

Copenhagen, 1889, was appointed Court pharmacist on January 29, 1930, and his "privelegium" granted March 28th of the present year. Round three sides of the shop above the wall fittings are inscribed the names of all the proprietors and the dates of their occupancy from 1669 to 1930. Portrait medallions of the present King and Queen of Denmark adorn the walls. A lamp standing on the counter is surmounted by a crown and the initials H. A. (Hof Apoteket) finely wrought in bronze. The shallow and narrow counter cases carry tooth brushes and a few dentifrices and some English toilet soaps: there is no perfumery and no other display. A large business is done in supplying and renewing ships' medicine chests. There is a well-equipped pharmaceutical laboratory, and all through the quiet atmosphere of a large and highly responsible practice.

THE TWO SONS OF A DANISH APOTHECARY.*

BY EDWARD KREMERS.

Opposite the harbor of Kiel, the naval base of Germany, and between two larger Danish islands, there lies the long but narrow Langland. It is but four to eight Km. wide and 50 Km. long, hence its name; its area is but 275 square Km. According to recent statistics, it has a population of only 19,541 inhabitants. The only city on the island is Rudkjoebing, which at the same time boasted of 3447 inhabitants, and a harbor which about 150 vessels regarded as their home port. Yet this insignificant place gave to Denmark one of her greatest statesmen of the nineteenth century, and to the world one of her famous scientists. What is more, these two men were brothers, who first saw the light of day in the home of an apothecary. The love of truth as expressed in nature and nature's laws was instilled into their minds by their father, the love for all that is true and noble having previously been implanted in their young hearts by their mother. Such at least is the story told by Hans Christian Andersen in his tale of the "Two Brothers."

Hans Christian, the older of the two brothers, was born August 14, 1777, in Rudkjoebing. At the age of eleven he was set to work by his father in the apothecary shop, where "he developed a taste for the natural sciences." Apparently, to make up for the instructional deficiency in so small a place, he was sent away from home when eighteen years of age to receive instruction in the classics. For proficiency in these studies he received academic honors in 1796. In 1798 he received the medical prize of the University of Copenhagen and in 1799 he was awarded the doctor's degree in philosophy. Thus, while his father set him to work in his apothecary shop at an early age, this apprenticeship was not allowed to interfere with a liberal education in the classics and an equally broad introduction into the study of the natural sciences. One has but to look over the list of his publications to see that he never allowed his speciality to dwarf him intellectually.

In 1800 he acted as manager of the Manthe apothecary shop in Copenhagen, and at the same time delivered his first lectures in chemistry before the Academy of Surgery. After this he made his first trip to the continent, where he remained several years visiting the greater part of Germany, also France and Holland. He returned to Denmark in 1804. Somewhat later he was appointed to the professorship in physics at the University of Copenhagen. In 1824 he founded the Danish

* *JOUR. A. PH. A.*, 7 (1918), 620-625.

Society for the Advancement of Science. In 1829 he was made Director of the Polytechnic School in Copenhagen. In 1840 and 1850 he received government recognition by being appointed conference councilor and privy conference councilor, respectively. He died March 9, 1851.

His world fame, Oersted owes to his discovery, in 1820, of the deviation of the magnetic needle thereby the electric current, thereby establishing the laws of electromagnetism. However, not a few of his earlier writings are of a chemical nature, and one of them in particular, *viz.*, his *Om et nyt Aesk i Peberen*, the discovery of piperine in pepper, only a few years after the German Apothecary Sertürner had discovered the alkaline properties of morphine, reflects his earlier pharmaceutical training.

The younger brother, Anders Sandoe, was born December 21, 1779, became a jurist and later statesman. In the latter capacity he advanced from one position to another until, in 1853, he was appointed prime minister by the King of Denmark. He died May 1, 1860.

However, to return to the apothecary shop, which is the scene of Andersen's story. According to the fifth edition of "Den Farmaceutiske Stat i Danmark," 1915, published by the Danish Pharmaceutical Society in 1917, the "Rudkjoebing Apotek" was established November 2, 1705, by Christopher Gottfried Becker. In 1741 it passed into the hands of Anders Joergensen and in 1773 into those of H. Vennenghausen. On June 5, 1776, hence only a month before the Declaration of Independence of the American colonies from England, it was purchased by Soeren Christian Oersted for 600 Rbdl. Inasmuch as neither of his sons followed in the footsteps of their father, the apothecary shop did not remain in the family, but passed into the hands of one Anthon Jacobaeus, March 10, 1806. After that it changed hands several times and since 1889 its proprietor has been Christian August Pilegaard Bauer.

But now, as to Hans Christian Andersen's story of the two brothers. It will be seen that the Christian names of the Danish story teller are those of the elder of the two brothers, the world-famous scientist who emanated from the modest apothecary shop in Rudkjoebing. The German translation is one of the seventeen selected by O. B. Super in his "Andersen's Maerchen" of the Heath Modern Language Series. However, the exceedingly meagre comments in the "Notes" contain nothing whatever pertaining to pharmacy. The English translation here reproduced is taken from the 1870 edition of "Stories and Tales" by Hans Christian Andersen, of Houghton, Mifflin Company, who kindly gave permission to use their text for this purpose.

