

Australasian Mining Patents.

The following complete specifications have lately been accepted in the various States undermentioned, and letters patent will, therefore, issue to the applicants in due course. This report is furnished by Mr. Edward Waters (Fred Walsh, manager), 23 Elizabeth-street, Sydney, from whom further information may be obtained:—

Amalgamator, Electro.—W. H. Harrison, Sydney: Improvements in electro amalgamation for the recovery of gold, silver, and mercury from crushed ores. New Zealand, July 25, No. 13,818.

Gold From Sea Water.—H. C. Bull and Arthur Watling, of London: Improvements in the extraction of gold from sea water. West Australia, July 12, No. 3404.

Ores, Refractory.—Honnets Sulphide Company, Limited, Perth (W.A.): Process and means for converting refractory ore into free milling ore. Queensland, July 27, No. 6940.

Separators, Magnetic.—F. J. Odling and William Jamieson, of Melbourne: An improved process for magnetically separating pulverised ores, sulphide or otherwise, from their gangue or from each other. New Zealand, July 25, No. 13,806.—**Ditto, John Warren, Broken Hill Proprietary Block 10 Mine: Improvements in electro-magnetic ore separators.** New South Wales, July 29, No. 11,219.

Smelting.—C. E. Manton and J. W. Rayfield, both of Menzies (W.A.): Process of direct smelting and purifying, principally for gold precipitates or base bullion. Victoria, July 28, No. 17,684.

Sulphide Ores.—Adolph Gutensohn, of Ashley, and H. H. Price, of London: New or improved process of eliminating the sulphur from sulphide ores. Queensland, July 27, No. 6936.

Zinc-lead Sulphide Ores.—Thomas Fwyman, Leeds, England: Improvements in treating zinc-lead sulphide ores and tailings. New South Wales, July 21, No. 11,222.

Gold in Country Rock.

In an official report on the Nundle, Hanging Rock, and Bowling Alley Gold Fields, near Tamworth, Mr. J. E. Jaquet, Geological Surveyor of the Mines Department, writes as follows regarding a discovery of gold in country rock:

"Near 'The Folly' line of reef an old miner, Mr. John Wright, has proved that the gold occurs not only in the quartz reef, but also in the country in their vicinity. Mr. Wright has erected a small stamper battery upon the creek, and is now working an extensive body of auriferous slate. He has proved the auriferous rock to be at least 25ft wide, and to extend downwards to a depth of 50ft, and has raised and crushed about 400 tons of ore. The ore is composed of a light-colored, decomposed slate, which is traversed in all directions by veinlets of ferruginous quartz. The gold may possibly occur only in these veinlets, and not in the slate itself, but the fact remains that we have here an extensive low-grade deposit. I took a series of samples from the exposed faces, and these showed the ore body to contain from 2dwt 17gr to 5dwt 16gr of gold per ton. I consider this discovery of importance. The majority of the auriferous deposits at Cobar, which is now the most productive gold field in the State, are somewhat similar in character. I would strongly advise prospectors in the district to test the country rock for gold, more particularly in those places where it is impregnated either with quartz or iron oxide. If this be done, it is possible that bodies of low-grade auriferous slate may be discovered from which the gold could be profitably extracted by cyanidation."

Diamond Mining at Copeton.

The recent half-yearly report of the Elliott Diamond and Tin Company, Copeton (Inverell district), draws attention to the fact that diamond-mining in the parent State has, owing to the energy of the above company and the suitability of its saving appliances, become, after many years of languishing, a profitable industry. The general public and even the great majority of mining men know little or nothing about diamond-winning, with the natural result that an announced yield of so many carats per load of wash is like Greek to them. As to the profitableness of this form of mining, it may be mentioned that the average yield generally is equivalent to 1½oz gold per load of dirt. Lately, in extending the main drive yields have reached to 16 carats per load, representing a money value of £20 16s, and being equal to a gold return of 5oz per ton. That is leaving out all account of tin won, which last half-year returned £395. The price for these diamonds has risen from 9s per carat to 26s since the Elliott Company began operations, a rate which is likely to be maintained on present appearances. The diamond dirt at Copeton lies on a soft granite bottom at a depth of 70ft from the surface, and the mining work is similar to that of the alluvial gold mines of Victoria. The quality of the diamonds in superior to the South African stones, the white stones being equal to the best Brazilian, and are sold as such to the trade, and realise the highest price. Australian diamonds, from their superior brilliancy, are finding a good market in London. For the past six months stones to the value of £2024 were sold by the Elliott Company, which also disposed of 6¼ tons tin for £395. The company ended the term with £1100 in hand.

