The race is then blocked some twenty yards below its head and the water overflows the sides until the obstruction is removed.

The pressure of water from the telescope is illustrated by the fact that when the nozzle is elevated a 300 ft. arc is possible. Twenty-three men could be profitably employed in the claim. At present five are working it. Still, over the past eighteen months an average of over 100 oz. a month has been collected. This is fine gold ranging in the scale of purity from 989 to 1,000 fine. Other golds average about 950. This is considered a satisfactory return, as the sluice moves only about 100 yards of spoil an hour.

It's hard work, but it's enthralling, especially when the yield is good. Even the claim manager, who has chased gold since 1898 and who refers to those who seek it as " mugs " and " suckers," would find it difficult to give up the chase even so late in life. There is still a gleam in his eye as, peering and blowing into the bottom of his old copper pan, he spots the dull colours.

Dredging

They tell a story on the Coast of an inquisitive tourist who asked where the Pancake Rocks at Punakaiki came from. A Coaster replied that the glacier brought them. Rising neatly to the bait, the tourist exclaimed, " Where's the glacier now ? " " Gone back to get some more ! " shot back the Coaster.

But the inhabitants are easier on the visitors who inquire the reason for the huge heaps of stones that are often seen when travelling through the country districts of the Coast. The non-committal and unqualified reply " Tailings " is not very enlightening, so the Coaster will go on to explain that these " tailings " are the spoil left after an alluvial dredge has worked over gold-bearing ground. These great piles, up to 60 ft. high, cover acres of land and are furrowed as though they had been worked with a huge plough. Desolate grey mounds, occasionally coloured with a red fungus, they are unsightly blots on the face of a green and bush-clad countryside—monuments to man's search for gold with modern machinery.

Alluvial gold is carried in a gravel " wash," and to free it the " wash " must be passed through some process which will separate the gold from the rubble. The main-spring of this process is water. Wash the gravel with water and the heavy gold will sink. The remaining sand and stone is cast aside as " tailings."

The old diggers in sluicing, left tailings beyond their race. Modern sluices with greater power leave behind a proportionately greater amount of spoil. But the huge gold-dredges treating thousands of yards of ground a day, leave behind them a huge hill of grey stones. Because much of the early sluicing was done in hills and creeks and terraces, these scars are not easily visible. The dredge works on flat or semi-flat land, and its despoliation is open for every one to see. If you've ever tried to put back in a slit trench or fox-hole the amount of spoil you took out of it (which isn't likely), you will understand the difficulty experienced in leaving the land level. Approximately one-third of the spoil remains over the surface.

Many of the locations now worked by the dredges were previously prospected by the early diggers (some were passed over), but where the early miners were looking for rich strikes and left alone land which would require too much capital to work, or would yield only small returns per yard treated, the dredge, because of the amount it handles can be run economically if it returns 6d. per yard.

Wooden dredges were first used in New Zealand by a Chinese in Central Otago many years ago and were most successful. They have since been developed, until to-day the modern steel dredges, electrically powered, weigh 3,000 tons and handle about 400 cubic feet of ground per minute. They look very like ordinary harbour or river dredges with huge buckets that bite deep into the earth, depositing the gravel inside the dredge for treatment and ejecting the spoil on a conveyer belt at the other end. They also float on the pond they dig. Where they are working above water-