ing 6,155 tons of lead bullion. In addition to this No. I was operated for 27 days in August on Silver King ore, producing 140 tons of copper matte, which was shipped to the Granby Consolidated Mining and Smelting Company's smelter for converting. The tonnage of the lead smelting operations was made up of 14,169 tons lead ore and concentrate, a large proportion of which was roasted; 5,915 tons of dry ore, and 2,721 tons of B. C. Standard. This is an increase of 6,025 tons of ore, with 1,845 tons of Emma, over the previous year's smelting operations. For the first six months the ore supply was of a very unsatisfactory nature, and I find that lead being scarce, the proportion of flux was much higher in the charge; thus 10,180 tons of ore were smelted with 5,159 tons or fluxing Emma, while in the second half-year 12,625 tons of ore required but 4,172 tons of Emma. It is also evident in the bullion produced, which was 2,750 tons in the first, and 3,405 tons in the second half.

The lead bullion shipped carried 1,096,415 oz. of silver and 9,201 oz. of gold, while the copper matte carried 41,294 oz. of silver, 130 oz. of gold, and 130,-800 lb. of copper, making a gross value for the year of practically \$1,000,000.

In the early part of the year the uncertainty as to the future of the ore supply made it seem unwise to put in hand any of the planned improvements at the smelter, but certain heavy expenditures for maintenance, etc., were absolutely necessary. In the second half of the year the promise of the bounty on lead somewhat stimulated the ore supply, and I felt justified in putting in hand certain improvements which have had their effect on the last month or two of the year. The maintenance of the plant generally has been extremely heavy, about \$22,000; a heavy item being renewals in timber, lumber, roofing, etc., much of which has been in service since the smelter started. The improvements and necessary additions during the year have been a culvert under the main trestle, at a cost of \$378: this enabled us to fill the trestle with slag, and obviate the necessity of renewal; new ore bins costing \$650; a system of connection with the old Silver King ore crusher and sampler, by which our B. C. Standard and Emma fluxing ores are handled from railway cars to gravity bins at a cost of from 15 to 20 cents per ton; cost of installation, including electric equipment, \$3.750; 40 ft. of additional trestle at the sample mill, \$440; a 6-in, pipe line from the penstock to the reservoir, \$476; a third hand roaster of improved design and greater capacity, \$2.864. We have also spent on flues, both in maintenance and improvements, \$3,300, old flues being inadequate for three hand roasters, and have purchased a new charging scale, fire hose and a pair of larger settlers for No. 2 furnace at a cost of about \$1,100. \$1,000 have been spent on a new elevating system, designed to economise labour in handling calcines and foul slag. This is not yet completed.

Beginning with January, I have gradually increased Mr. Harris' sphere of usefulness by transferring him from the assay office to the smelter. It seems desirable that the detail of smelting operations be watched closely, and I wish to carry on some experiments along

certain lines with a view to improving our metallurgical work. The experiments have proved satisfactory; and the step has been justified.

The chief improvements to bins have been in making the fuel and flux deliver by gravity to the barrows, which means a direct saving, observable towards the end of May and during June, of over \$12 a day.

Early in February we received the first shipments of moment of the B. C. Standard ore and gradually replaced our limestone with it, with advantage to the smelting operations. The roasting plant has been very hard pushed for the greater part of the year, and has generally given satisfatcion, though the mechanical roaster had to go in for extensive repair at the close of the year.

## THE KING AS A YUKON MINE OWNER.

HAD he but preserved the life of a mining claim that was deeded to him about two years ago, His Majesty King Edward VII, would now be on a fair road to increase his private fortune by the addition of a considerable quantity of virgin gold taken fresh from the auriferous gravels of the Yukon. Thus Yukon World of October 28th. The claim was thought to be barren and by reason of its nonrepresentation was allowed to lapse to the crown, or nominally King Edward himself, and it is a question now, paradoxical as it may seem, whether or not the loss in one instance may not likewise be a gain in another, though it is quite likely that before a representative of His Majesty could make a claim to the ground some horny handed miner will have planted his relocation stakes at the upper and lower boundaries and received a grant to the same.

This is how it happened that the King came to be a mine owner in the Klondike, though the records in the Gold Commissioner's office fail to disclose the date of his miner's license. On July 2, 1900, a number of mining claims were sold at auction by the government, among them being a section designated as 1A on a tributary of Eureka Creek at No. 18 on the left fork. It was supposed to be 250 feet long and in the competition for its possession it was finally knocked down to J. K. Sparling. Things in those days were booming and it was not known but that Eureka would develop into a second Eldorado. At any rate there were those who were willing to take a chance.

Nothing was done with the ground the first year beyond the payment of \$200 in lieu of the representation work required by the regulations, and it was renewed to July 2, 1902. About the same time the renewal was taken out an agreement was entered into to sell the claim to W. E. Carlin and others for \$3,200, but the option was not taken up. Then came a grouping for the purpose of working in common claims 1, 1A, 2, 3, 4 and 4A, the work was done and the fraction that was destined to become famous as the private property of King Edward was again renewed.

Within a year afterward, the making of history as pertaining to 250 feet of ground on a tributary of Eureka commenced. It was on February 10, 1903, that