

Philadelphia. At the Centennial the electrical exhibit was insignificant; at the Columbian it is the greatest department of the Fair. At the Centennial, a great Corliss engine on exhibition filled a large room with pulleys and belts; now, power is derived from a similar engine for several rooms and not a belt or pulley is visible. Yes, the science has made great strides, but it is not a mere vulgar theory that it is still in its infancy."

Many other theories set down by skeptics as vulgar, he also sanctioned with the stamp of scientific approval, not with the air of a great scientist, but in an unassuming yet decidedly emphatic way. For instance, he declared his belief, amounting almost to conviction, that the flying machine would be an accomplished fact before the end of the century, at most before the end of ten years. This great undertaking was no longer in the hands of "fakirs;" it was engaging the minds of practical scientists, such men as Maxim, the inventor of the great Maxim gun, and Professor Langley, of the Smithsonian Institute. The great difficulty in the past was that inventors were on the wrong track. They had been vainly trying to make a flying machine on the principle of the balloon, lighter than the air. Such a machine could never be properly steered. The flying machine of the future would have greater specific gravity than the air. Of this Prof. Langley and Maxim were convinced, and on this principle one or both will soon succeed. The machine need not have wings. Nature was not always a wise guide; the steam locomotive got on well without legs. Indeed, the rotatory motion was the most economical. It was also a mistake to suppose that great power was needed to propel a body in high air. It was absurd to suppose that a pigeon possessed half a horse-power. Steam, not electricity, would supply the power of the air ship; at least until the storage battery was made perfect. As to the future of electric lighting, Mr. Bell believes it to be vast, almost infinite. This was demonstrated by the young Russian scientist, Nicolai Tesla, who, before a New York audience, lighted a hall by electricity passing through his body, the light emanating from his outstretched finger tips. Electricity could, therefore, be made harmless to human health or life.

"Tesla's plan," said Mr. Bell, "is to conduct the current in a series of waves by ever-recurring instantaneous cessations. He can fill the dome of this room with a cloud of light, the supply of electricity coming from two zinc plates on either side of the dome, these plates electrifying all the intervening air."