The Tarcoola Field.

The Mines Department, Adelaide, has received advices from its officer at Tarcoola (Mr. Gee), stating that operations at the different claims are proceeding satisfactorily. The Tarcoola Blocks Company recently treated some dirty amalgam, left over from the clean-up of the late crushing, and obtained 14oz smelted gold. This makes a total yield of 1004oz from 384 tons of stone—an average of 2oz 12dwt per ton. Prospectors have discovered a large body about half a mile east of Toimer's Hill, consisting of veins of siliceous ironstone embedded in limestone, with quartzite on the south and granite on the north. This shows gold, and steps are being taken to open it up.

The Mount Morgan Company during July treated 20,436 tons for 10,170oz gold, as compared with 16,954 tons for 14,016oz during June.

West Australian Crushings.

The Ivanhoe Company, Kalgoorlie, during July produced 8497oz 13dwt of gold from 6592 tons treated, being an average of nearly 1oz 6dwt per ton. Details of the yield are supplied as under: Battery crushed 6303 tons for 3390oz 1dwt; sands treated, 3240 tons for 1565oz 8dwt 12gr; slimes treated, 5346 tons for 2163oz 11dwt 12gr; sulphides dealt with, 289 tons for 638oz 12dwt 12gr; concentrates, 92 tons yielded 740oz.

The gold return last month by the Associated Gold Mines, Kalgoorlie, amounted to 3805oz as under: Treated by the grinding pans and filter presses, 2749 tons, yielding by amalgamation 1500oz, value £4 1s 4d; by cyanidation, 1800oz, value £3 15s, extraction 92 per cent.; treated by old percolation process, 1197 tons, yielding 605oz, value £3 15s per ounce. Of this latter 600 tons were vatted for a few days only. The above output must be considered very satisfactory, and now that the remodelled plant is doing such good work, even better results may be expected in the future.

The Great Boulder Proprietary last month treated a total of 7842 tons, which yielded 12,214oz 17dwt gold. Details: Battery, 2369 tons for 1200oz; sulphide mill, 5277 tons, yielding by amalgamation, 3681oz 10dwt; cyanidation, 5019oz; tailings, 4000 tons for 1494oz 12gr; concentrates, 205 tons for 820oz.

The July output of the South Kalgoorlie Company was the largest yet returned by the mine. The total tonnage put through was 1800, and the yield therefrom was 1723oz. The oxidised ore returned 250oz from 350 tons, and the sulphide 1473oz from 1450 tons.

The Golden Horseshoe Company's total output for July was 15,409oz 19dwt gold, the different plants yielding as under: Battery, 7610 tons for 5170z 10dwt; tailings cyanided, 3626 tons for 1922oz 4dwt; slimes, 4908 tons for 2079oz 17dwt; concentrates, 690 tons for 637oz of smelted gold; 1434 tons treated for 5545oz 15dwt.

The Great Boulder Perseverance's average yield last month was nearly 1oz 7dwt per ton, 9441 tons treated having returned 12,630oz 6dwt 20gr gold. Details are given as under: Battery treated, 2241 tons for 1522oz 16dwt 3gr; 7200 tons for 3617oz 6dwt 16gr by amalgamation, and 7490oz 4dwt 1gr by cyanide.

The Great Fingal's yield for July was 6361oz, as under: 3928 tons crushed for 5186oz; 2340 tons of tailings for 955oz; concentrates, 25 tons for 240oz. Sons of Gwalia crushed 10,019 tons for 4555oz of bullion; 240 tons concentrates for 285oz; cyanided 5250 tons of tailings for 1194oz; total yield, 6034oz. East Murchison United crushed 4300 tons for 2375oz; cyanided 3565 tons of tailings for 912oz; total yield, 3287oz. Long Reef crushed 1783 tons for 791oz; cyanided 3424 tons for 440oz; slag treated 8wt for 80oz; total yield, 1311oz.

