PUGET SOUND UNIVERSITY.

THE Puget Sound University was chartered in March, 1888, under the auspices of the Methodist Episcopal church, with the object of founding and maintaining an institution of higher classical, scientific and theological learning in the region of Puget sound. For some time the question of location was unsettled, several of the eligible cities of the sound being under consideration, but at last a most desirable site being offered in Tacoma and the other advantages of that rapidly-growing city being so great, the managers decided to locate the university there. Work is now in progress on the main college building, which is completed to the first story, and which will cost a total of $60,000. This beautiful and substantial structure has a solid foundation of stone, and the superstructure is of brick with stone trimmings, and is 63 x 200 feet in size and four stories high with a pyramidal tower above the high, arched entrance. On the last page is given an engraving of this handsome edifice. The corner stone was laid on the sixteenth of September by Bishop Thomas Bowman, of Saint Louis, assisted by the presiding elder of the Puget sound conference. The site is a most charming and healthful one, being on the crest of the hill overlooking the city and bay and commanding an entrancing view of the sound, the Cascade mountains and the great, white peak of Mount Tacoma. It is expected that the building will be completed in time for the school term beginning in September, 1890.

ARTIFICIAL GLACIERS FOR IRRIGATION.

ALMOST novel, and to a degree practicable, plan of storing up water in winter for use in summer is suggested by Hon, William N. Byers, founded on an intimate knowledge of mountain streams and climatic conditions in the mountains.

Most of the longer streams that flow out from the crest of the snowy range rise at, or above, the upper line of timber growth. They descend by a steep grade through the upper belt of timber, and a number of them converge toward the center of a basin which is the gathering point for a large stream. This basin is generally a swampy meadow or a thicket of willows, filled with beaver dams. Sometimes it is partially covered with spruce trees. In any case it is wet, and nearly or quite level. The water flows through it very slowly, and a relatively large quantity is always in store there. At the foot of the basin a sharper descent begins, and a large, well-defined stream is formed. It may, farther on, pass through other basins and lose itself in successive swamps or beaver ponds.

In ordinary seasons these high regions are early covered with snow. In many places it comes before the ground is frozen at all. It bridges over the channels of the small streams and each succeeding storm covers them deeper. Consequently they flow all winter under the snow. When the small streams have united and formed the large one, it is too wide for the falling snow to bridge over, but the frosty nights soon cover it with ice, leaving plenty of room beneath for the winter flow of water. Snow soon spreads a blanket over the ice and the stream is safely housed from its source at timber line all the way down the mountain slope to the point where changing temperature brings alternate freezing and thawing for many months. Ice once formed remains ice until the next summer.

The plan is to obstruct these small streams at, or just above, their first Alpine basin. It can be very easily done. When the snow has covered over the little rivulet and the weather has become freezing cold, break through the covering at a favorable point, pack the channel full of snow and compel the water to flow over your snow dam into the open air. The compact body of water that hitherto flowed in its confined and covered channel now spreads out like a fan, in a thin sheet. It saturates the snow, the freezing air quickly changes it to ice, and in a little while a hillock is growing up like the dump at the tail of a ground sluice. And this hillock, or thousands of them, may be kept growing all winter.

To carry out this plan would require an able, trusty man for each given space. It may be the basin, or a number of basins, at the head of a considerable stream. He must make his winter home there. Before winter sets in he will have surveyed the ground and marked out his route. It will be nearly on a level along the mountain side and will resemble a trapper's trail for setting a line of traps. He will mark it well by blaz- trees or planting poles. At the crossing of each little stream he will determine the exact place to interrupt its flow and mark it by a high pole. He must watch the work, and especially after each considerable fall of snow he should go over his entire circuit. A man should take care of fifteen or twenty miles, or from fifty to 100 streams. This process might be applied lower down the stream, where it is larger, and instead of building a number of little glaciers, construct a grand one. Success depends upon bringing the water out to the air, distributing it in a thin sheet over a comparatively large surface, so it will freeze quickly, and keeping the flow all the time on the surface. To save it all, the process must be high enough on the mountains to have steady freezing weather. One man at $60 a month for six months in the year will store up more water against the next irrigating season than can be stored in a $50,000 reservoir.