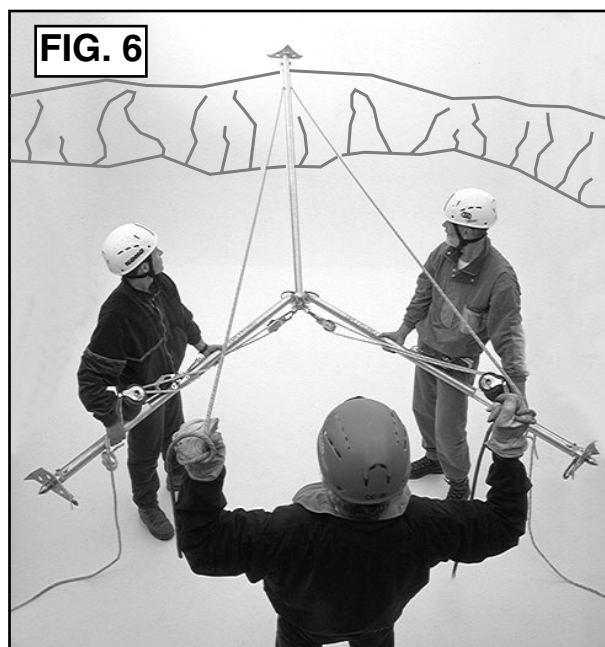


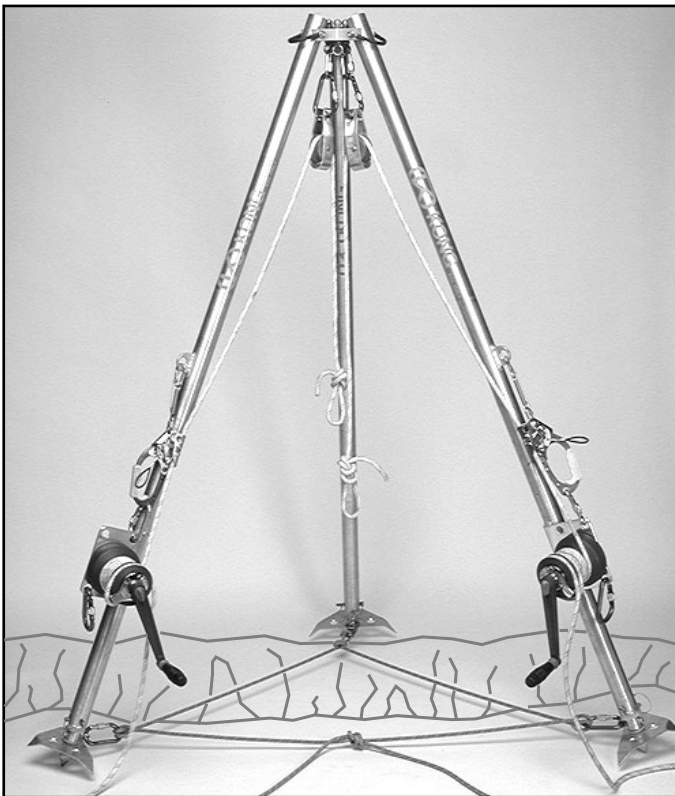
FIG. 6



Now the three men will move together towards the crack until the articulated joint stands out 30-40 cm over the crack. The third operator will drop the leg which is held by the rope on the opposite side of the crack. The foot should place itself at about 20-30 cm from the edge (fig. 7).

While the third operator holds the rope fastened to the foot firmly, the other two operators push upwards the other two legs, take them at 20-30 cm from the edge and place the feet in the ground. The distance between the feet must be approximately the same as the length of the leg itself.

FIG. 7



The right placement of the rescue stand is shown in figure 8, with the legs wide apart forming an angle of about 60°.

