

LARGEST FILTERS IN THE WORLD.

A Chicago Company Fitting Out the Davenport (Iowa) Water Works.

Water filtration has always been a serious problem, but it has remained for a Chicago firm to construct mechanical filters that will not only insure a supply of pure water, but will guarantee the cleansing of the sand through which the water passes. For some time the Davenport (Iowa) Water Company has been engaged in making examination of the various filters employed in cities all over the United States. A large sum of money has been expended and the reports of J. P. Donahue, the secretary and treasurer of the company, as to the water filtration in other cities led the stockholders to borrow \$300,000 for the construction of the filter plant. Bids were asked and the Hyatt Pure Water Company, the National Water Purifying Company, the O. H. Jewell Filter Company and the American Filter Company of Chicago sent in estimates for the work. Though the latter is the youngest company in the states, the superiority of its filters led to a settlement between it and the Davenport company. Yesterday afternoon Chester B. Davis, the president of the Chicago company, signed the contract and the work will be pushed at once. The filters, when erected, will be the largest and finest in the world. They are of the horizontal style and ten in number, each seven and a half feet in diameter and thirty feet in length. The possible capacity of the filters is 7,500,000 gallons of pure water a day, while the easy capacity is 6,000,000 gallons. The water is forced through the filters under an extreme pressure of 200 pounds to a square inch, and then passes downward through five feet of sand and through a screen of fine slits sawn through cylinders of heavy seamless tubing made of composition metal. The sand has been brought from Horn Island in the Gulf of Mexico. This sand is of an even texture and not porous, thus preventing microbes from clinging to the particles and decaying. The great secret of water filtration is the washing of the sand, and this is perfected in the filters of the Chicago company. The custom has been to have such large steel plates for filters manufactured at Pittsburg, but the Chicago Steel Rolling Mills are now able to handle the plates required by the Davenport Water Company.