

other lines, all the outcome of his genius and power over matter and the elements, which are now and always have been round and about us.

What of transportation—one of the chief factors in our business as well as our social life? Look back upon the ox team, and now see the bicycle, the automobile, the trolley, and the airplane, all of which have come to stay. Milton wrote in his day: "In future we will touch a button on the wall and a figure will spring forth to serve us." Surely Milton prophesied. Behold the submarine boats, which run under water at a high speed, with entire crews on board bottled up in their prison without discomfort.

And only a short time since, when 'phone and telegraph systems were all put out of business by a great storm of rain and wind, the Lackawanna Railway operated all their trains within a radius of one hundred miles from New York by the wireless station. Eventually we will be able to communicate one with the other by a wondrous telephone system, lately invented, viz., a pocket edition of wireless by which one is able to communicate at some distance with persons supplied with duplicate instruments.

Dr. Barringer Cox, of Bedford, New York, has an invention of a wireless apparatus which may be strapped about the waist and deftly hidden in the folds of a cloak. A picture I have seen shows Dr. Cox with his case, or receiver, raised for a message. The apparatus has a range of eighteen miles.

We have air ships which can sail upside down, can steer against adverse currents as nicely in the air as a boat upon the water, and will shortly sail in the air across the ocean. We now know that we can send messages through the air without a wire, but it has just been announced that a man has succeeded in sending *wireless power* to some distance. This means that the new invention will dispense with wires and complete the development of navigation of the air, through a flying machine, which will receive its power from the ground without wires, and, avoiding the carrying of fuel and a heavy engine, will be enabled to conquer adverse winds. At present there are new facilities for travelling on land and sea. A Swiss inventor has devised a roller skate with large pneumatic wheels that will go over ordinary roads. Peter Hewitt, in trying to build an aeroplane to sail in the air, discovered a new type of boat that would travel on top of the water. The faster the boat was driven the more it rose to the surface of the water, and skimmed along the top at a tremendous rate.

What of Luther O. Burbank, the wizard in plant life? He has been enabled to grow yellow violets on trees; he has made grain bear two heads on the same stem where one grew before, so that every acre of land will yield double in the future. The wild pea he has reduced in size and made it as tender as the French pea. He has made the cactus of the desert so smooth that one can rub his face along the leaves without suffering irritation, and at the same time made it as delicious a food as the egg plant. The wild cactus of the desert can be grown on millions of acres of waste land and become as valuable as alfalfa land of to-day. Cattle will live for ten months without any water other than that which the cactus furnishes, and they fatten upon it better than on ordinary meadow grass.

Our forestry commission estimates that in twenty years our forests will all be gone; there will be little wood left to build houses with and very little wood left to make paper with. In the future straw, palmetto and cactus will