The balance of the Clyde Block is ridgy table-land, composed of high-level sandstone gravel lying over clay, varying in depth from a few inches to possibly 100 ft. or more.

There is direct evidence that this country is absolutely unsuitable for irrigation. It puddles readily where there is any top soil, grows rushes, and is so porous that it absorbs an unlimited quantity of water. This is clearly demonstrated on McArthur's farm, and is also proved by the seepage from the Alexandra Water-race.

Galloway Flat.

Where good soil from the higher levels has been deposited round the ends of the gullies, as is commonly the case in districts examined by me, irrigation is highly remunerative, but immediately the water extends beyond the limits of the good soil it disappears into the shingle. Irrigation has been carried on here for years; but, notwithstanding the strenuous exertions of Mr. Alexander Gunn, manager of Galloway Station, aided by a liberal water-supply, the area that is capable of being irrigated does not increase.

Tiger Hill, Lauder Block (III).

This area extends from Chatto Creek, along the foot of the Dunstan Range, to Dunstan Creek, near St. Bathan's, and thence along the Manuherikia River to Chatto Creek.

The fertile belt referred to as extending from Clyde along the Moutere faces continues along the whole length of the foothills to Dunstan Creek, varying in width from one to two miles or more. Of this, a considerable area is capable of cultivation without irrigation. This block contains a large area of land, approximately 35,000 acres, fit for irrigation, extending from a mile above Chatto Creek Railway-station to Cambrians, facing the Manuherikia River and Dunstan Creek.

The greater portion of this area is good agricultural land, composed of mica-schist with rich humus, and is admirably adapted for irrigation. About 4,000 acres of this block is already irrigated, particularly so from below Tinkers to near the railway-line at Spottis Creek, and from Drybread to the main road at Lauder. The benefits of irrigation, where applied with discretion, are certainly phenomenal, while, on the other hand, harmful results are noticeable from continual flooding and negligence.

There is a large area of flat land between Matakanui and Chatto Creek, commonly known as the Matakanui Flat, in addition to several table-lands situated between Thomson's and Lauder creeks, which, although apparently lending themselves well for irrigation, are unsuitable because of the absence of soil in some places and the poverty of the soil in other places, the subsoil being a cementy sandy gravel.

Mr. John Wilson, of Lauder, who has had such practical experience of irrigation, has lately constructed a race to one of these table-lands, with the intention of liberating the sludge from Tinkers diggings, for experimental purposes. The result of this experiment should be most interesting, inasmuch as it will demonstrate the effect of an abundant water-supply on poor land where the shingle is sufficiently impervious to permit the water to distribute itself before disappearing under the surface. The sludge from Tinkers contains a considerable amount of decomposed schist and humus, and should, unlike most tail-race deposits, have a beneficial effect. Should this experiment prove a success, similar treatment could be supplied to the Matakanui Flat. At the same time the fact must not be overlooked that the irrigation of this class of land is only practicable where an abundant supply of sludge-water can be obtained at a nominal cost, as at best such land is only fit for grazing purposes.

Ida Valley Block (IV).

This block commences at the Poolburn Gorge, and extends along the foot of Ruggedy Ridge to its junction with Rough Ridge, which it follows to above the Oturehua Railway-station. Thence it stretches to the mouth of the Idaburn Gorge, along the Naseby – St. Bathan's Road to Hill's Creek, following the foot of the Blackstone Hills Range to Poolburn Gorge, and comprising approximately 60,330 acres, of which area about 52,500 acres is fit for irrigation.

Almost the whole of the land on the southern side of the railway-line is admirably adapted for irrigation, a very large proportion being first-class agricultural land, which would undoubtedly become highly productive on the application of water. There is conclusive evidence that even the lighter soils here would respond well to irrigation, in some places to an almost incredible degree.

The local Irrigation Committee, composed exclusively of *bona fide* farmers, is so convinced of the suitability of its land for irrigation and the benefits to be derived therefrom, that it has submitted through its secretary, Mr. A. Armstrong, a proposal signed by fifty-eight farmers in Ida Valley, offering sums varying from 10s. to £2 a week per sluice-head of water for about a hundred heads for six months yearly. List herewith attached.

With better cultivation and the closer settlement which would consequently follow, no doubt a higher price could be paid for the water, of which a much larger quantity would in time be required, while the value of the land would be proportionately enhanced.

On the northern side of the railway-line the land is somewhat irregular, portions of it being shingle drift from the adjoining mountains, with a shallow covering of top soil of inferior quality.

The Hill's Creek end is at rather a high altitude (about 2,000 ft.) above sea-level, and inclined to be cold and sour. Along the foot of the Blackstone Hill Range, and extending towards Ida Valley Railway-station, the soil improves, and should no doubt benefit from irrigation.