

### Yukon Gold Fields.

The following special from William Ogilvie, Dominion surveyor in the Yukon, now en route to Ottawa, is published by the Chicago Tribune:

St. Michael's, Aug. 16, via steamer Portland to Tacoma, Aug. 29.—The first attempt at mining in the Yukon valley was made in the early seventies on the head waters of the Teslin river, commonly known in the district as the Hootalinqua. Nothing, however, was done at this time beyond establishing the fact that fine gold was to be found there. About ten years later mining was instituted on the Stewart with success, but at that time all the gold that was found was fine gold on the bars of the streams. The gathering of this gold requires more care than in the case of coarse gold and, besides, requires the use of mercury in its collection.

A few words describing the modus operandi will be interesting to the uninitiated. As gold is nineteen times heavier than water the attraction of the sands and gravel of the streams reduces it to so fine a scale that it is easily carried away by a swift current. It is a well known fact that mercury and gold form amalgam. Assume, now, an oblong box 10 by 12 inches wide, 6 or 8 inches deep, and 12 feet long. In the bottom are placed what are called riffles. That is a series of parallel strips running lengthwise of the box, a half inch or more apart.

#### WATER MUST HAVE FORCE.

Now place three of these boxes end to end so that one discharges into the other in such a position that there is a fall of about three inches to the foot. Direct a stream of water into these which flows the entire length of the three boxes. The water must have such a force as to roll down the incline of the sluice boxes stones weighing six or eight pounds, often more. In fact, anything that is not too large to get into the box.

Now convenient to the head of the set boxes is a pile of earth or gravel-bearing gold, technically known as the dump. The gravel and sand are swept along over the riffle by the course of the water. The heavy metalliferous constituents of the gravel sink between the riffle bars and remain there. When the spaces between the bars become clogged there is danger of the gold or other metalliferous parts running out into the tailings, the flow of water is stopped, the riffle bars taken out and all found in the sluice boxes carefully collected and cleaned up.

#### TECHNICALLY KNOWN AS A CLEAN UP.

This is technically known as a clean-up. One clean-up on a claim on El Dorado last spring gave 80 pounds avoirdupois, or over \$16,000, the product of some hours' shovelling.

Now, suppose that some of the gold contained in the gravel is so fine that it will be swept on and out of the boxes. This will be lost. To obviate this, quicksilver is used. To do this one of the boxes is prepared in a suitable way with small receptacles in which some quicksilver is placed. This box is at the lower end of the line of riffles and all the fine particles escaping the riffles are caught and held by the quicksilver. The quicksilver afterwards volatilized and recollected, the gold remaining in the resort.

So far as I know this process with quicksilver has not been used on either El Dorado or Bonanza. In all the

mining on Stewart river or the tributaries of the Yukon no quicksilver has been found necessary. Coarse gold has been equally sought for and found in 1880 on Forty Mile River, about twenty-three miles above its mouth, just about where the one hundred and forty-first meridian or international boundary is crossed.

This discovery soon spread through the country and soon Forty Mile was the only camp on the whole Upper Yukon valley. Numerous good gulches were found on the side waters of Forty Mile, which were soon overcrowded and the overflow spread about and soon found Miller glacier and other creeks tributary to Sixty Mile, which joins the Yukon nearly 100 miles above Forty Mile, the latter being the distributing point for that region.

#### CLAIMS ESPECIALLY GOOD.

Some of the claims on Miller Creek were considered especially good, as much as \$40,000 being taken out by one individual. Archdeacon McDonald, and Anglican missionary who labored among the Indians along the Porcupine, visited the Yukon in the vicinity of Forty Mile in the seventies. In his rambles over the country he found gold on a creek tributary to Birch Creek, tributary to what is known as Circle City. The news soon spread and gold was discovered in large quantities in some of the gulches, and Circle City was born about 200 miles below Forty Mile. These two centres up to August, 1896, attracted the great bulk of the men entering the country.

