COLUMBIA, (s. c.) August 19.

The Columbia Water Works have been completed by Col. Blanding, according to his charter, by the extention of the main Pipes through the town in every part required by his stipulations with the council. The whole extent of pipe thus laid down, is 17654 feet, all of cast iron; beginning at the Basin, nine miles diameter, and ending at the extreme parts of the town, with two inches. It thus reaches about three miles and a half, conveying water to forty six squares—on which the town is principally built. The water that supplies this establishment, is collected in a valley about 800 feet to the west of the main street, from pure springs. The basin in which it is thus collected is sunk about 14 feet below the surface and is enclosed with a wall of stone four feet thick. This is covered in, so as to exclude filth and heat. This basin contains 40,000 gallons, and when the engine is not pumping, the water which is received from the spring through a trunk that enters the bottom, is passing off over the top of the walls. These springs were ascertain by accurate measurements made in the year of 1818 and 1819, to supply more than 80,000 gallons in twenty four hours. And there are springs in the valley, which have not been yet turned into the union. From the bottom of the collecting basin to the top of the wall of the summit or distributing basin, there is 120 feet elevation in a distance of 900 feet. The distributing basin is on a hill about 500 feet west of the principal street, and has a general elevation above the town of 25 feet, so that every house in the place can be supplied with water from it, in the second and some in the third story. This basin is a perfect circle of brick, 76 feet diameter, and nine feet deep below the surface of the earth. It is protected by a conical cover, that excludes heat and dust, but at the same time is well ventilated. It contains 250,000 gallons, and when full, will supply the present population of the town for ten days, without being replenished. In the main pipes there 44 fire plugs, so that each corner of the squares that are watered has a supply for extinguishing fire. These plugs are 2 7-8 inches diameter, and suited to the hoes of the fire engineers. Every house within the watered limits, thus has a supply for extinguishing fire within 250 feet of it, and on the main street, within 125 feet.

The pumping establishment is worked by a steam engine of twelve horse power of the most beautiful construction and workmanship, which in two and a half hours supplies the present consumption of the place, for 24 hours, and consumes about one third of a cord of wood.—There are one extra boiler and duplicates of all parts of the machinery that are subject to break, so that in case of accident the necessary repairs can be made long before the water in the distributing basin is consumed. The surplus power of the engine drives two pair of mill stones; one for corn and the other for wheat. The merchant mill is of a very superior construction, having all the facilities of the most approved work of the kind. The surplus warm water from the condensing cistern of the engine, is conveyed to a neat bathing house, which is also supplied with cold water, and affords a bathing establishment of vast use to the comfort and health of the town.

These works have been erected by the funds of an individual, who has received no other aid than the sum of 5,000 dollars from the state legislature in consideration of which he is bound to supply all the public buildings with water free of charge. Already the Court House, Jail and State House, are supplied. The College, Male and Female Academies and the Lunatic Asylum, are entitled to the some privilege, but the expence of servise pipe, by contract is not a charge on the proprietor of the works.

The town pays $500 a year for the use of water, to extinguish fire and the ordinary charge to a family is 20 a year. It is understood that the profit of this establishment do not as yet produce more than four per cent on the capital expences. But we are induced to believe that the increasing population of the town and the liberal encouragement of our citizens will soon make it a valuable stock.—The comforts afforded by it, are every day more extensively felt: and whether we regard the security which this work presents against fire, the health promoted by its introducing a general practice of bathing, or the convenience it affords for every household purpose, this undertaking, superior, we believe, to any which individual enterprise has effected in the United States, must be considered as of incalculable value to our town. The only circumstance which substracts from its

universal utility is that the pipes being sunk about four feet below the surface, are affected by the heat of our summers and the water is too warm for pleasant drinking, although it is perfectly pure, and in other respects equal to the best spring water. We understand that the proprietor is about attempting an experiment to remedy this defect, and to deliver perfectly cool water for drinking. We understand his plan and think it will succeed.

The talents and enterprise of this gentleman we are in hopes, will yet meet the reward they deserve.—*Telescope.*