

common rubble work, pointed and lined. The plan admits of great variation, not only as to material, but size and style of finish, and is commended to the study of all congregations not over-numerous or wealthy, who wish to combine economy and effect in the highest possible degree. We conclude with the following brief details in reference to the actual building herewith illustrated:—

It is a Gothic structure, seventy-six feet by forty-five, exclusive of the tower, which is fifteen feet six inches square, and, the steeple included, one hundred and thirty-three feet in extreme height. It has a basement with a lecture room forty-eight feet by forty-one, with two vestries and staircases, communicating with the church and pulpit above. The church is finished in the Gothic style in all its details. The ceiling is elliptical, with curved ribs to give the best effect to sound. Between each window is a moulded Gothic corbel, supporting a moulded rib on the ceiling, under each principal rafter, and opposite each buttress. The church is lighted on each side by five large ornamental traceried windows in two lights; the sashes will be of light cast iron, with quarry panes of glass bedded in putty. There are seventy-six pews with accommodation for three-hundred and fifty adults on the main floor, but from the ample space allowed for aisles and sitting room, it is easy to accommodate a much larger number. There are three aisles. The pews are comfortable open seats with ramped ends. The entrance to these aisles is from the vestibule by three pair of cloth doors opening outwards. The pulpit is on a platform raised two steps above the church floor, in a niche built so as to form a semi-circle in the wall, with circular seat, &c. On the front is a screen handsomely wrought, having seven arches with cuspings, mouldings, columns, table mouldings, caps and bases, with reading desk, &c. The singing and organ gallery over the vestibule have a richly ornamented front, and seat accommodation for fifty, making in all 400 roomy sittings. The main entrance to the Church is through the tower, having a flight of eight steps to landing enclosed by folding doors, from which the vestibule is reached by a double staircase of nine steps, the singing gallery having a staircase at each end of the vestibule. The stone portion of the tower is sixty-six feet in height, having belfry and other windows in character the same as described to church. The exterior of the building has a pleasing outline, having six buttresses on each side and eight at the tower angles, finished at the top by ornamental cut finials. The building material is of limestone of a superior quality. The cost of the building was about eight thousand dollars.

THE MAMMOTH TREES OF CALIFORNIA.

The *Sequoia gigantea*, popularly known in the district where it grows as the Mammoth Wash-

ington Tree, was first discovered by the English traveller and naturalist, Lob on the Sierra Nevada, at the elevation of five thousand feet, and near the source of the rivers Stanislaus and San Antonio. These trees belong to the natural order *Coniferae*, or the Pine family, and grow two hundred and fifty, and even four hundred feet in height. The bark, which is of a cinnamon colour, is from twelve to eighteen inches thick; the wood reddish, but soft and light; and the stem from ten to twenty feet in diameter. The branches grow almost horizontally from the stem; their foliage resembles that of the cypress; yet, notwithstanding the monstrous size of these trees, their cones are only two inches and a half in length, resembling those of the Weymouth Pine (*Pinus strobus*); whilst the *Auracauria*, or South American Pine, although far inferior in size to the *Sequoia*, produces cones of the form and magnitude of a child's head.

The *Sequoias* stand together in groups on a black, fruitful soil, which is watered by a brook. The miners have given some of them their especial consideration. One has been called "The Miner's Cabin;" it is a hollow tree about three hundred feet in height, the excavation being seventeen feet in breadth, and nearly fifty feet in circumference. "The Three Sisters" have all sprung from the same root; "The Old Bachelor," worried by storms, leads a solitary life. "The Family" consists of a group of trees—two large ones, "The Parents," and twenty-four small ones, "The Children." "The Riding School" is an immense tree which has been overturned by a storm, in the hollow stem of which a man can ride on horse-back for a distance of seventy-five feet.

In standing before these giant forms of the forest, we naturally try to calculate the time which was necessary to bring together such vast masses of vegetable matter, and then think of our short lives and diminitiveness. Judging from their rings, these trees are at least from two to three thousand years old. The following description of one of them, recently felled for timber, is taken from a work published by the Government of the United States:

"As there has been already considerable discussion with regard to the age of this tree," says Dr. Bigelow, "I may state that when I visited it in May last, at a section of it, eighteen feet from the stump, it was fourteen and a half feet in diameter. As the diminution of the annual rings of growth, from the heart or centre to the circumference or sap-wood, appeared pretty regular, I placed my hand midway, roughly measuring six inches, and carefully counted the rings on that space, which numbered one hundred and thirty, making the tree 1,885 years old.

"A verbal or written description of this tree, however accurate, cannot give one an adequate idea of its dimensions. It required thirty-one of my paces, of three feet each, to measure thus rudely its circumference at the stump. The only way it could be felled was by boring repeatedly with pump augers. It required five men twenty-two days to perform the operation. After they