

## ECONOMIC POSSIBILITIES OF YUKON—CAIRNES

where gold still remains in the various old stream channels, it is in most places difficult to find, and if discovered, may prove very expensive to mine. Thus, although the gravels of such districts may have originally been, and in places still are rich, and a certain amount of gold can even be profitably produced, still the effects of glaciation are everywhere greatly detrimental to the economic development of these areas.

On the accompanying map a line is shown marking the approximate edge of the glaciated zone. Thus, all areas outside this zone in which the older schistose rocks occur, should afford geological conditions quite similar to those existing in the Klondike, and with no more difficulties to be met in connection with the various prospecting and mining operations. There still remains to-day hundreds or even thousands of square miles of practically unprospected territory where these conditions exist. These areas are therefore considered the most promising for the occurrence of placer deposits of economic importance, and certainly warrant careful exploration.

### PLACER COPPER

Native copper is found in the gravels of many of the streams distributed throughout various districts in Yukon, but Kletsan creek is the only stream along which it is known to occur in economically important amounts.<sup>1</sup> Kletsan creek is a small tributary of White river, which heads in Natazhat glacier in the vicinity of the 141st meridian—the Yukon-Alaska International Boundary line. The first definite information concerning this occurrence is contained in Hayes' report of a trip he made from Selkirk to Skolai pass in 1891 in company with Lieutenant Schwatka.<sup>2</sup>

Previous to this time the Indians had carried on quite a traffic in native copper obtained chiefly or entirely from Kletsan creek, this metal being used for arrow heads, knives, cooking utensils, and also for bullets, where lead could not be obtained.

<sup>1</sup>Cairnes, D. D., "Upper White River district, Yukon": *Geol. Surv., Can., Memoir 50*, 1915, pp. 133-135.

<sup>2</sup>Hayes, C. W., "An expedition through Yukon district": *Nat. Geog. Mag., Vol. IV*, 1892, pp. 143-145.