Hannan's Reward had a total output for the month of 601oz 6dwt gold. The battery put through 329 tons of stone, and the cyanide mill dealt with 1683 tons of tailings.

The Queensland Menzies produced 760oz gold during July; 200 tons crushed returned 648oz, and 390 tons put through the cyanide plant yielded 112oz.

Among other July crushings reported were the following: Westralia Mount Morgans, Mount Margaret, 4417 tons for 3003oz, average over 13dwt per ton; Euro Gold Mines, Mount Margaret, 887 tons for 624oz; Hannan's Proprietary, Kalgoorlie, 1140 tons for 257oz, average 4¼dwt per ton; Great Boulder Main Reef, 1977 tons for 2257oz, average over 1oz 2dwt per ton; Hannan's Star, 1355 tons for 904oz, average 13dwt per ton; Princess Royal, Norseman, 1617 tons crushed for 1102oz, and 1305 tons cyanided for 400oz, total 1502oz; Moonehine Mine, Mulwarrie, 30 tons for 298oz.

Key Excerpt

Diamond Mining at Copeton.

The recent half-yearly report of the Elliott Diamond and Tin Company, Copeton (Inverell district) draws attention to the fact that diamond-mining in the parent State has, owing to the energy of the above company and the suitability of its saving appliances, become, after many years of languishing, a profitable industry. The general public and even the great majority of mining men know little, or nothing about diamond-winning, with the natural result that an announced yield of many carats per load, of wash, is like Greek to them. As to the profitableness of this form of mining, it may be mentioned, that the average yield generally is equivalent to 1½oz gold per load of dirt. Lately, in extending the main, drive yields have reached to 16 carats per load, representing a money, value of £20 16s, and being equal to a gold return of 5oz per ton. That is leaving out all account of tin won, which last half-year returned £395. The price for these diamonds has risen from 9s per carat to 26s since the Elliott Company began operations, a rate which is likely to be maintained on present appearances. The diamond dirt at Copeton lies on a soft granite bottom at a depth of 70 ft from the surface, and the mining work is similar to that of the alluvial gold mines of Victoria. The quality of the diamonds is superior to the South African stones, the white atones being equal to the best Brazilian, and are sold as such to the trade, and realise the highest price. Australian diamonds, from their superior brilliancy, are finding a good market in London. For the past six months stones to the value of £2024 were sold by the Elliott Company, which also disposed of 6¼ tons tin for £395. The company ended the term with £1100 in hand.

The manager of the Cobar Chesney reports: 560ft level north has been extended total 163ft; full width of face in ore of payable grade, 560ft level south extended total 162ft; ore more or less across face, but hardly payable; discontinued for the present. 460ft level north extended 2ft; face hard and of low grade. Face of crosscut in high grade ore; shall continue the crosscut to east wall of lode. No. 4 shaft: Contractors have sunk 3ft, making depth 26ft. They have also risen 1ft from below, leaving about 75ft yet to work

between bottom of shaft and the rise. No change of country here.

The Blayney Copper Company's furnace during a run of nine days treated 683 tons of ore for 130 tons of matte, containing 24½ tons of copper. The quantity of copper dispatched was 54½ tons. The second furnace and blower have been delivered, and are being put into position.

The Girilambone Copper Company's concentration mill last week ran 36½ hours. Ore treated amounted to 105 tons, and produced 14½ tons of concentrates, of average value. Further parcels of crude ore and concentrates, totalling 36½ tons, were dispatched to Cockle Creek. The new sorting floor has been completed, and the screens placed in position. The Wilfley table is working on the slimes. In the mine, the north end of Dunstan's stope at No. 1 level is looking well, while the other parts of the stope maintain their value. The country in Bethel's stope west, at No. 2 level, is getting harder, and also rising in value, and probably contains oxides.

A correspondent on the Drake field states that the erection of smelters on the field has been definitely decided upon. There are thousands of tons of low-grade ore available, which would prove profitable by local treatment, but which would not pay to ship for smelting elsewhere.

