## MUSEUM BULLETIN NO. 15.

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## GEOLOGICAL HISTORY.

The country in which Gay Gulch and Skookum meteorites were found has been geologically surveyed by Mr. R. G. Mc-Connell, Deputy Minister of Mines, Canada, whose report thereon is to be found in the Annual Report of the Geological Survey of Canada, Vol. XIV, 1901, part B. In this report Mr. McConnell devotes considerable attention to the character and origin of the auriferous gravels for which the Klondike district is famous: these he classifies as low-level gravels, gravels of intermediate levels, and high-level gravels, the high-level gravels being the oldest. These high-level gravels are further subdivided into river gravels and "white channel" gravels, the latter being the older. The term "white channel" is a miners' designation given to the gravels by reason of their appearance and distribution. The "white channel" gravels are ancient creek deposits varying from a few feet to 150 feet in depth. They consist of a "compact matrix of small, clear, little-worn and often sharply angular grains of quartz, pebbles, and rounded sub-angular and wedgeshaped quartz boulders often two or three feet in diameter. Flat and sub-angular pebbles of sericite schist, the principal rock of the district, are also present, but in much smaller numbers than the quartz constituents. The schist pebbles are usually decomposed and crumble rapidly when thawed out. The deposit is indistinctly stratified, but, except in rare instances, there has been no complete sorting of the various constituents into separate beds and the composition is very uniform through-The colour is characteristically white or light grey due to out. the preponderance of the quartz constituents and the leaching out of the greater part of the iron."

From the position of the Gay Gulch and Skookum meteorites at or close to bed-rock, it is natural to conclude that they must have been laid down in the positions in which they were discovered in the earliest stages of deposition of the "whitechannel" gravels. These "white-channel" gravels, according to Mr. McConnell's estimate, date back to Pliocene time at least. The probability is, therefore, that these two meteorites like the gravel deposits in which they were embedded date back to Plion even th

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