H.—9.

## NEW DISCOVERIES.

v.

There is nothing very remarkable to record under this heading, no new gold fields having been discovered, or proclaimed during the past year. I note, however, a few remarks in the

Wardens' reports which are worthy of attention.

Mr. Warden Fraser, of the Thames, directs attention to a fact almost unique in the annals of quartz mining. He remarks,—"Embedded in the mullock, of which the lode was composed, were found large flakes of apparently pure gold, some of which were about three inches square and three-quarters of an inch thick, and others smaller. There was a large deposit of this stuff found, in all about 500 oz. It required no other treatment than melting in the crucible, losing only 41 per cent., the remainder being gold. These flakes were not, I may remark, of the usual consistence of melted metal; they looked rather as if the particles of gold in the lode were sufficiently fused to make them adhere together, but they could be separated with little force. Since that time the prospects of the mine have improved. Other deposits of this singular composition have been found, although not in such large quantities as that to which I have referred; and in addition to this, the general crushing stuff from the lode yields on an average 21 ounces to the ton."

Mr. Warden Whitehorn, when speaking of Queen Charlotte Sound, in the Province of Marlborough, says,—"Nothing has been done here. The district appears to be rich in minerals. Antimony in large quantities has been found, of a very good quality. Plumbago also exists, but the quality of that at present known is not very good, though I believe only the

surface has been tried."

Mr. Warden Broad, of Reefton, in reference to his district, remarks as follows:--" In previous reports I have alluded to the discovery of antimony, coal, iron, lime, clay, lignite, &c. To these I may now add marble, concerning which Mr. Theodore Ranft furnishes me with the annexed report: 'The marble of this district is of three different kinds. The best quality is principally of a coral formation, of a grey-blue with white veins, and capable of a high polish. Its extent I have proved over a distance of three-quarters of a mile, where it is overlaid by a newer formation. The stratum is divided into a number of beds, varying from six inches to as many feet, and the total thickness is over 30 feet. It is situated between Lankey's and Garvey's Creeks. The next in quality is situated about a mile and a half further north, and is of vaster extent. It is of a brown-blue ground, with white bands intervening. The organic formation differs from the former in its having less coral, and molluscs are more prominent. The third quality is situated on the Waitahu, is of a deep black, beautifully interwoven with white veins. In structure it is the most massive, blocks of 50 cubic feet being easily obtainable without the slightest joint. It is not so crystalline as the first-named, but is capable of a good polish. In organic structure it differs from the second quality by being principally of molluse origin, and enclosing but little coral in proportion to the first quality. All three marbles would be invaluable for ornamental and architectural purposes if there existed a reasonable means of transport to the seaboard. The natural access is good, and an outlay of £100 would enable wagons to load on the site. In the same formation there is a large deposit of calcspar and selenite, easily convertible into lime and

At Waipori, in the Tuapeka district, a deep lear has been found, running across two spurs, of a highly auriferous character, and which promises to continue as a feeder of the main lead running through the Waipori Flat, in which the Government are now cutting up a sludge channel, on the false bottom. This work is being executed under the provisions of "The Public Works and Immigration Act, 1870."

## WATER SUPPLY UPON THE GOLD FIELDS.

In the last table appended to this report will be found the amount of money expended for water supply under the Public Works and Immigration, Acts, 1870, 1871, 1872, and 1873. It will be seen that four companies are paying interest on the subsidies obtained, while the Hohonu Company, in Westland, have refunded a portion of the capital advanced.

Table 26 shows that the expenditure and the liabilities for survey, construction of, and subsidies for, water-races on the gold fields up to 31st May, 1874, amounted to £296,66 10s. 9d.; and that the amount of money disbursed was £87,788 6s. 9d., of which £11,462 7s. 4d. was payment as subsidies to registered gold mining companies.

## PROSPECTS OF THE GOLD FIELDS.

A perusal of the reports of the Wardens, and an examination of the comprehensive tables included in the Appendix, will, I think, lead to the conclusion that there is no reason for anxiety as to the future prospects of the gold fields of the colony: the time, no doubt, has passed for easy alluvial workings, and the application of skilled labour and capital is necessary now in gold mining as in other pursuits. In the older mining districts large areas of ground, considered not payable, when worked in the ordinary way, are found to be remunerative, and handsomely so, under the system of hydraulic sluicing; whilst it is notorious that many square miles of auriferous country, I may say in both Islands, remain entirely undeveloped. Labour of all kinds, at the present time, is so highly paid that little inducement is held out to prospect the country for gold. Since the date to which my returns have been made up, there has been a steady improvement