OREGON MARBLE.

To test the authenticity of a marble discovery, the proofs are very simple and easily obtained. Pure marble effervesces in acids; gives quicklime by calcination; has a conchoidal, scaly fracture; can be easily scratched with a knife. These qualities united occur only in the three principal varieties of limestone—in the saccaroid, like that of Carrara, the modern statuary marble; in the foliated limestone, constituting the antique statuary marble, like that of Paros; and in many of the transition and carboniferous limestones, subordinate to the coal formation.

Supposing these requirements to exist, the only things needed to constitute a profitable marble quarry are a large extent of homogeneous limestone and good facilities for transporting the slabs to market when cut. It is simply from these advantages combined that none of the statuary marble quarries of the pyrenees, Savoy, Corsica and other places, once important, have ever been able to compete with the quarries of Carrara valley, in Italy.

The question now comes, have we any marble in Oregon of the requisite qualities in pureness and color, and near enough to railroad transportation, to justify the hope of their being of value in the future? The answer is as distinct and pronounced as the question. Oregon, though only superficially explored in this connection, is already proved to be full of such quarries, from Baker and Wallowa counties in the extreme east, down along the mineral formation to Grant's Pass, in the extreme south. In fact, the sides of the intervening valleys in many places, like the celebrated Carrara valley, seem to be mountains of marble, and what is better, as pure in quality and color as any now produced in Europe or England, excepting a few special varieties not yet found here.

The quarries I am personally most familiar with are those near the town of Joseph, Wallowa county. To these I shall confine myself in showing what the marble industry will soon be here, as in this case I can hold myself responsible for the statements made.

The quarries in question are situated near the mouth of Hurricane creek, about two and a half miles northwest of the town, sufficiently high up in the mountains above the creek to allow them to be worked to a great depth before water interferes. The works, so far as they have gone, can be seen from the town. At this point there are ten claims, fifteen thousand feet in length by six hundred feet in width, or about seven acres of land, well timbered and watered. The property is owned by citizens of Joseph incorporated as the Wallows Marble Company.

Four different varieties of stone, singularly pure in character and color, have been found at this point

one white, two grays, one red. Samples of these I took last year to San Francisco, where they were thoroughly polished and subjected to the severest tests of acids and fracture that could be applied. The opinion of all the leading marble men in that city who saw the samples was uniformly the same, that they were all the very best American marble ever exhibited in the country. In fact, I had the greatest difficulty in making them believe that they were really an American product. On being polished to its full capacity, the white sample appeared at least two degrees whiter than the best Carrara marble in the market and equally pure in character. The red was admitted to be equal to the best Scotch and superior to the best Tennessee red in the market; while the two grays had no equal in the market. The darker gray of the two, indeed, is equal to any marble ever taken out of the earth. The cost of developing the quarries thoroughly at this point would not be serious.

A variegated marble quarry is situated on the same creek, about three miles above the incorporated company. It produces two or three varieties, a gray and a blue, both absolutely perfect. This property consists of six claims, of the usual size. The marble here shows out in solid form, without crack or crevice, to such an extent that blocks fifteen by twenty feet could be sawed from the ledge to-day without further stripping. The vein can be traced up the mountain quite plainly as far as the six claims extend back from the creek.

Besides these, there is a magnificent black marble in the district, which, when polished fully, is a good mirror, and a vein of what is called "Whitney stone." The latter is valuable as forming a substitute for granite, only much lighter and more easily worked, both great advantages in costly buildings. From the fineness of grain it accepts as perfect a polish as the purest marble, and resembles granite in color.

The varieties mentioned range in price about \$8.00, \$9.00 or \$10.00 a cubic foot. There are about twelve and one-half cubic feet in a ton, so the standard price is \$100.00 per ton for the white and red as the most common, \$112 50 for the variegated as the most popular, \$120.00 for the black as the most rare. With the exception of a small vein in England, and another in Ireland, Belgium has the good fortune to furnish the world with most of its black marble. It is this which makes it worth £2 a cubic foot in England or \$120.00 a ton in America. The Belgian product, all marble men allow, is no better, if indeed as good, as the Oregon product. An abundant supply, which the state can furnish at these figures, makes marble out of the most valuable products, and at the same time one of the safest to speculate in .- From an article scritten by Leigh Harnett.