Thomas alva edison essay



Thomas Alva Edison was the most famous and prolific inventor of all time. Duringhis life, over 1100 patents were issued to him or his associates; he was knownas the wizard of Menlo Park, the town in New Jersey where he set up his firstinvention factory. Yet he was not really a scientist, having no theory ormathematics, and most of his success came from perfecting the ideas of others oralready existing inventions by trial and error. He learned telegraphy on therailway, and his services as a telegrapher were in demand during the Civil War, when he traveled all over the country, incidentally studying electricity. In 1868 came his first invention: a machine to record votes in Congress. ButCongress turned it down, because they were not interested in speeding upmatters. Edison then resolved to work only on inventions that were commercially viable. His first such invention was an improvement on the ticker machine whichtransmitted stock market prices. At this particular time in U. S. history, when Wall Street and big business were more powerful than the government and anenormous economic expansion was under way, this invention was so successful thatEdison set up a small manufacturing plant to build ticker-tape machines, whichhe later sold at a profit. This was the first instance of Edison's ability tosee what needed to be invented before inventing it. Next he made improvements to the telegraph, culminating in a system that allowed four messages to be sent onone wire. He also made improvements to the typewriter. By 1876 Edison quitmanufacturing and set up his first invention factory, with employees to help himdevelop ideas. Their first inventions were improvements to the telephone, including a microphone. At this moment Edison had invented the concept of commercial inventing, which has dominated twentieth-century technology. In 1877Edison produced his most celebrated invention, certainly

his own favorite: thephonograph. Edison's device used a tinfoil-covered drum which was hand-crankedwhile a stylus traced a groove on it. The first recording ever made was ofEdison's own voice reciting Mary Had a Little Lamb. Typically, Edison hadwritten out a list of ten uses for a sound-recording machine before he built it.

He saw it as a useful office machine, and did not foresee themultimillion-dollar record industry of today, which has survived competitionfrom radio, TV, and Edison's own motion pictures. In 1878 Edison, using histrial-and-error method, began research toward the development of an incandescentlight bulb. He made thousands of experiments before achieving success with acharred cotton thread, sealed in a vacuum so that it would glow without beingconsumed. His team then worked out the principles of the generating and distributing system that made electric lights for every home practicable. In1882 the first generating plant was opened at Pearl Street in New York City.

Edison used a direct-current system; a former associate of his, the U. S.

scientist of Croatian origin, Nikola Tesla, developed an alternating-currentsystem for the rival Westinghouse company, which eventually prevailed. TheEdison Electric Light Company, however, grew by mergers to become the GeneralElectric Company. While working on the light bulb, Edison made his only realscientific discovery, the principle of the vacuum tube. At the time, however, there seemed to be no use for its properties; not until 1900 did the Britishelectrical engineer, John A. Fleming, discover and

develop its potential forradio. In 1887, Edison moved to a larger laboratory in West Orange, New Jersey.

In 1889 he built a movie camera and later set up a small studio for making shortmovies for peep-show machines. "Once again, however, the entertainment aspectsof his invention did not really appeal to him, and it was finally left to othersto develop the movie industry." "Electricity illuminates parts of New Yorkbeginning September 4, 1982, as Thomas Edison throws a switch in the offices offinancier J. P. Morgan to light the offices and inaugurate commercialtransmission of electric power from the Morgan-financed Edison Illuminating Co.

power plant on Pearl Street. The company will soon supply current to all ofManhattan and it will develop into the Consolidated Edison Co., prototype of allcentral-station U. S. power companies. "This day marks one of the mostgigantic leaps of technology as no longer would we have to depend on sunlightand or candles to work. This means our productivity time was doubled! Withoutthe invention of the lightbulb, out lives would be incredibly different. Even inthe most rural of places electricity is a must and is still depended on. It issomething we use every day and its utility boosts Edison up to the 4th positionin my mind. Also his invention of the phonograph revolutionized the musicindustry as is made listening to music at home possible for the first time. Alsohis invention of the vacuum tube helped not only the radio invention but it wasone of the key instruments in the first computer, another invention which Icannot possibly imagine life without. Such an inventor should not go unnoticedin time and thats why I ranked him 4th.