VICTORIA.

The Ski Lift

By Colin Wyatt.

The last two winters in Europe have seen the introduction of a new mechanical means of ascent for the ski-runner, the ski lift. This contrivance is by far the simplest and cheapest yet devised, to construct, to run, and from the passenger's point of view, and should be especially well adapted to Australian conditions. The principle is that of the endless chain, and the construction is as follows. At the top and bottom of the chosen slope, which need not be of an even gradient, two sheds are built, the top one housing a vast cylindrical drum some 14 ft. high and 7 feet diameter, round the top of which, in a groove, passes the endless cable; the drum must be there to prevent the hooks fouling. The lower shed houses a similar drum and the engine and controls which are very simple; usually electric power is used and sufficient power should easily be obtained in the Victorian and New South Wales mountains. Between the two drums a double line of pylons is erected, in pairs, facing each other at a distance of eight feet and about a hundred feet from the preceding pair. These pylons, of a very light metal or wooden construction, bear wheels which carry the one-inch steel cable. From this cable depend specially shaped "hooks" attached to it by two wires, the first vertically down from the cable, the second running up forward to the cable at an angle of some 30 deg. Both take the strain equally, but the second wire is necessary to keep the hook from swinging backwards and forwards and to steady it when passing round the drum.

The hook is an L-shaped tubular metal bar about two inches in diameter, with the inside edge flattened. The wires are attached to the apex of the upright bar by a powerful spring. The horizontal bar acts as a support; it cannot be called a seat, for one does not sit upon it but merely leans against it for support as one leans against a fence. The sticks are carried in the left hand and the right hand grasps the upright of the L, though it can easily be ridden without holding on. The left-hand row of pylons takes the up wire and the right the down.

The method of use is as follows: the skier buys a book of 12 tickets for 10/-, and passes through a turnstile, on ski, into the starting enclosure. He then stands in the track under the up-wire, facing up-hill, with one foot advanced to take the pull. As the hook comes round the drum the attendant pulls it down and walks quickly forward and places it under the seat of the runner, who holds on to the upright, with his right hand. The spring on the wires takes up the starting shock so that one has time to hold back the hook for comfortable adjustment for a fraction of a second and brace the body for the increasing pull if need be walking forward at the same time. Then the full pull comes and one is gliding steadily up the slope at about four miles an hour. Should one by any chance drop a stick or fall off, the hook is pulled clear over one's back by the spring. If the hook should catch in a piece of clothing the attendant can stop the chain instantly. Thus the skier can take his 10,000 ft. of running before lunch without ever taking his ski off or having to battle his way into a funicular with other people's ski jabbing him in the back. A second attendant is at the top to assist if necessary, but it is quite impossible for a runner to get taken round the drum since a special horizontal "landing" is cut into the slope so that, if the runner cannot pull the hook from under him in time, he runs into this flat area, whereupon the hook is gently but firmly pulled up over his back and clear of him by the tension of the spring. It must be remembered that the hook is not sat upon but leant against.

Since the skier slides and is pulled over the ground by the hook, and is not carried bodily, comparatively little power is required to operate the "lift". A continual chain taking runners up the hill at a rate of five a minute with a staff of four, two attendants, a ticket collector and an engineer, is a godsend to skiers, and even at a shilling a run becomes a very paying proposition. The lift installed at Suvretta in Switzerland last winter more than paid for itself in its first season. No special track has to be cut, since the spring takes up inequalities, and in the Suvretta lift two roads are crossed at right angles which are cut across a 25 deg. slope.