On the 11th April, 1916, the shareholders of the Ross Goldfields Reconstructed (Limited), agreed to the voluntary winding-up of the company, being of opinion that the Ross Flat had, after exhaustive testing, proved valueless as a mining proposition, the sole cause of the company's failure being the low value of wash found in the mine.

Since the Cassius Claim was closed by influx of water in 1872 several costly attempts have been made to work the deep leads at Ross Flat, and the large sum of £234,100 has been expended in such attempts by the following companies: 1882—Ross Gold-mining Company, £30,000; 1885-87-Ross United Company, £97,000; 1907-11—Ross Goldfields (Limited), £51,928; 1911-16—Ross Goldfields Reconstructed (Limited), (two companies of that name), £35,173. The value of gold obtained by such companies was as follows: Ross United, £8,416, during six weeks' operations: Ross Goldfields (Limited), £1,928 from 10,336* trucks of wash, being 3s. 8½d. per truck; Ross Goldfields Reconstructed—to 31st December, 1914, £7,823, from 53,573 trucks of wash, being 2s. 10d. per truck; during 1915, £6,985, from 30,984 trucks of wash, being 4s. 6d. per truck; from 1st January to 15th April, 1916, £1,530, from 7,473 trucks of wash, being 4s. 1d. per truck.

Prior to the inundation and stoppage of the earlier claims during 1872, the returns from the deepmining operations at Ross Flat are incomplete, but it was officially recorded at the time that from the Morning Star, Excelsior, and Cassius Claims £43,865 was obtained during a very brief period.

The whole of the operations at Ross since 1907 were confined to extending the Ross United and Cassius workings at from 161 ft. to 191 ft. below high-water level; no attempt was made to reach the main bottom, which the Ross United shaft, although carried by that company to a depth of 265 ft. below high-water level, had failed to do. Notwithstanding this, however, there exists no reason to believe that the Ross deep leads will ever pay to work, owing, chiefly, to the high cost of pumping. The quantity of water dealt with during recent operations varied between 1,700 and 2,200 gallons per minute. Owing to the nature of the leads, and the capacity of the plant, only a small daily output of wash was possible. A great deal of capital was lost on account of the unreliability of the hydro-electric pumping and transmission plant, which failed frequently during the earlier operations.

In his final report to the directors of the company, dated the 23rd March, 1916, Mr. K. M. Barrance,

mining superintendent, stated as follows:

"Development under Jones's Flat: The east drive off No. 2 shoot, which last year had advanced 350 ft., has been continued right under Cassius workings, and is now well under that area of Jones's Flat worked from the Morning Star shaft towards the Excelsion lease. Beyond disclosing—between 450 ft. and 700 ft. east of No. 2 shoot—an area of brown heavy pay-wash, about 200 ft. long by 80 ft. wide and 4 ft. 6 in. deep, there was no ground opened up which would pay a company to operate. The values met with after this run of pay-wash was confined to a depth of 2 ft., and were neither so good nor so consistent. For the last 300 ft. the wash has been low-grade in this direction. After passing the payable wash the underlying bottom continued to rise about 3 ft. 6 in. every 100 ft., and there is evidence at No. 19 North drive that the area of blue wash is only 120 ft. wide. At both ends of this drive the terrace-bottom rises up almost abruptly, possibly forming on the surface those low-grade terraces on either side of Jones's Flat which are commonly spoken of now as the "old man bottom." It appears very evident from the position and vertical depth of the east drive that the sumps of both the Morning Star and drainage shafts must have been very close to if not actually in this bottom, and therefore one can discredit the theory of a layer of pay-wash below their lowest workings.

"Other developments undertaken included four test rises above the main east drive, and the

extension of an east drive off No. 17 north drive for 48 ft. No pay-wash was encountered in either

case.
"The north-west extension on the Ross United lead was followed by driving for 245 ft. from No. 3 shoot at a lower level than the driving off No. 2 shoot. The values in the blocking around this drive showed that they were confined to a depth of 2 ft. over a width of 35 ft. As the wash at the end was only just payable and had a tendency to dip underfoot the drive was not persisted with.

"Pay-wash reserves: There are no reserves beyond a few pillars, which will be taken out during

the next week.

"Transmission-line: During the year about a dozen interruptions have occurred through faulty

insulators, but to no serious extent has this interfered with continuous mining operations.

"Power-station at Kanieri Forks: The power plant has continued to be equal to the demands required of it, and with a total cost of ¹/₁₀d. per kilowatt-hour compared favourably with larger installations."

Otago and Southland.

The past year has been unfavourable for this class of mining, owing to the prolonged periods of dry weather experienced in parts of the district, and an absence of heavy falls of snow in the high country, upon which most of the claimholders depend for supply of water to carry them over the early summer months.

At the claim of the Gabriel's Gully Sluicing Company, Lawrence, three elevators have been kept steadily at work treating tailings from the Blue Spur cement-deposit with satisfactory results. In places the tailing is 90 ft. in depth. The amount available for treatment is fairly extensive. Twentytwo men are employed. Gold to the value of £7,548 was won during the year, and dividends to the amount of £3,472 were paid.

^{*} The mine trucks are of ten cubic feet capacity, and it is estimated that four trucks represent one cubic yard of solid gravel, but only about one-third of the gravel and boulders mined was considered as worth trucking and sending to the surface.