from Chicago finds that fir flooring, first grade, finished and dry, can be freighted from Portland to that city and sold at a profit. Puget Sound spars are sold in New York or Liverpool at a fair margin. Large trees, 7 to 8 feet in diameter, formerly wasted, are now sawed into massive beams for railroad or bridge work. Mills that saw plank 100 or 120 feet long are driven to fill their orders. Railroad cars of greatest strength are built of Oregon yellow fir. These special demands will be multiplied as traffic from one to twelve feet, being equally broad at the top as increases.

The preservation of timber differs from timber culture and forest preservation, the care of which belongs to the United States Government for the sake of climate and water supply. Private companies can, and will, take better care of their own timber than Government or small holders will be disposed to do. Their interests require it. It has been the custom for thirty years for farmers to destroy their timber in clearing land for cultivation. Mill companies keep and protect their tracts. Those of Puget Sound, who are said to own 300,000 or 400,000 acres, will preserve it more carefully for future use when needed than owners of a few hundred acres ever would do. They can, and will, hold for a larger profit than it would pay to be forced upon a full market. A monopoly of timber land on this coast may prove the best means of its preservation for future populations.

G. H. ATKINSON.

CASTELLATED ROCKS OF THE MISSOURI.

OT only in the grandeur of its rugged canyons and the power and beauty of its waterfalls does the Missouri command the admiration of travelers. Among its many peculiar attractions are the quaint forms and unique carvings of Nature seen below Fort Benton and near the Judith, known as the Castellated Rocks. No better description of them can be given than that by Captains Lewis and Clarke, who viewed them in June, 1805, while passing up the stream on their great journey to the mouth of the Columbia. Their report says: "These hills and river cliffs exhibit a most extraordinary and romantic appearance; they rise in most places perpendicularly from the water to the height of between two and three hundred feet, and are formed of very white sandstone, so soft as to yield rapidly to the impression of water, in the upper part of which lie imbedded two or three thin strata of white freestone insensible to the rain. In trickling down the cliffs the water has worn the soft sandstone into a thousand grotesque figures, among which, with a little fancy, may be discerned elegant ranges of freestone buildings, with columns variously sculptured, and supporting long and elegant galleries, while the parapets are adorned with statuary. On a nearer approach they represent every form of ruins; columns, some with pedestals and capitals entire; others mutilated and prostrate; some rising pyramidically over are varied by niches, alcoves and the customary appear-

as in our country they are accustomed to frequent large stone structures. As we advance there seems no end of the visionary enchantment which surrounds us. In the midst of this fantastic scenery are vast ranges of walls. which seem the productions of art, so regular is the work-They rise perpendicularly from the river, manship. sometimes to the height of 100 feet, varying in thickness from one to twelve feet, being equally broad at the top as below. The stones of which they are formed are black, thick and durable, and composed of a large portion of earth, intermixed and cemented with a small quantity of sand and a considerable proportion of tale or quartz. These stones are almost invariably regular parallelepids of unequal sizes in the wall, but equally deep, and laid regularly in ranges over each other like bricks, each breaking and covering the insterstice of the two on which it rests; but though the perpendicular insterstice be destroyed, the horizontal one extends entirely through the whole work; the stones, too, are proportioned to the thickness of the wall in which they are employed, being largest in the thickest walls. The thinner walls are composed of a single depth of the parallelepid, while the thicker ones consist of two or more depths. These walls pass the river at several places, rising from the water's edge much above the sandstone bluffs which they seem to penetrate; thence they cross in a straight line, on either side of the river, the plains over which they tower to the height of from ten to seventy feet, until they lose themselves in the second range of hills; sometimes they run parallel in several ranges near to each other, sometimes intersect each other at right angles, and have the appearance of walls of ancient houses or gerdens."

While floating down stream on a calm, moonlight night one can readily imagine himself on the ancient Euphratres and passing through the ruins of the mighty city of Babylon. The lights and shadows of the moon conspire with these eroded cliffs to form the most grotesque shapes and peculiar images, constantly changing and blending, until one loses all sense of time and place, and surrenders himself completely to the most vivid and curious fancies his imagination can conceive. In going to or from Fort Benton by steamer these castellated rocks are passed, and the tourist who can spare the time for such a trip will find it one of the most interesting on his journey across the continent, not only for the peculiarities here described, but for many other attractive features of the river scenery.

ously sculptured, and supporting long and elegant galleries, while the parapets are adorned with statuary. On a nearer approach they represent every form of ruins; columns, some with pedestals and capitals entire; others mutilated and prostrate; some rising pyramidically over each other till they terminate in a sharp point. These are varied by niches, alcoves and the customary appearances of desolated magnificence. The illusion is increased by the number of martins who have built their