from the Section Manager, who was to accompany us underground, that the skip was ready to descend left no time for wavering. In starchy white jacket and trousers, hob-nailed boots, and sturdy helmet with battery lamp attached, we were the last to squeeze into the skip and the dark, eerie descent down the shaft began.

By law each mine has two shafts linked together underground so that two exits and proper ventilation are always available. Each shaft divides into six compartments: two for transporting men and materials, two for hauling out the ore, one for ventilation, and a conduit for power cables, telephone wires, compressed air ducts, and water pipes. Workmen ride in a triple-decker "cage" that can hoist and lower 65 men at a time.

Constructing the mine shafts represents about a quarter of the capital outlay needed to open a mine, thus there is a race to excavate the shaft in the shortest possible time so that the investment can start paying off. It is an ever-quickening pace. In 1897 it took a month to sink a shaft 164 feet; this year shafts were sunk at the rate of 1118 feet a month.

Tunnelled Maze

At the depth of a mile the skip comes to a halt, discharging us at the center of a subterranean hive of tunnels. Tunnels have been excavated at many levels leading to the plane of the reef. Turning off at right angles, other tunnels run along the reef face. Thus the reef is separated into large blocks by a crosshatching system. Still more tunnels—these steeply inclined, link the different levels into one huge network.

From the shaft station we walk through an archway hewn out of solid rock. We come to a railway platform where a pint-sized electric shuttle train takes a gang of laborers and us aboard. The string of little cars carries us to the furthermost forward station, from which we have to go the rest of the way on foot. We slosh through damp, clayey passages until we join a cluster of Bantu miners waiting at an assembly area for their "boss boy" and their foreman. The "boss boy" is a Native miner in charge of a crew. The foreman is in over-all charge. He arrives carrying a small steel hammer. A wire gate leading to the "working areas" is unlocked and we all go forward.

At frequent intervals the foreman taps the sides and roof of the tunnel with his hammer. He is testing for danger spots, where there is a possibility of falling rock. If he hears a hollow sound in response to his tapping, he chalks a wide circle. A safety crew follows and "sews up" the trouble spots by driving long iron "reinforcing" pins into the rock.

Mining Team Work

The roar of pneumatic drills reverberates from the stopes — the low-roofed niches where the actual digging goes on. At the top of a little incline, four miners crouched in the cramped stope work as a team: a foreman, a driller, his assistant, and a "wash-boy." The driller, a lean, wiry Native wearing a burlap loincloth, ankle boots, leather shinguards, and a stout helmet bores into the mass of quartz and pyrites rock with a four-foot long iron tungsten-tipped drill. His husky Bantu helper, similarly clad, fixes the point of the jack-hammer drill on an indicated spot, steps back to prop his feet against the vibrating drill handle, and, along with the driller, guides the throbbing apparatus. A steady stream of water pours from the hose to cool the tungsten tip and keep the rock dust down. It takes four minutes for the iron rod to bite three and a half feet into the rugged rock. Perspiration rolls from the bodies of the men. When they have finished, there is an abrupt vacuum of silence. Then comes the echo—the "talking" sounds of settling rock. The drill bit has to be wrenched back out of the rock with strong pliers. Into these drilled