A Molong telegram says that Messrs. Burgess and party recently sent to Dapto from their mine at Obley a trial lot of 8½ tons sulphide ore, which returned 3oz 5dwt 14gr gold and 2oz silver per ton. The mine is situated about 800 yards from the old Goodrich Smelting Works. The gold occurs in a loose granite formation. The chute of gold has been proved for 300ft, and the original shaft is now down 30ft, where the reef averages 15in. Sulphides were met with at a depth of 27ft.

Wattle Flat Items.—Payable gold is being won by Williams and party at Dam Creek, five miles distant from Wattle Flat. The ten-head battery at Messrs. Crawford Brothers' mine, on Surface Hill, has been completed, and is working on the stone which has been accumulating for some time. The new vein cut by Toohy and Reading in their mine at Clear Creek has yielded 19oz 13dwt gold from 5 tons crushed. Messrs. H. Sutor and Gilmour are erecting a small battery on Clear Creek close to their mine, which is looking well. A Bathurst syndicate has also erected a small battery there to crush its own ore.

(For continuation see "Latest Mining News.")



Mr. W. H. Groom, M.P.

Henry Groom, the member for Queensland, in the Federal House of Representatives, died at Melbourne early on August 8, after having been in a bad condition for several days. The much regret among members, the young man being one of Australia's oldest and ablest politicians. At the Federal election he was returned as one of Queensland's representatives to the first Australian Parliament. Deceased gentleman conducted the "Chronicle" and the Toowoomba which publications his son, Mr. Harry Groom, now acting-manager. Mr. Groom was the member, besides whom there are several other members of the family. (says "Fugh's Almanac") was born in Devonshire, England, on March 9, 1824, educated at St. Andrew's School in London. He arrived in Queensland in 1867, at Drayton on the Darling Downs, and went to Toowoomba in 1868 as a storekeeper. Groom took an active part in public affairs after Toowoomba had been gazetted for in 1860, and when in January, 1861, for nine aldermen took place, Mr. Groom was one of the candidates, and was elected first Mayor of Toowoomba, which office he held for three years, during which time he worked the ratepayers, being instrumental in several new streets and in securing the site of the present Town Hall, and the splendid reserve Queen's Park, containing 70 acres, laid out as a botanical garden. It general resort on Sundays and holidays acres of it are now planted with avenues of splendid shade trees. In 1862, on the occurrence of a vacancy in the representation of Toowoomba, Mr. Groom, in response to an invitation, offered himself to represent the electorate. He was opposed by Mr. J. C. White, who was strongly supported by the squating interest. Mr. Groom, nevertheless, was elected by a majority of 21, the total number of votes recorded being 231. At the general election in 1863, Mr. Groom again came forward and was opposed by Mr. F. N. Isaacs, of Gowrie Station. He was again returned, this time by a majority of 26. He resigned