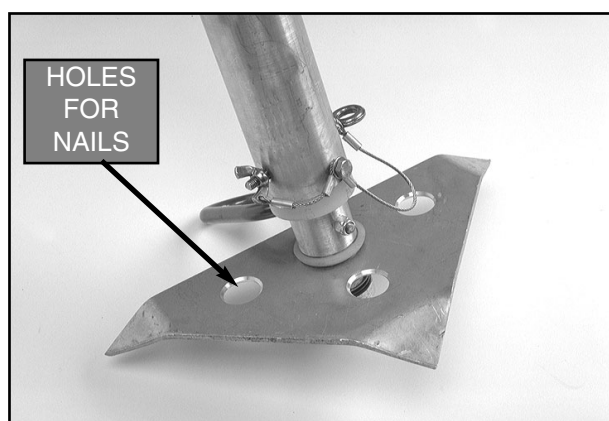
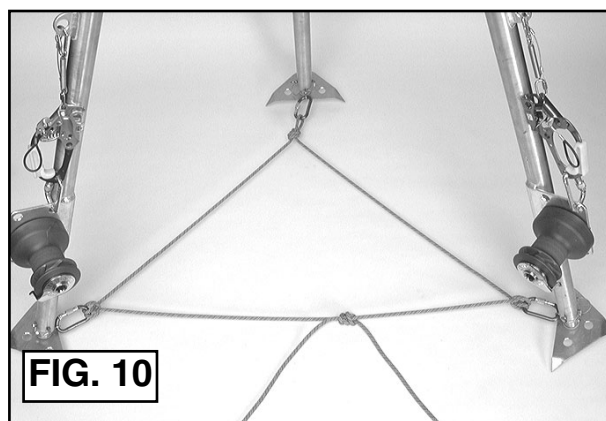
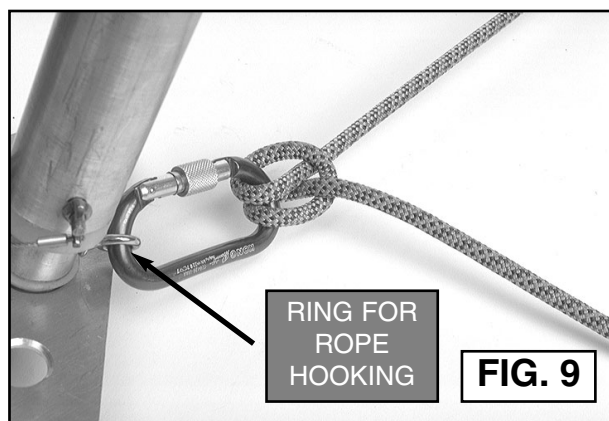
A wider angle is OK as well (never wider than 90° anyway), so it is not recommended to use this rescue stand for cracks which are wider than 3.5 m.

For wider cracks use the overhanging assembling systems or the "Stelvio" fishing pole.

NOTE: The steps described above are standard steps. Obviously the environmental and distinctive features of the ground can force the rescuers to choose different ways of placing the rescue stand according to their experience, e.g. lengthening the legs asymmetrically.

FIG. 8

Now tie up the two ends of the rope held by the third operator to the connectors which are fastened to the foot of the two poles (fig. 9), remembering to knot also the two ends together, thus preventing the legs from opening wide while the rescue stand is on load (fig. 10).



A special care for the seat of the feet in the ground is recommended. If necessary, dig proper housings with a hatchet (not supplied), so that the plates lay flat on the ground. If necessary and possible, lock them by inserting proper nails (not supplied) through the holes in the plates (fig. 11).

FIG. 11

DROPPING OPERATION



After checking the correct placement and the stability of the rescue stand insert the hand levers in the winch by rotating the little lever at the top of the handle to mate the safety board (fig. 12). To take them off work backwards.

FIG. 12



FIG. 13



FIG. 14

Open the ascender teeth wide (fig. 13), insert the dropping rope and then close it (fig. 14). Now the rescuer can hook himself to the rope eyelet and lay bodily on it; the rope will be held firm by the ascender.

Wind two or more rope turns around the winch drum (depending on the hanging load). Now hold the rope firmly, recover one or two centimetres rope through the hand lever to unlock the ascender and begin the dropping by keeping the ascender safety teeth open through the cable with a hand and letting the rope slip in the other hand.

