

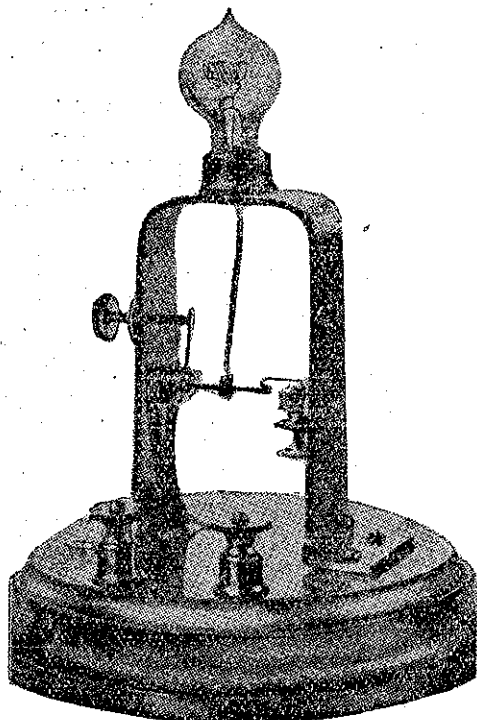
fully arranged on shelves, and duly labelled "Poison." The chemical knowledge Edison began to acquire in those early days subsequently proved invaluable to him in problems encountered in his invention of the incandescent electric lamp and his famous storage battery now so much in use.

AS young Edison needed more money to augment his stock of chemicals he persuaded his parents to allow him to apply for the concession to act as a newsboy on trains of the Grand Trunk railway line between Port Huron and Detroit, a round distance of 126 miles. He obtained the concession and commenced selling newspapers on the train which left Port Huron at 7 o'clock in the morning and arrived back at 9.30 in the evening—a long day for a kiddie.

Actually this was not Edison's first business enterprise, for, prior to that, he and the Dutch boy Oates hawked vegetables grown by his father, with a horse and small wagon, and in one year handed over to his mother £120.

After selling newspapers on the train for several months Edison started two little shops in Huron, one for periodicals and the other for vegetables, butter and berries in the season. He shared the profits with two boys who ran the shops for him, but the lad who attended the periodical shop could not be trusted, and Edison soon closed that enterprise. He kept the vegetable shop going for nearly a year. Edison's business acumen was again shown when he obtained the newspaper-selling concession on an express train leaving Detroit in the morning and returning in the night. Then when the daily immigrant trains commenced running he employed a boy to sell bread, tobacco and stick-lolly. The Civil War added a great stimulus to the sale of newspapers, and Edison prospered. Of his daily takings he gave four shillings a day to his mother, but most of his profits he laid out in chemicals and chemical apparatus.

So enthralled was the youngster with experimentation that Edison carried his laboratory on the train with him! The luggage van was divided into three compartments, one for express packages and luggage, one for the mails and the third was originally intended as a smokers' compartment, but was unused. The train conductor permitted young Edison to use the spare compartment as his laboratory, which he soon established with an imposing array of jars, bottles, test-tubes, batteries and other miscellaneous equipment. Edison had a copy of a translation of a work on qualitative analysis by Karl Fresenius, a German professor, and this was used as a basis for the lad's experiments. Edison found time to study on the train, and also print a little newspaper, "The Weekly Herald." He bought a tiny printing press and taught himself to set up the type and print



From this crude apparatus—the first incandescent lamp—conceived and constructed by Edison only fifty years ago, has evolved the modern electric lamp.



(From "Cosmopolitan" Magazine).

Thirty-five years ago, these two now world famous men—Ford and Edison—met at a dinner. It was the time when Edison was working on the designs for an electrically propelled vehicle. Ford was planning the motor, and sought out Edison to obtain some advice. Edison, upon hearing what Ford had to say, remarked: "Your ideas are the sounder. My vehicle has to be receiving power constantly; yours can make its own." Since then the two had been the closest of friends.

the miniature paper. He procured his news from the various railway telegraph offices. Edison sold his "Weekly Herald" at 1½d a copy or 4d. for a month's subscription. Edison produced the journal without aid, acting as advertising manager, circulation manager and newsagent. The paper immediately reached a circulation of 400 copies.

Through visiting the telegraph offices at the various railway stations Edison became interested in electricity. Then he had a boy chum erected a telegraph line between their homes, and by dint of practice late at night they soon became quite proficient.

Things ran smoothly on the railway train until one day the luggage van gave a severe lurch, and one of Edison's phosphorus sticks was thrown from a shelf to the floor. The phosphorus became ignited, and the van took fire. Edison attempted to extinguish the blaze but failed. The timely arrival of the conductor, however, with some water saved the situation. Then the conductor lost his temper, and boxed Edison's ears. These blows ultimately caused the deafness that developed and remained till his death. At the Mount Clemens station the conductor evicted Edison with his complete outfit, and left him on the station, his equipment ruined, and the boy in tears.

Edison re-established his laboratory in the family cellar. He continued to run his paper, "The Weekly Herald," until at the suggestion of a young friend he enlarged the paper, which he renamed "Paul Pry." Under this new title Edison's journal indulged in small talk and pointed personalities. One resident of Edison's home town became so peeved over a personal allusion in the said journal that he pitched the youthful editor into the Saint Clair River. The paper did not long survive this episode.

EDISON continued on the trains with the newspaper concession, but contrived to do endless reading at the Detroit Public Library. His hunger for learning was insatiable.

One morning in August, 1862, when Edison was only 15 years of age, an incident occurred which had a direct effect on his career. The child of a stationmaster at Mount Clemens was playing in the gravel on the railway line when a loaded box car was shunted along the line. Edison threw his cap off, flung his newspapers aside and dashed out on the line. He jerked the child clear of the box car just in the nick of time, for a wheel struck Edison's heel, but fortunately without inflicting any injury. The stationmaster showed his gratitude by undertaking to instruct (Concluded on page 30.)