his seat on assigning his estate in 1866, owing to the failure of the Bank of Queensland; but was immediately re-elected without opposition in 1867, and was subsequently banqueted, and presented with a purse of 100 sovereigns. In 1867 he was again elected Mayor of Toowoomba, and officiated in that capacity at the opening of the southern and western railway to Toowoomba. At the general election in 1869, he defeated Mr. James Taylor by a majority of 222 votes, the electors paying the whole of Mr. Groom's election expenses. In 1870, 1871, 1874, and 1878, he was again returned. In 1874, in recognition of his many services to the town and district, he was invited to a public banquet, and presented with a handsome illuminated address, a solid silver tea and coffee service, and a purse of 250 sovereigns. At the general election in 1883, he defeated the Hon. John Douglas by 442 votes, and in January of that year he was once more chosen Mayor of Toowoomba, being re-elected in 1884 without opposition, and at the end of 1884 completed seven years of the Mayorality of Toowoomba. In 1884, on the meeting of Parliament after the general election, he was elected Speaker by 29 votes to 18 in a House which consisted then of 54 members, having previously refused the Chairmanship of Committees offered him by the M'Ilwraith Government. On his return to Toowoomba after his election as Speaker, he received a great ovation, and was entertained at a banquet, and presented with an illuminated address. He sat for the same constituency from 1862 to 1900. He was the oldest member of the Queensland Legislative Assembly, and had the honor of being "The Father of the House." On August 11, 1887, Mr. Groom having then completed twenty-five years' continuous representation of the Toowoomba electorate—a term probably never previously reached by any other representative in any Australian Parliament—celebrated the event by a banquet, in the parliamentary buildings, to which were invited all the members of the then existing, and the survivors of the first, Parliament of Queensland. By those competent to form an opinion, Mr. Groom was pronounced one of the best and most impartial Speakers that ever presided over the Legislative Assembly. On the dissolution of the Legislative Assembly, consequent upon the passing of the Redistribution Act, in April, 1888, Mr. Groom appealed to his constituency for re-election, and was returned at the head of the poll, polling 1065 votes. In 1892 he visited England, returning the same year. Before his departure he was given a public banquet, and on his return was publicly welcomed by the Mayor and representative citizens. He was again elected for Toowoomba at the general election of 1893, by a larger majority than he had previously obtained. At the general election of 1896 five candidates were nominated for Drayton and Toowoomba—two Ministerialists, two Oppositionists, and a Labor candidate. This was the first time in the history of this electorate that Labor broke away from the old representative and nominated a candidate in its own interests. The contest was a severe one, but Mr. Groom achieved a signal victory, being returned at the head of the poll. The general election of 1899 also resulted in his favor. He polled on that occasion 1360 votes, the largest number ever recorded for him. A petition was subsequently lodged against his return and that of his colleague for bribery and corruption. The case was heard before Mr. Justice Real, as Election Judge, and six assessors chosen from the Legislative Assembly. Before the trial closed, the petitioner withdrew the charge of bribery. The charge of corruption was dismissed by the assessors, with £100 costs against the petitioner. The Judge, in his report to the Legislative Assembly, expressed his concurrence with the assessors. Mr. Groom stood in a unique position so far as the Parliaments of Australasia are concerned. He had an unbroken record of 39 years of Parliamentary life, and represented the same constituency the whole of that time. The unbounded confidence the electors of Drayton and Toowoomba had in Mr. Groom is shown in the fact that while in 1862 he polled 132 votes out of 231 recorded, at the general election of 1899 he polled 1360. When the proverbial fickleness of the populace, and "the caprice of constitutions" are borne in mind, Mr. Groom's unrivalled record appears all the more striking and remarkable in Australian history.

The New Governor of Victoria.

(See Portrait on page 39.)

Colonel Sir George Sydney Clarke, R.E., has been appointed Governor of Victoria. The selection is said to have been due to the valuable advice and assistance which Sir George S. Clarke will be able to give to the Governor-General, Lord Hopetoun, in connection with questions whereon the new Governor has long been a recognised authority. He was one of the committee appointed by the Secretary for War some months ago to inquire into the War Office. He is about 53 years of age, and a native of Lincolnshire. After a successful school career at Wimbledon he passed first into and first out of the Royal Military Academy, entering the Royal Engineers when 20 years of age. After three years' service he was placed on the staff of the R.I.E. College, Cooper's Hill, till 1880. Two years later we find him in Egypt, and again in the Soudan Expedition, 1885. Thence onwards his departmental record is as follows: Suakim, in Intelligence Department and as Assistant Political Officer; reconnaissance and action at Hasheen, Tamai, and Thakool; mentioned in dispatches (medal with clasp); employed at War Office till 1892; Secretary Colonial Defence Committee; Secretary to Royal Commission on Navy and Army Administration; sent on special duty to Sweden, Berlin, Paris, Linz, Belgium, Bucharest, Gibraltar, Malta, United States, America, and Halifax.

A new hospital is to be built at Gundagai, and the work is to be started before Christmas. Over £500 is in hand for the building fund. Mr. H. H. Carter, indent traveller for Messrs. Stewart and McDonald, of Glasgow, died on August 9, at the Exchange Hotel, West Maitland, from a complication of diseases. Mr. Carter was leaving for Sydney on August 8, when he was seized with a fit at the railway station. He was then removed to the hotel.