

Black Flag condenser, c1895



Description

This is a sepia photograph, measuring 15 cm x 20 cm, showing nine men at a condenser near Black Flag gold mine and townsite about 30 km north-west of Kalgoorlie, Western Australia, around 1895. At least some of the men are members of a prospecting team and they have three camels to carry their gear and themselves. One of the camels has water containers strapped to it. The foreground is bare sand and scrubby bushes can be seen in the surrounding country. Written on the picture are the words 'SMITH and WATSON'S "BLACK FLAG CONDENSER"'.

Educational value

- This asset depicts a method of obtaining water on the gold fields - there were no permanent sources of fresh water and prospectors rushing to seek fortunes in the 1890s had to rely on gnammas (holes in the granite rocks that collected water), on natural soaks where water accumulated in the soil and on distillation of saline water from lakes or underground; this photograph shows a very simple system of condensing water at a salt lake; the saline water is boiled and the steam collected and directed through pipes into the large galvanised iron tanks where it condenses into potable water; too many condensers working the same salt lake caused the water level in the ground to fall, making it difficult to obtain salt water for processing.
- It is typical of water supply in small mining settlements in Western Australia's arid eastern gold fields at the time of the 1890s gold rushes - this photograph was taken three years after gold was discovered in the Coolgardie region; such 'condenser' plants were established by commercial operators if substantial numbers of people came to live at the site of a find; this one was owned and operated by a Mr Smith and a Mr Watson; smaller portable condensers allowed men to remain safely out in the field away from mining centres, as long as enough salt water was available to condense.



Categories: Early Water Supplies

- It shows camels carrying water in large tanks strapped to their sides - camels were the means by which water was distributed to remote gold fields since they could carry heavy loads (every 1,000 L of water weighs a tonne); the soft pads on their feet allowed them to move easily over the extensive sand plains in the arid gold fields and they could live off the native vegetation; they could also travel long distances without consuming the very water they carried; however, one prospector complained his camels drank more condensed water than any other type of water but when water was cheap they weren't thirsty!.
- It shows an example of a condenser that features in a first-hand account of the time - New Zealand prospector John Aspinall passed through Black Flag in August 1895, and stopped at this condenser; he recorded in his diary, 'had a taste of condensed water again and recognised the old smoky taste familiar in earlier experiences in Coolgardie'; he described condensers as 'usually consist [ing] of two square 200-gallon [910-L] iron tanks built with a sort of oven underneath. A pipe 5 or 6 inches [12.5-15 cm] in diameter and about 60 feet [18.3 m] long leads from each tank, being doubled back with a bend so that the end comes back close to the tank. The steam gets cooled going along the pipe and the water drips from the pipe into a galvanised iron tank'.
- It is at Black Flag, which was both a town and a mine - its gold was discovered in 1894 after rain allowed prospectors to venture beyond the immediate surrounds of Coolgardie and Kalgoorlie; 1894 and 1895 were years of exploration with parties radiating out from these centres and many embryo towns were established; according to an 1895 first-hand account, Black Flag derived its name 'from a flag that was hung up as a sign for a store'; like a condenser, a shop was a quickly established commercial enterprise.
- It is typical of scenes witnessed by Premier John Forrest in 1895, moving him to insist the Government solve the problem of water shortages in the gold fields - John Forrest visited Black Flag during a 1,600-km tour of the gold fields in November 1895; he received deputations from local inhabitants and came away with the appreciation that chief among their wants was a reliable fresh water supply; the Coolgardie Water Supply pipeline, which opened in 1903, was as much due to his political influence as Engineer-in-Chief C Y O'Connor's design.
- It displays some of the imported equipment required for the condensing plant - the corrugated iron water tanks and pipes would have been brought in from the nearest rail head, probably by camel; the 400-gallon (1,514-L) tanks, measuring 1.2 m x 0.9 m, were loaded on camels, one each side, with pipes ready for assembly on the spot; the tanks are on 'stilts' made from poles cut from the local bush; the nearest rail head may have been up to 250 km away.
- It gives an indication of the environmental effects of condensing operations - the surrounding bush was often completely cleared for poles and fuel, contributing to dust storms and erosion; in the centre of the photograph are traces of smoke from the furnace that is fuelled by local timber; the water tanks and the iron pipes that convey the steam are also supported by poles and rails cut from the nearby bush.

Copyright Reproduced courtesy of Battye Library

Creator Roy (William Roy) Millar, photographer, c1895

Identifier Battye Library number 008949D

Source National Trust of Australia (Western Australia) <http://valuingheritage.com.au/>



Categories: Early Water Supplies