

is not fully understood, M. Berthelot, the famous French chemist "has found that under the influence of the silent electric discharge, it combines with various organic compounds and notably with benzene." He also developed at ordinary pressure a magnificent fluorescent substance, greenish yellow in color and having a spectrum similar to that of the Aurora Borealis. No doubt in time many other interesting facts concerning Argon will be brought out and its true place in nature accorded to it. The discovery of Argon was a brilliant achievement and is the singular result of a prediction followed after an interval by realization.

TESLA'S EXPERIMENTS.—The researches of Tesla in the department of electricity deserve more than a passing notice. Mr. Tesla is acknowledged to be one of the greatest living electricians and his inventions and investigations fully justify one in assigning to him that distinction. In the recently invented oscillator, he departs from beaten paths and yet produces a machine giving higher and better results than before attainable in other dynamos. In the dynamos, as in general use to-day, that part of the wire of the armature, which revolves in front of the magnets, is useless so far as contributing to the generation of electricity. Mr. Tesla in his oscillator obviates this loss by having the armature dart in and out of the magnet, instead of revolving, cutting the lines of force swiftly, regularly, smoothly and thus generating current by this action. This to-and-fro motion of the armature is obtained by fastening the armature direct to the piston of the engine and one beauty of the machine is the absence of all governors, the currents regulating the mechanical movements.

The oscillator is of great practical value as an instrument of research, since it generates a current of high frequency and high potential and has that regularity needful for practical research.

Mr. Tesla has also obtained good results in some of his researches with other phenomena of electricity, as the generation of light from empty bulbs, the attainment of enormous voltage by means of induction, etc. In all his experiments Mr. Tesla brings to his aid the all-pervading ether, his theory as to electricity differing from the theories of some other eminent electricians.