

along that ditch. The only means of carrying the pipe into the desert was by rail, and therefore I decided to dig the ditch alongside the railway-line. Once the pipe was distributed along the ditch, it must be laid in the ditch, jointed together, and buried before water could be pumped through it. The desert was white with groups of Bedouins driving their goats and camels towards the safety of the Nile Delta away from the invading Italians, and in a week I had a couple of thousand of them swinging their picks and shovels on the job. They were shepherds by profession, and it was their first attempt at western manual labour. They proved poor workmen, but made up in numbers what they lacked in skill. By November, 1940, our 100-mile pipe project was nearing completion. We were already pumping water through the easternmost sections of our pipe, much to the delectation of the local Bedouins, who moved their tented camps to the pipe-line to take advantage of leaking joints. They often used to coax a joint to leak with a railway spike or a nail, but we had one recurrent trouble which was more than mere Bedouin pilfering of water. Night after night I used to find a certain air-valve smashed and a column of water spurting 40 ft. in the air. This was sabotage by some enemy agent. One of my subalterns and myself lay hidden one dawn to catch the saboteur. As we lay there the light grew quickly. The swell of land behind the pipe-line stood out clear-cut. Suddenly three figures were standing on it dressed like Bedouins. Boldly they threaded their way among the tussocks to the air-valve—stood over it. My rifle bullet got one through the chest as he raised a hammer to smash the valve. The second went down with my bullet between the shoulder blades even as he began to run. My subaltern and I both missed the third as he raced madly for cover. That third man escaped, but the other two lay dead. We left them there as an example to the rest.

The Army of the Nile gradually grew into the powerful Eighth Army; a force of some 8,000 men grew into an army of more than 100,000; the enemy

was driven back across the Egyptian border and my water system kept pace with the growth of the army. By the spring of 1942 I had 600 miles of main pipe-line. On the Nile Delta I had built great filtration plants. Two million gallons of Nile water was being filtered daily and pumped westwards 600 miles right into the conquered portion of Italian Libya. Numberless branch lines carried filtered water into all sections of the Western Desert, and by now I had a force of 5,000 men under me, working on water-supply. It was the greatest water scheme ever conceived to nourish an army at war. And the British Eighth Army was the best-watered army in the history of desert war. The Eighth Army man was outraged if he did not receive his daily gallon. In June, 1942, the Eighth Army suffered the disastrous defeat of Knightsbridge, lost many men, most of its tanks and guns, and was forced to retreat 500 miles to the El Alamein positions. To the water-bloke of the Army this involved blowing up 500 miles of pipe-line which during the last two years we had constructed with so much sweat and toil. We blew that up. Under each low spot we placed a charge of high explosive so as to drain it and deny to the enemy the water that lay in it. Because a full pipe-line of eight inches diameter and 500 miles in length holds many millions of gallons, enough water to allow the enemy to pursue us in comfort, we drained that pipe-line of water so efficiently that the enemy pursued us with a thirst that rose each day of the pursuit. Along the water system, too, were twenty-four pumping-stations, twenty-four systems of underground reservoirs for water storage. Somehow in the rush and clamour of that retreat we managed to get our pumping sets out of the pumping-stations, loaded them on any empty vehicle that offered and got them safely to the rear. We drained the reservoirs and threw into them bone oil, a stinking liquid distilled from waste bone.

At last the remnants of the Eighth Army rolled behind the prepared El Alamein line of defence, the Afrika Korps in hot pursuit. The enemy