



OTIS BROTHERS HYDRAULIC PASSENGER ELEVATORS.

No direct application of power is made to cause the car to descend, the valve-rope being pulled by the operator in the opposite direction to that described above, when the water above the piston passes out, and the piston ascends, being moved by the greater weight of the car, which sinks with a smooth and steady action, its speed being easily regulated by the operator by opening or closing the valve. A certain range of speed is allowed him, though there is a fixed maximum which cannot be exceeded. The car stops automatically at the top and bottom of its route, and it may be called by means of an operating rope. In these machines every probability and possibility of accident has been carefully considered and guarded against. All the parts of the machine are made not only strong enough for the work required, but many times stronger than extreme prudence would dictate, and the manufacturers have spared neither pains nor expense in the effort to make their elevator absolutely safe. All the moving shafts are of steel, and all the other parts, excepting the car, of iron.

The quantity of water required for running the Otis elevator,

and the attendant expense, is reduced to a minimum, the friction to be overcome being materially lessened in comparison with that of other machines of the same class, by the careful attention given to the mechanical perfection of details of construction. They are ready for use at all times, day or night, and can be operated by any person of ordinary intelligence.

These elevators have so well demonstrated their adaptability for their intended uses, that they have come into very general use for freight and passenger service in all the large cities of the United States and Canada, in governments and other public buildings, hotels, manufactories, business houses, stores, and private dwellings; and we are safe in making the statement that they realize most fully the desirable conditions of extreme simplicity, the highest economy, and safety in action. Among the many prominent buildings in New York in which these elevators are employed, we may mention the Morse Building, Borell Building, Post Office, United Bank Building, and the stores of Arnold, Constable & Co., and Stewart & Co.—*Manufacturer and Builder.*