Aug. 16, 1896, Geo. W. Cormack discovered coarse gold in what is now known as Bonanza Creek and panned out about \$12 in a few moments. On the next day he located Discovery Claim No. 1 below it for himself and No. 1 above for his Indian associate, Skookum Jim, and No. 2 below for his other Indian associate, Takleh Charlie. He then spread the report of the discovery, and before Sept. 1 upwards of 100 claims were staked and before October over 500 had been staked on this creek and on El Dorado and their tributaries.

#### GOLD BOTTOM DISCOVERED.

Gold bottom has been discovered before Bonanza, and one of its tributaries, Hunker Creek, had obtained some notoriety and might have been much more largely developed than it now is had not Cormack, about the middle of September, come down to Forty Mile with \$1,200 in dust, which he and his two associates washed out of Discovery in a few days with limited and crude appliances.

Rumor got to Circle City of the richness and extent of the new diggings, but was not credited till December, when authentic, reliable news was taken to that place and resulted in Circle City literally disgorging itself and to-day it and Forty Mile are practically deserted. Men from both places considered themselves extremely lucky to secure the working of twenty-five or more feet on some of the claims on what is termed a lay, that is, they take out the gold-paying dirt, wash it, and get a percentage, often of one-half of the output. In this way a man working a small fraction of claims, thirty or forty feet, has taken out a good home stake. I think it can be safely asserted that more substantial home stakes have been taken out in "lays" on Bonanza and El Dorado during the last season than were taken out of all Forty Mile, Sixty Mile, and Birch

Creek (Circle City) districts combined during their three best years.

#### MANY TRIBUTARIES ABANDONED.

In this way all the other creeks tributary to Klondyke, yes, even branches of the Bonanza and El Dorado themselves, were practically abandoned for the time being, so that all the rest of the Dawson district remained undeveloped. As all the claims located in Canada have to be represented within twelve months of the date of their record, the claims on the other creeks will have to be developed or abandoned. Few of them will be given up.

From this fact we will be enabled to state more definitely by the end of September next what these streams amount to. Bonanza Creek joins the Troandik, commonly known as the Klondike, for two miles above its mouth, Bear Creek joins six miles above, Gold Bottom twelve or fourteen miles above, and Too Much Gold thirty-five or forty miles above. Bonanza is about twenty miles in length and El Dorado, one of its branches joining about midway of its length, is eight or nine miles in length. A claim is 500 feet in length, measured in the general direction of the stream.

Bonanza thus furnishes upwards of 200 claims, El Dorado about eighty, and the several tributaries of these two will give us nearly as many more, and should the hillsides prove remunerative and some of them have already done so a good many claims having been staked there, we will have about 1,500 claims on the above extent in the valley of the Bonanza.

#### SIX THOUSAND MEN NEEDED.

Now, we may assume that 1,000 of these at least will be worked with profit. Those 1,000 claims will require about 6,000 men, directly and indirectly, for their proper development. Now, we may safely assume that the other creeks mentioned tributary to the Troandik will furnish as many more claims, or, in all, say 2,000. Of course, much depends upon whether the hillsides will pan out as they have heretofore. If they do not, we can estimate at least 1,200 claims will be worked at the Troandik Valley.

Adjacent to the Troandik is the valley of Indian Creek. So convenient are the two water systems to each other that it is only the labor of an hour or two to cross from one of the other.

On Indian Creek, close to the head of Bonanza and El Dorado, two tributaries have been prospected, Dominion and Quartz Creeks, with fair success. We may assume, then, that considerable mining will be done on Indian Creek, possibly as much as on the Troandik. This will give us, say 2,500 claims combined with Troandik diggings.

#### DEMAND FOR FIFTEEN THOUSAND MEN.

Assuming the same ratio per claim as before, we require 15,000 men for the proper development of this area. The emporium for this will no doubt be the town of Dawson, situated about half a mile below the mouth of the Troandik.

It cannot in the nature of things be seriously doubted that good paying quartz will be found in the vicinity of these placer claims which will more than double the importance of this district. Several quartz claims have already been recorded, but their value has not yet been determined.

It is a most difficult country to do quartz prospecting in. Only at