process is repeated with each section, it is practically always running down a falling gradient, continuous, though of varying steepness. The hydraulic power necessary in carrying out this system is conveyed through a pipe which is laid beneath the rails, and the admission of water to the cylinders of the rams is controlled either by electrical means from the cars themselves, or by the weight of the train depressing the section it is about to leave, and in this way actuating the supply valve.

SKATES OF GLASS.

"I believe the death knell of metal and wooden skates has been rung," said one of the largest skate manufacturers to the writer recently.

Several practical inventors have been experimenting on these articles for years past, and the latest result is a skate made of glass, hardened by a recently discovered process to the consistency of steel. The entire skate is of this substance, the upper part resembling a slipper, open behind, with a split 'lace-up' heel cap.

Among several advantages stated are, that they are much faster than steel blades, and so extremely slippery that they will run almost equally as well over rough, snow-covered ice, as upon smooth, and also easily over inequalities, broken twigs, and other obstructions. They are made very sharp, and owing to their extreme hardness, it is impossible to blunt them; and, unlike steel skates, they never want grinding, and cannot rust.

These "crystal" skates are really beautiful in appearance, being nearly transparent; the substance also has, while in the liquid state, been variously colored. They have already been privately tested. A famous skating champion recently tried a pair at the Niagara ice rink, using mahogany colored ones, to avoid attracting attention, the time being hardly ripe for exhibition. A private trial has been made in Paris at an ice rink especially hired for the occasion, several ladies—among them a celebrated continental lady skater—taking part; their skates were colored blue, crimson, brown, etc., to match their costumes.

Three offers of £6,000 and £7,000 have been made, it is said, by certain capitalists for a third share in the invention, but it is believed a company will be floated.—Pottery Gazette.

PERSIAN COTTON.

A report by the United States Consul-General in Teheran on the cultivation of cotton in Persia, and the native spinning and weaving industry there has been published by the Department of State in Washington. Cotton is indigenous to Persia and will thrive in any part of the country where the soil is suitable and irrigation possible. Owing to scarcity in the supply of proper manure the same land is not sown with cotton two years in succession, but is allowed to remain fallow for a year. Planting takes place at the commencement of April and continues for about a month, according to the varying circumstances of latitude and situation. The harvest begins with the last week in September and is finished everywhere by the end of October. The method of picking the cotton is much the same as that in use in other countries. After it is gathered and dried the cotton is put through a cleaner consisting of two parallel rollers, between which it passes, and a box to receive the seeds. The contrivance is an inefficient