NOTE: Do not open the ascender teeth by fully unlock the safety lever (fig. 15). Do not put your finger into the cable eyelet (fig. 16). During the dropping the safety teeth must be kept lifted through the opening cable by using two fingers only, so that it can be immediately released if necessary (fig. 17).



FIG. 15

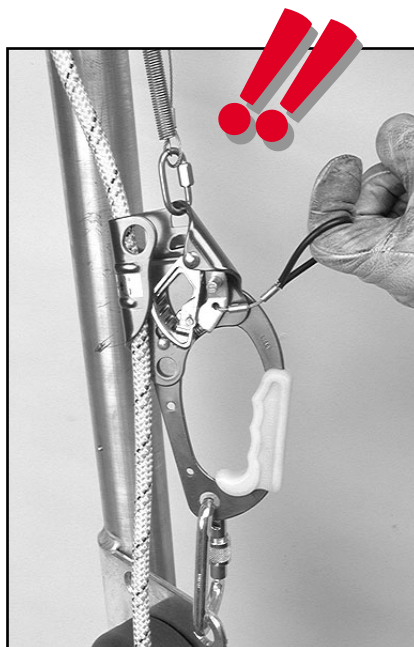


FIG. 16



FIG. 17



The dropping operation is carried out by slipping the rope on the drum. The dropping speed depends on the number of the rope turns on the drum and on the tension of the rope (fig. 18). We suggest the use of gloves.

FIG. 18

RECOVERY OPERATION

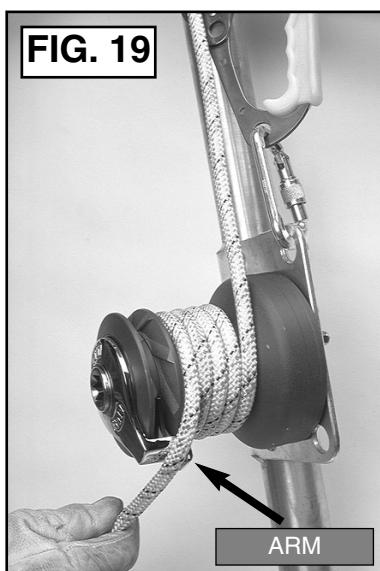


FIG. 19

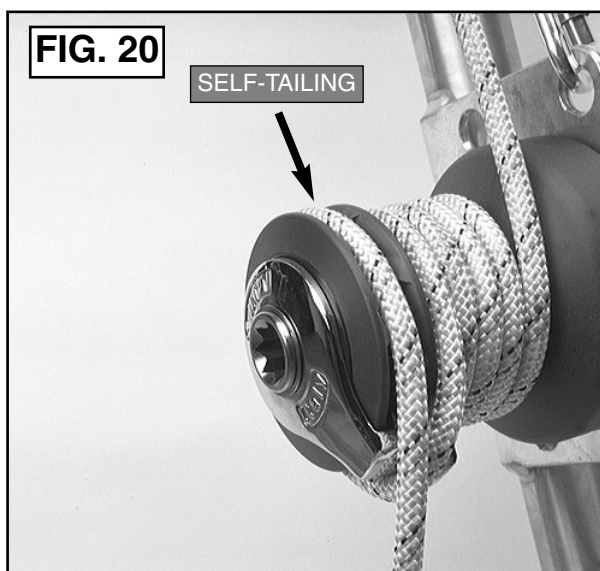


FIG. 20

Wind the rope around the winch drum (at least 4 turns), then pass it on the arm (fig. 19) and insert it in the self-tailing. The rope must make a full turn in it (fig. 20).

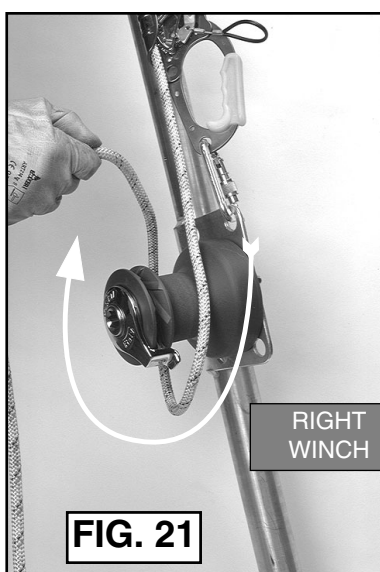


FIG. 21



FIG. 22

NOTE: On the right winch the rope must be placed in front (towards the operator) and slipped behind the drum (fig. 21), while on the left winch it must be placed behind (towards the inside of the rescue stand) and slipped in front towards the operator (fig. 22).

