Alexander Ghram Bell Essay, Research Paper

Alexander Graham Bell’s invention of the telephone grew out of his research into ways to improve the telegraph. His soul purpose was to help the deaf hear again. Alexander Graham Bell was not trying to invent the telephone, he was just trying to help out people in need. Young Alexander Graham Bell, Aleck as his family knew him, took to reading and writing at a precociously young age. Bell family lore told of his insistence upon mailing a letter to a family friend well before he had grasped any understanding of the alphabet. As he matured, Aleck displayed what came to be known as a Bell family trademark–an expressive, flexible, and resonant speaking voice. Born in Edinburgh, Scotland, the inventor spent one year at a private school, two years at Edinburgh’s Royal High School (from which he graduated at 14), and attended a few lectures at Edinburgh University and at University College in London, but he was largely family-trained and self-taught. He moved to the United States, settling in Boston, before beginning his career as an inventor. With each passing year, Alexander Graham Bell’s intellectual horizons broadened. By the time he was 16, he was teaching music and elocution at a boy’s boarding school. He and his brothers, Melville and Edward, traveled throughout Scotland impressing audiences with demonstrations of their father’s Visible Speech techniques. Visible Speech was invented by their father but he didn?t have much luck with it. It is a technique were ever sound that comes out of a persons mouth can be represented with a visual character. In 1871, Bell began giving instruction in Visible Speech at the Boston School for Deaf Mutes. Attempting to teach deaf children to speak was considered revolutionary. Bell’s work with his deaf students in Boston would prove to be a watershed event in his life. One of his pupils, Mabel Hubbard, was the daughter of a man–Gardiner Greene Hubbard– who would go on to play a vital role in Bell’s life and work. While Mabel herself would one day become his wife. Bell felt that a course had been set and he would go on to consider himself, above all else, a teacher of the deaf Bell had the good fortune to discover and inspire Thomas Watson, a young repair mechanic and model maker, who assisted him enthusiastically in devising an apparatus for transmitting sound by electricity. As the two collaborated on ways to refine Bell’s “harmonic telegraph,” Bell shared with Watson his vision of what would become the telephone. Watson was intrigued, and a partnership was forged. Bell’s ideas about transmitting speech electrically came into sharper focus during his days in Boston. As he read extensively on physics and devotedly attended lectures on science and technology, Bell worked to create what he called his “harmonic telegraph.” On April 6, 1875, Bell was granted the patent for the multiple telegraph, which sent two signals at the same time. In September 1875 he began to write the specifications for the telephone. He had developed the “harmonic telegraph” which could send more than one message at a time over a single telegraph wire. On March 7, 1876, the U.S. Patent Office granted him Patent Number 174,465 covering, the method of, and apparatus for, transmitting vocal or other sounds telegraphically…by causing electrical undulations, similar in form to the vibrations of the air accompanying the said vocal or other sounds. In the wake of Bell’s invention of the telephone came an avalanche of patent lawsuits and corporate maneuvers. Western Union Telegraph Company was the titan in the field of telegraphy and was not content to sit on the sidelines as the Bell Telephone Company captured the spotlight. Feverishly working to develop their own telephone technology, Western Union employed two prominent inventors–Thomas A. Edison and Elisha Gray. Looking to protect its patent rights, the Bell Company sued Western Union and won. In the years that followed, the Bell Company (which would eventually become AT&T) would be forced to defend its patent in over 600 legal challenges. In every case, the patent withstood attack thanks largely to Alexander Graham Bell’s clear and convincing testimony. After inventing the telephone, Bell continued his experiments in communication, which culminated in the invention of the photophone-transmission of sound on a beam of light- a precursor of today’s optical fiber systems. He also worked in medical research and invented techniques for teaching speech to the deaf. The range of Bell’s inventive genius is represented only in part by the 18 patents that granted in his name alone and the 12 he shared with his collaborators. These included 14 for the telephone and telegraph, four for the photophone, one for the phonograph, five for aerial vehicles, four for hydroairplanes, and two for a selenium cell. Eager to infuse a love of science and the natural world in others, Bell lent considerable financial and editorial support to both Science magazine and National Geographic. Upon Bell’s death on August 2, 1922, the nation’s phones stilled their ringing for a silent minute in tribute to the man whose yearning to communicate made them possible. Alexander Graham Bell was a man of many talents. Aleck had accomplished many things in his life, the telephone, the joy of helping deaf people speak, and the marriage of him and his wife. The next time you pick up the phone think about the man that made it possible for all of us, Alexander Graham Bell.