

## SPALLUMCHEEN RIVER, B. C.

SPALLUMCHEEN RIVER is one of the interior streams of British Columbia, flowing down from the Gold Mountains in a general northwesterly course a distance of seventy miles, and discharging into Shuswap Lake. For a large portion of its course it is navigable for small steamers, and boats ply regularly between the head of navigation and Kamloops, a distance of 125 miles, following the river, the Shuswap lakes and Thompson River. Below Kamloops the waters flow through Kamloops Lake, the main Thompson River, and finally, by way of Fraser River, to the ocean. Spallumcheen Valley lies along the river and extends westward to the head of Lake Okanagan, being some thirty miles in length. This is one of the largest and best agricultural districts in the Province of British Columbia. Crops yield enormously without irrigation, and natural grasses grow luxuriantly. A little further west lie the valleys of Pleasant and Salmon rivers, where the most extensive farming in the Province is carried on. A wagon road leads from Kamloops to Spallumcheen, a distance of sixty-five miles. Lake Okanagan extends southward seventy-five miles, the Okanagan River issuing from the lower end, and continuing in a general southerly direction through a series of small lakes to its junction with the Columbia, in Washington Territory, 175 miles from the head of Lake Okanagan. With the exception of a fall of eight feet at one point, there is no obstacle to steamer navigation the entire distance. A canal from Lake Okanagan to Spallumcheen River, which is one of the improvements contemplated for the future, would open the lake to the steamers plying on Thompson and Spallumcheen rivers, and but for the obstruction mentioned would give them open water to the Columbia. Such a canal would be a direct union of the waters of the Fraser and Columbia. It would open to steamer traffic the great Okanagan Valley, one of the most important agricultural districts in British Columbia, extending in a successive series along the lake and river to its junction with the Columbia, sixty miles south of the international line. The construction of the Canadian Pacific will give easier access to this region for emigrants in another year. The line runs along the southern side of Shuswap Lake, where it will be tapped by the steamers plying up the Spallumcheen. The population in that region is already quite considerable. Several stores, post offices, schools and flouring mills are to be found there, especially in Mission Valley, where the Catholics have long maintained a mission, and beyond question hundreds of families will ere long be settled in this region, which is in many respects one of the most desirable portions of British Columbia. The climate is singularly agreeable; not excessively cold in winter nor oppressively warm in summer. The rainfall is ample to ensure abundant crops, without creating that continued moist atmosphere peculiar to the region lying along the coast. With settlements and greater production will come better transportation facilities. The scenery is grand and inspiring, as is indicated by our engraving of Giant's Castle, and to the sportsman it offers attractions unsurpassed.

## THE ISLANDS OF PUGET SOUND.

TO the early explorers Puget Sound, with its multitude of bays, inlets and islands, was a watery labyrinth. Vancouver, who first entered and named it in May, 1792, spent two months in exploring it with the crews of two vessels, his labors being much increased by the number of false inlets created by the numerous islands. He was in particular search of a passage inland, and it must have been aggravating to be led long distances by apparent inlets which proved only to be narrow passageways between two islands or between some large island and the mainland. The islands of Puget Sound vary from small timber-crowned bluffs rising abruptly above the surface of the water to tracts of land many square miles in area. They are in special abundance near the foot of the Sound proper, opposite the Straits of Fuca, and extending northward between Vancouver Island and the mainland of Washington Territory. Though originally christened the "Gulf of Georgia," this island region is now spoken of as a portion of Puget Sound, a name applied by Vancouver only to that arm of this great inland sea extending southward from Admiralty Inlet. Two counties—Island and San Juan—have been created among these islands, while many others belong to the counties of the adjacent mainland. The San Juan islands were those which threatened to precipitate hostilities between England and the United States in 1873, the last relic of the long international boundary dispute. They consist of a group lying between Rosario Straits, claimed by England to be the main passage, and the Canal de Haro, the passage for which the United States successfully contended. Lumbering and fishing, dairying, stock raising, and to some extent general agriculture, are the leading industries on the larger of these numerous islands. On some of them, especially those among the San Juan group, are vast beds of limestone, and there is produced the greater portion of the lime used in the Northwest. Our artist has given a sketch of a group of small islands in this region, which he has christened the "Island Sea," in the background of which rise the white dome and lesser peaks of Mount Baker. It is amid such scenes as this the traveler on Puget Sound finds himself continually sailing, scenes from which he departs with regret, and which long linger vividly in his memory.

IN France and Spain ordinary brick-dust made from hard-burned, finely pulverized bricks, and mixed with common lime, is universally used as a substitute for hydraulic cement. It is in some respects even superior to the best Rosendale hydraulic cement for culverts, drains, tanks or cisterns, and even for roofing purposes. It is regularly known in those countries as an article of commerce, and is sold in barrels by dealers at the same price as cement. A block of this substance one inch thick, without sand, after immersion in water for four months, bore, without crushing or splitting, a pressure of 1,500 pounds per square inch. The mixture of a small quantity of brick-dust to ordinary mortar will, it has been said, prevent disintegration.