While an operator guides and slightly stretches the rope coming out of the self-tailing making sure it does not tangle nor is trampled on, another operator operates the hand lever for the recovery by rotating it clockwise or counterclockwise depending on the load to be lifted and/or on the strength of the operator.

As described above, the "Cevedale" rescue stand can be used also on very wide cracks. In this case it must be assembled so as to overhang. Figure 23 shows a possible way of placing the rescue stand, with the lengthened central leg leaning against the wall. Figures 24 and 25 show another way of placing the rescue stand, without central leg. This is an "emergency" use of the rescue stand. As a matter of fact, in case of overhanging recovery operations it is better to use the "Stelvio" fishing pole (supplied by Kong S.p.A. as well), which should be specified for such applications.

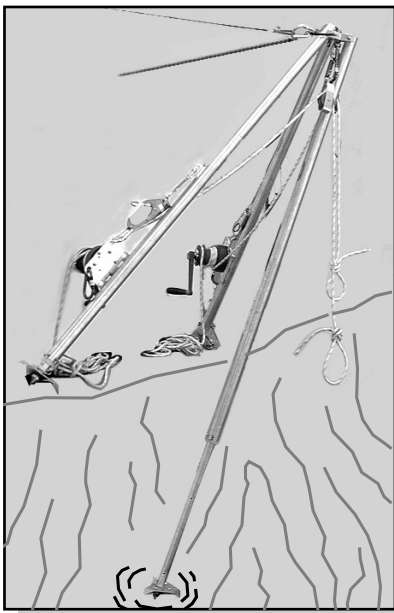


FIG. 23

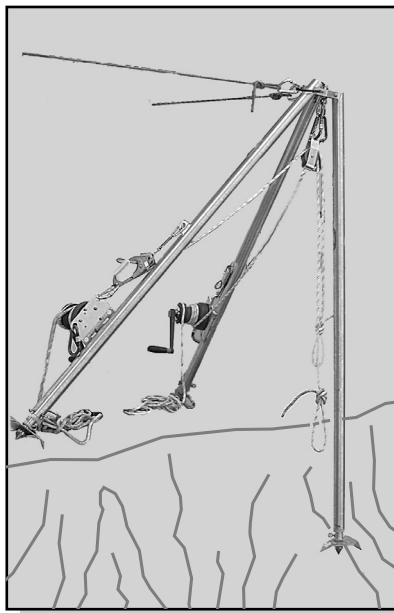


FIG. 24

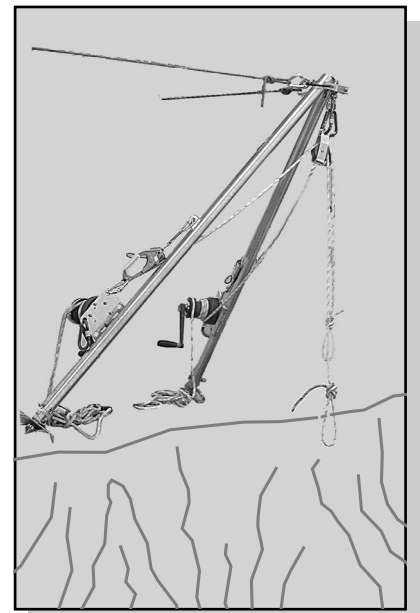


FIG. 25

NOTE: The placement and the locking of the rescue stand in this situation require great experience and must therefore be carried out by a very expert and trained rescue team.

The initial placement of the rescue stand and the placement of the anchoring points for the stretching and fastening ropes (not supplied) must be carefully thought over, carried out, tried and tried again many times to assure the perfect stability of the rescue stand when it is on load.