C.—13.

In *Greek's* and *Duffer's Creeks* the auriferous wash being worked is, for the most part, such as might be considered under this head; but not wholly so, for there are workings at high levels on the side of the range towards Stony Creek and Fox's that show the "Old-man bottom" is being worked in that direction.

In the Kapitea Watershed the upper portions towards the Loop-line Road on the one hand, and the track from Whiskey Creek, on the Kawaka, to Greek's on the other, have been but little explored, and certainly not sufficiently prospected, and it is not till nearing the Greenstone-Hokitika Road that distinct alluvia, due to the present action of the stream, begin to be met with in the main stream or in Little Kapitea Creek. At Italian Gully and Callaghan Hill, the gold-workings, whatever they may have been, are not now in modern creek-gravels. Following down Kapitea Creek, considerable areas of worked ground are met with, showing the former importance of mining in the modern gravels and bed of this stream.

On the south side of the Teremakau Valley, regard must be had to the workings in the

On the south side of the Teremakau Valley, regard must be had to the workings in the Seven-mile Creek, Scot's Creek, and some other creeks within the Taipo Valley, a tributary of the Teremakau. Neither the Little nor the Big Wahinuinui proved gold-bearing—at least, not sufficiently so as to attract a mining population—and this may be said also of all the recent alluvial deposits in

the Teremakau Valley above the Taipo Junction.

In Donegal Creek, a quarter of a mile on the Kumara side of the junction of the road thence with the Christchurch-Hokitika Road, gold-workings were for a considerable time carried on in creek-wash derived from glacier débris, and "Old-man bottom," showing in the banks of the stream. These workings were not in gravels brought down by the Teremakau itself, the gravels of which apparently remain barren of gold till passing opposite Dillmanstown, and at the junction of the Greenstone.

On the south-western bank of the Teremakau, between Kumara and the mouth of the river, there is a considerable extent of bush-clad plain, gradually sloping towards the sea. As the Teremakau has cut its way to the sea at a considerably lower level than this plain, though the surface of it may be recent gravels, the high level prevents them being considered under this head, except it be some reconstructions of the gravels along the banks of the lower part of Hughie's Creek. On the northern side of the Teremakau Valley there are no gold-workings east of the west margin of the granite mountains at the source of the Big Hohonu or Greenstone River. In the Greenstone Valley, a quarter to half a mile wide, the low banks have been worked for gold from the junction with the Teremakau to Maori Point and Harrison's Terrace, and in some of its tributaries like workings have been, as, for instance, Little Fuchsia Creek. Workings are now carried on for the most part at higher levels.

In the New River Watershed the recent alluvia of almost every creek have been worked for gold, and of the Rutherglen district, within the watershed of Saltwater Creek, the same thing may be said. The various lesser streams and gully-creeks need not, therefore, be here more closely

described.

In the Grey Valley, below Brunnerton, there are no gold-workings in the low grounds along the river-banks. At the upper end of the Brunner Gorge there are workings on the banks of the river, and again at intervals gold has been obtained up to the junction of Ford's Creek and the Blackball Creek with the Grey River. At one place a considerable amount of plant has been erected for the working of the low-level river-gravels close under the terrace. In Langdon's, Ruby, and Nugget Creeks, and the beds of several other streams draining from the eastern slopes of the Mount Davy Range, the modern alluvia have been worked for gold since the earlier discoveries made in the Grey Valley, and, by a limited population of miners, are still being worked. In all of these creeks the wash and gold is in part derived from cements at the base of the coal-measures, but in greater part from the denudation of a narrow belt of gold-bearing slate and sandstone country, which, in a wedge-shaped area, is prolonged along the middle lower slope of the Mount Davy Range nearly to the right-hand branch of Ford's Creek.

the right-hand branch of Ford's Creek.

In Ford's Creek gold-workings have been carried on in both branches, and a large area on the south-west bank of the left branch has been worked, chiefly by Chinamen. No part of Ford's Creek drains from slate country, and none of its gravels are due to the action of the Grey River. Its gold is of such a quality that it cannot have had the same source as that found in the Blackball, and it remains, therefore, but to infer that the gold of Ford's Creek has been derived from the conglomerates at the base of the coal-bearing series, which, as a coarse breccia-conglomerate, has a large development within the watershed, and of which much detritus is mixed up with the

slaty portion of the gold-bearing wash.

In Blackball Creek all the wash of the valley may be considered recent. It is wholly derived from the slates and sandstones of the Maitai series, that form the neighbouring part of the Paparoa Range, and which within this watershed are impregnated with quartz reefs, some of which are of considerable dimensions. The inference usually made, that the gold comes from this reef, is thus evidently correct, as there are are no other than auriferous Maitai rocks in that part of the valley

where the chief workings are carried on.

In the valley of the Roaring Meg there is an alluvial flat near the source of the stream which is known to be gold-bearing; but in this very little work has been done up to the present time, it being thought necessary to bottom the alluvial deposits in the flat, where the ground is likely to be deep and wet. From a study of this during the past year, it appears that this upper basin of the Roaring Meg has at one time been a lake, which filled in to the level of the outlet, had then laid over the lacustrine deposit an overlaying stratum of river-shingle, which, resting on the false bottom of the lacustrine series, are the only gravels that are likely to be worth prospecting. As this area of unworked ground lies directly in the line of the Upper Blackball and Moonlight Diggings, and has derived its gravels from the same rocks (the Maitai series, impregnated with quartz reefs), it is fairly reasonable to expect within this workable deposits of gold. After the Meg leaves the ranges it