"In a less exalted sphere we meet with the same phenomenon. Sir William Herschell was a musician, Faraday a bookbinder, Scott a lawyer's clerk, Murat a student of theology, Ney a notary's clerk. Arkwright, the inventor of the spinning-machine and the first cotton manufacturer, a barber; Spinoza a glass-blower, Adam Smith a clergyman, Lord Armstrong an attorney, Herbert Spencer an engineer, Pasteur, the father of modern medicine and chirurgy, a chemist; Edison a news-vendor; George Stephenson and most of the great inventors and creators of industry of his time were ordinary workingmen.

"When we look round we find not only that many leaders of men were devoid of a highly specialized training in that particular branch of human activity in which they excel, that they were self-taught amateurs; but that many of the ablest politicians and of the most successful business men have not even had the advantage of a fair general education. Abraham Lincoln had learned at school only the three R's. and those very incompletely; President Garfield worked with a boatman when only ten years old; President Jackson was a saddler and never spelled correctly; President Benjamin Harrison started life as a farmer, and President Andrew Johnson, former tailor, visited no school, and learned reading only from his wife. George Peabody started work when only eleven years old; the late Sir Edward Harland was apprenticed at the age of fifteen years; Andrew Carnegie began his commercial career when twelve years old as a factory hand; Charles Schwab, president of the United States Steel Corporation, drove a coach as a boy, and then became a stake-driver at an iron-works. Josiah Wedgewood started work when only eleven years old; Arkwright, the father of our cotton industry, was never at school; Edison was engaged in selling papers when twelve years of age, and Sir Hiram Maxim was with a carriagebuilder when he was fourteen. 'Commodore' Cornelius Vanderbilt, the railway king, who left more than a hundred million dollars, started as a ferryman at a tender age; the founder of the wealth of the Astors was a butcher's boy, Baron Amsel Mayer von Rothschild a pedler. Alfred Krupp a smith, Rockfeller, the head of the Standard Oil trust, a clerk All these most successful men were autodidacts."