

the creek claims, some are worked in a remarkable deposit of white gravel, locally known as the "White Channel" or "White-wash." This consists of pebbles of quartz and of white sericite schist. The soft schist is in flat rounded pebbles, but the quartz is largely in subangular boulders and pebbles, which have not been completely rounded, indicating quite clearly that the material has not been transported far, and has not been worn by water for a prolonged period. The white channel is sometimes more than 100 feet thick, and does not seem to attain an elevation of more than about 700 feet above the Klondike River ; at about this level it may cross the valley, and the creek gravel then consists of white-wash, as for example, at 12b above Discovery in Gold Run. It was pointed out to me that the creeks are seldom richly productive above their intersection with the white channel. The origin of this deposit is very uncertain ; a more complete knowledge of it would doubtless throw much light upon the origin of the gold in the Klondike region ; it would be particularly interesting to ascertain whether the gold exists in any quantity in the quartz pebbles themselves ; the quartz of which they consist does not appear to be mineralized to any extent, but has a "hungry" or unproductive appearance. At present the white-wash is only sluiced for the metal which lies between the pebbles ; the quartz itself has not been crushed for gold ; but in some of the nuggets gold is attached to, or encloses, quartz precisely resembling the pebbles in its aspect. There is, so far as I know, a remarkable absence of any signs of glacial action. It is the opinion of the local geologists that the white-wash has been produced by the torrential action of water, and it certainly presents an appearance in harmony with such an origin.

(4) QUARTZ LEDGES.

In the Klondike district, as in all auriferous areas, active search has been made for quartz veins, without which the gold production