

here afforded for the first time officially and therefore from an authoritative and responsible standpoint, is at least this year of little practical utility to prospectors or investors. The matter, however, was unavoidable.

The report may be divided into four sections. First, the statistical tables given; second, the general remarks on the progress of mining; third, the original matter provided by Mr. Robertson, and fourth, the official reports of the various Gold Commissioners and Mining Recorders.

The statistical tables and general remarks on mining have already been published as a pamphlet for distribution at Buffalo and Glasgow, and are familiar to the public. The statistics show a satisfactory increase in the volume of the mining industry, and particularly give evidence of the development of the newly productive districts of East Kootenay and the Boundary. They show how the harvest of many years of patient work is beginning to be reaped. One rather disquieting feature however, of the statistics, is a reduction in the gross value produced in the Rossland mines although the tonnage produced shows an increase. A sudden drop in the amount of copper contained in the ore accounts for this circumstance, though what accounts for the sudden diminution in copper it would be hard to say, unless it be more indiscriminate shipments of everything containing gold enough to pay the cost of treatment from the Le Roi mine.

The remarks made on the general progress of mining merely draw attention to the salient features of the preceding tables except in one paragraph concerning prospects in which a somewhat elaborate comparison has led to conclusions which admit of an ambiguous construction. We quote: "The statistics show what these mines have, during the past year (1900), paid back in principal and interest to the lenders of the money for their development. This total amount so returned was in 1898, \$6,529,420; in 1899, \$6,751,604, and in 1900 reached the sum of \$10,069,757." This is the expansion of a comparison of mining prospects to promises, which we can hardly describe as quite happy, nor can this description be applied when the promise of a prospect is likened to a promissory note, for the promise of the most promising prospect surely cannot be compared with the legal obligations associated with discountable paper. Again, the writer of the paragraph undoubtedly did not mean to imply that the investing public have received \$10,069,757 out of British Columbia mines in 1900. Yet we are constrained to admit that from the wording of the paragraph in question such an implication is at least possible.

To turn to more important matters: Unquestionably the most valuable portion of the annual volume is Mr. Robertson's report on the Atlin district as the result of a personal examination, while he has also made interesting reports on some of the "newer" producing mines of the Kootenays, including the St. Eugene, at Moyie, and the Boundary district. The report on Atlin can only be described as condemnatory of the district on present indications, but it is noted that the district has been insufficiently prospected, especially for quartz. In placer mining the report writes *finis* at the end of last season. In hydraulic mining it holds out a dubious future to three or four big companies. So far as the observations regarding quartz mining are to be taken as the result of an exhaustive examination they do not point to a single mineral claim on which it would be worth while doing annual assessment. These are the impressions derived from the report. In regard to placer mining we are told that "be the theories of formation or deposition what they may, the practical fact is that gold in quantity to

pay for ordinary placer working has only been found, as indicated, over a limited area and in a few creeks." Further on the report says, "As far as the creek claims are concerned, however, the season of 1900 will see the great majority of them either worked out, abandoned or sold to some hydraulic company, which by the use of water-power and suitable appliances will be able to move the gravel and get the gold much cheaper than could possibly be done by the laborious and costly methods of placer mining in vogue, and thus much unprofitable placer ground will be turned into very profitable properties."

We naturally gather from this that there is a hydraulic mining future before Atlin. But when we return to the section of the report dealing with hydraulic mining we find that conditions of water-power and dump are such that little is to be hoped for, unless all the resources of each separate creek are consolidated in the hands of one company. To quote again: "It is to be feared that the only practical solution of the problem is the formation of one large company holding all of Pine creek, from the falls up." With regard to quartz, few illusions about the Atlin district will survive the reading of Mr. Robertson's report. The country rock of the district has in places suffered surface enrichment from deposition of gold presumably during the glacial flow which brought the placer gold concentrates in the creek bottoms, and while there are fissures these also have been fattened on the surface from the same source and so far as developed below the zone of this infiltration, show no evidences of gold in payable quantities. This report is very discouraging. It may, however, perhaps be hoped without prejudice to its accuracy—for it is that of an eminent and duly qualified engineer,—but merely with due regard to its limitations, that there may be in the Atlin district some yet undeveloped resources, and which may afford the hope of future progress and development in spite of present discouraging circumstances. In fact the Provincial Mineralogist implies this and we find an indication of something of the sort interpolated in the report itself:—

"Later advices from the district state that, on the right bank of Spruce and the left bank of Pine creeks, shafts have been sunk through the heavy wash on the benches to a depth of 30 to 50 feet, and that the yellow strata of what has been called the 'first run' of gold has been struck and proved to be quite rich—which facts very much strengthen the theories of deposition already given. These benches have recently been tested by shafts at Gold Run—a blind gulch of the left bank of Pine creek about two miles above 'Discovery'—and are stated as proving rich enough for profitable drift mining."

If these later advices are correct they possibly point to an important and welcome change in the conditions affecting the immediate future of at least a section of the Atlin district. Mr. Robertson also visited the Bennett Lake Mining Division and inspected a number of surface showings of mineral there. But no particularly interesting information was procurable from this locality, although the description of the geology and topography of the country is of interest and value.

As usual the bulk of the report is occupied with the official statements of the respective Gold Commissioners and Mining Recorders. These statements, doubtless, serve a useful purpose and may be referred to for information about different districts. But improvements might, we think, be introduced which would render this feature still more attractive. There is, at present, little attempt at summarising or arrangement, and each chapter is built up upon a separate plan according to the in-