



## **Ross Chatfield**

as told to Sue Britt

On April Fools' Day, 1976, Ross Chatfield came to Coober Pedy, and "it's been significant ever since." He left his stressful workshop supervisor position in a truck repair garage, borrowed money and bought Ivan Tomak's workshop. It then became Outback Agencies, expanding into spare parts as well as engineering. Coober Pedy was booming with a population of 5000. Ross worked 14 hours a day. The blower was by then the preferred mining method. Engines, pulleys and belts were sourced from Adelaide. Ross specialised in making a more efficient blower by experimenting with different fan designs and hopper sizes and configurations so they would suck quicker and over greater distances. He also changed the design of the hub, making it easier to remove the fan assembly from the shaft for maintenance and repairs.

Ross was particularly known for his fan assemblies. Different combinations of engines, fan sizes and shapes led to greater suction. Ross's single fan assembly had bigger air passages which improved performance. He developed a twin fan by welding a second fan onto the first, further increasing output. Then he made a two-stage fan. The second fan sucked air from the first fan. They were connected by pipework. This design increased the suction a lot.

Ross built a double fan for Phillip Kruse who mounted it on his truck chassis using the truck motor to drive the fan assembly. When he wanted to move to a new location, he removed it from the chassis, fitted the tipper body back on the truck and loaded the blower into the tip truck, hopper and all. Phillip used this blower around the Kalgoorlie area and Claremont QLD, gold mining. The huge advantage was mobility. He dug down 186 feet and worked at that level and then drove a 60 degree decline for 100 feet. The blower was still pulling hard rock but water and mud, sucked up previously, became a problem so they would then go back up and start another decline. The total length the unit was sucking was 330 feet (100+m), most of it vertical.

Murray Millwood uses one of Ross's twin fans at Marble Bar in WA. This unit uses a V12 Mercedes engine, originally 900hp but de-rated to 600hp. The 41-inch fan was originally set up to run at 3600 rpm but the suction was too great for the type of mining Murray was doing so the speed was reduced to 2500rpm. This was a two-stage fan assembly. This blower is currently working to a depth of 45m sucking out hard rock.

Lindsay McFarlane had a blower with a twin fan and 280 feet of pipe. He used it for opal mining and dugout work. At the distance of 280 feet, about 90m, his tunnelling machine was still cutting 7 feet per hour. That was an impressive volume of material for a blower to shift. Sid Absalom once tunnelled 26 feet in an hour and half. He was mining underground and had finished off the area he was in. Up top he had a blower with one of Ross's twin fans. Rather than lift the tunnelling machine out, he tunnelled straight through, over 26foot, to a shaft they'd previously drilled. It was "softish" ground.