"On one of the Danish Islands, where ancient judgment seats loom up mid the cornfields, and mighty trees lift their heads in the beech forests, lies a little town, with red roofs over the owl houses. In one of these, curious matters were being prepared over the coals and embers of the hearth: there was testing in crucibles; there was triturating and distilling; there was pounding of drugs in mortars; an old man stood over the whole.

"'One must rightly combine the right matters,' said he 'yea, the right, the fitness, the truth in each created thing, we are to recognize and hold.'

"In the chamber, by the good good-woman of the house, sat two sons of hers—yet young, but with grown thoughts. Of right and reason had the mother ever counseled them, and to hold fast to truth, which is the face of God made visible on earth.

"The elder of the boys seemed arch and pert; his delight was, to read of nature's laws, of suns and stars—no tale could give him better joy. O, what bliss, to go on journeys of discovery or to contrive to imitate birds' wings, and fly!—yea, that were the true thing to find! Father was right, and so was mother; 'tis truth doth hold the world in shape.

"The younger brother was of a quieter mind, and lived but in his books; did he read of Jacob—how he clad himself in sheepskins to resemble Esau and therewith to wrong him of his right of birth—in anger the boy clinched his little hand, vexed at the fraud; did he read of tyrants, and the wrong and misrule that reign in the earth—tears filled his eyes. Thought of the right and of truth, that ought and were to triumph, swayed him mightily. One night the little one had gone to bed; but the curtains hung awry, and let in some light upon him, by which he lay with book in hand, and read to end the history of Solon.

"And thought did lift and bear him strangely on, 'twas as if the couch had grown into a vessel under sail—was he dreaming? or what meant it else? He glided over rolling billows—coursing swift athwart the sea of ages; his ear caught Solon's voice, proclaiming, in the stranger's tongue—and yet the boy did understand—the Danish motto: 'Justice buildeth up a land.'

"And the Genius of Humanity stood in the midst of the lowly chamber, bowed over the boy, and left a kiss upon his brow: 'Be strong in glory, and strong in the battle's heat; with truth fixed in thy breast, go forth on thy way unto the home of truth!'

"The elder brother was not yet abed; he stood at the window, gazing out upon the mist that arose from the plain; they were not elves, a-dancing over yonder; the old nurse, 'tis true, had taught him so; but he knew better; they were vapors, warmer than the air, and hence they arose. A shooting-star lit up the sky, and the boy's thoughts were instantly gathered up from the mists of earth, into the region of the shining meteor. The stars twinkled in the firmament, and it was as if golden threads were floating from them to the earth.

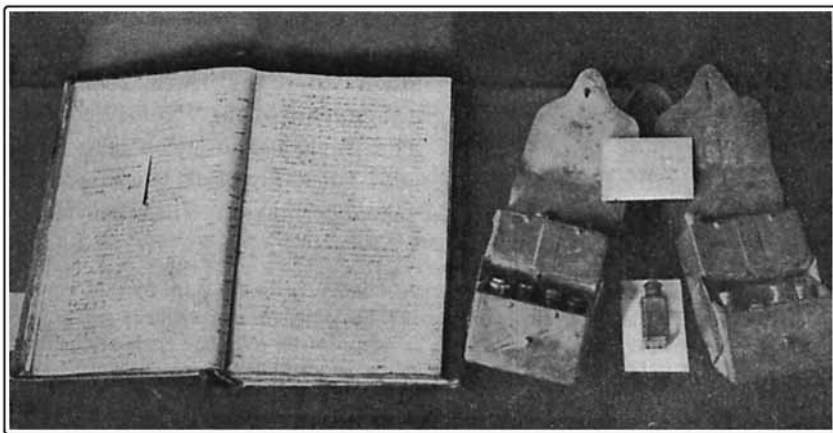
"'Come with me!' it sang and rang in the boy's heart, and the Race's mighty Genius bore him—swifter far than bird or arrow, or aught of earth that flies—out into Space, where ray on ray from star to star bound all the rolling globes to one another; the earth was spinning in the rare empyrean city crowding close on city. Through the spheres resounded—

"What is space, and where is distance, while the lofty spirits of Thought bears thee on high?

"And again the youth was at the window, peering forth, and the younger brother lay abed, and their mother called them by their names:

"'Andrew and Hans Christian!'

"Denmark knoweth them, the world knows both the brothers.—Oersted."



Dr. Sappington's Prescription Book and the Saddle Bags from which, traveling on horseback, he distributed the first quinine used in the Mississippi Valley—"Proceedings of the Celebration of the 300th Anniversary of the First Recognized Use of Cinchona."