

SCIENCE

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MODEL ELECTRIC ELEVATOR INSTALLATION.

WE present in this issue a view of a recent model hydraulic elevator installation made at the building of the United Security, Trust, and Safe Deposit Company of Philadelphia by the Otis Elevator Company of Yonkers, N.Y., and Chadbourne, Hazleton, & Co. of Philadelphia, agents in Pennsylvania for the Sprague Electric Railway and Motor Company.

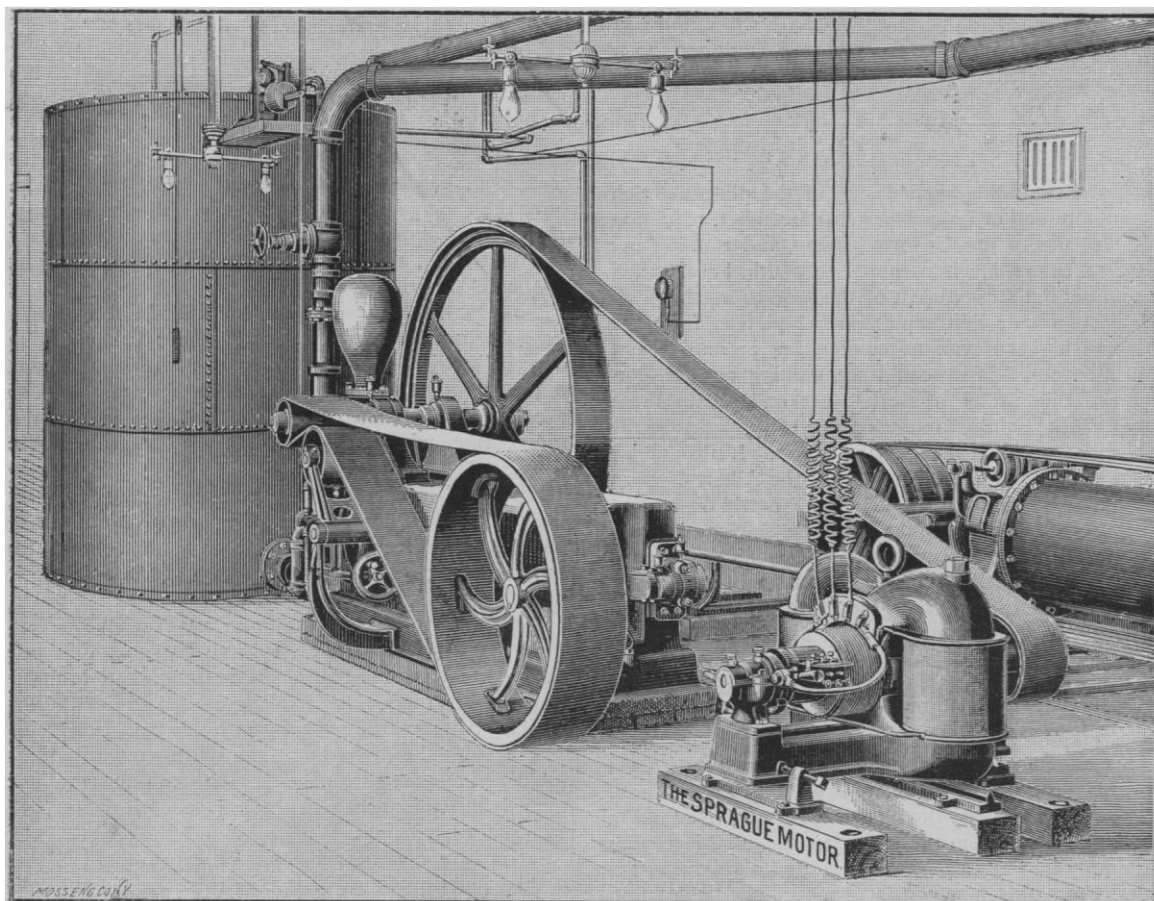
One of the first things which strikes an observer is the minimum of space required for every part of the installation. The pump was manufactured by the Otis Elevator Company specially for this

proved satisfactory in this capacity, and the Sprague motor was substituted.

This motor is now giving perfect satisfaction, and the plant is one of the finest elevator plants in Philadelphia. Our view is made from a photograph, and shows all the details of the installation.

THE WORLD'S MEAT CONSUMPTION, PRODUCTION, AND TRADE.

THE average consumption of meat in the world, says a recent number of the *Journal of the Society of Arts*, London, has in-



A NEW ELECTRIC ELEVATOR.

plant, and the arrangement for reduction of speed between the armature-shaft and the pump is made in the compact manner shown in the illustration. The motor operates the pump against a pressure in the tank, there being no overflow; and when the maximum pressure is reached, the motor runs empty, automatically cutting down the amount of electric current taken from the line, so that only sufficient current is used to supply enough energy to keep the motor in revolution.

Before the installation of the electric motor at this place, a gas-engine was used to supply the necessary power; but gas never

creased; but, on the other hand, the world's commerce in meat has declined. Germany's imports of meat declined from \$94,450,000 in 1878, to \$73,700,000 in 1887, while the exports declined from \$88,300,000 to \$33,900,000. In France, between 1879 and 1887, imports diminished from \$82,300,000 to \$53,910,000, while exports increased from \$35,950,000 to \$52,600,000. In England, where exports of meat are insignificant, the imports decreased from \$240,000,000 in 1880, to \$215,000,000 in 1887. On the other hand, the British colonies exported largely: for example, from Canada the exports increased from \$4,430,000 in 1879, to \$30,000,000 in 1887.