

JOURNAL OF THE
THE APOTHECARY, A LITERARY STUDY.*

BY EDWARD KREMERS.

10. THE TWO SONS OF A DANISH APOTHECARY.

Opposite the harbor of Kiel, the naval base of Germany, and between two larger Danish islands, there lies the long but narrow Langeland. It is but 4 to 8 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 in the island is Rudkjoebing,¹ which at the same time boasted of 3,447 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 OERSTED.
(From Lithographic Institute om Em Baerentzen.)

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,² 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

* For the illustrations the writer is indebted to Apothecary Hoem, of Copenhagen, and to Apothecary Bauer, of Rudkjoebing. The cuts for illustrating this article were kindly loaned the JOURNAL OF THE A. PH. A. by the *Deutsch-Amerikanische Apotheker-Zeitung*.

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 publications³ to see that he never allowed his specialty to dwarf him intellectually.

In 1800 he acted as manager of the Manthé 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 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 councillor and privy conference councillor, respectively. He died March 9, 1851.



ANDERS SANDOE OERSTED.
(From Lithographic Institute om Em Baerentzen.)

His world fame, Oersted owes to his discovery, in 1820, of the deviation of the magnetic needle by the electric current, thereby establishing the laws of electromagnetism.⁴ 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 Ser-tuener had discovered the alkaline properties of morphine, reflects his earlier pharmaceutical training.

The younger brother, Anders Sandoe, was born December 21, 1778, 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*,"⁵ published by the Danish Pharmaceutical Society in 1917, the "Rudkjoebing Apotek" was established Nov. 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 Rbdll.⁶ 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 is Christian August Pilegaard Bauer.



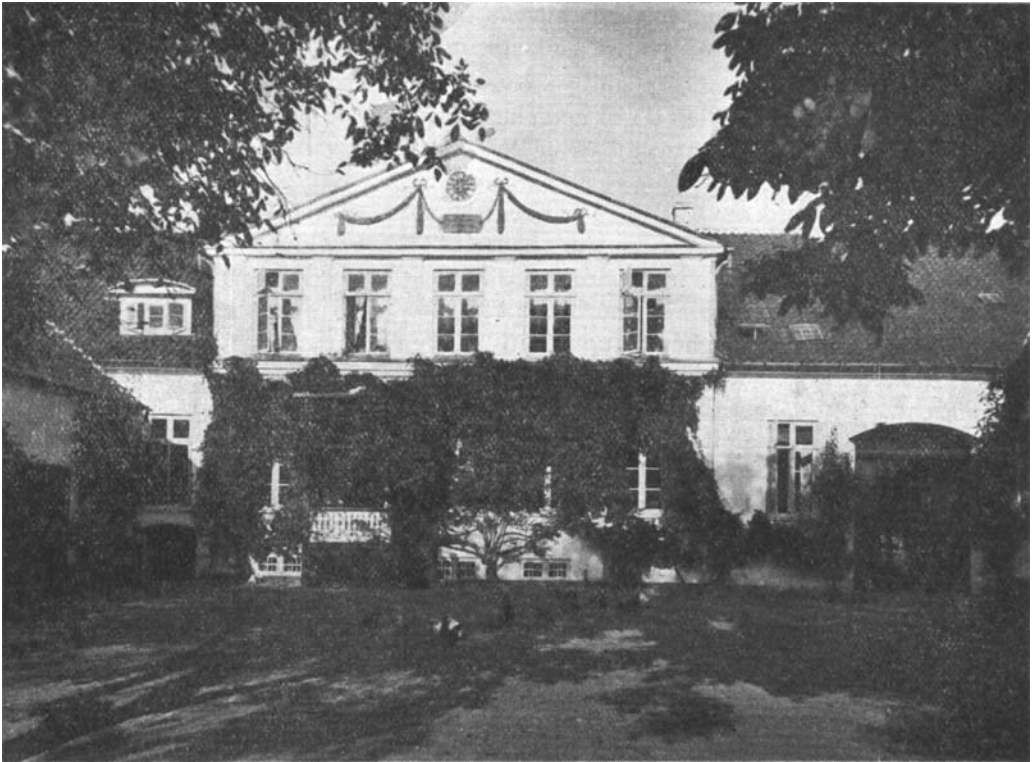
Statue, Hans Oersted, in Oersted Park, Copenhagen, unveiled September 25, 1876.

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 *Adersen'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 low houses. In one of these curious matters were being prepared over the coals and embers on 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.'



OERSTED'S APOTHECARY SHOP.

The following words are on the plate under the clock: "*Tiden-er-kort Brug-den-vel:*" Time is short—utilize it well.

"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 mists 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."

BIBLIOGRAPHY.

- (1) Kjoebing, is a place where merchants (Ger. *Kaufmann*) assemble, hence a market.
- (2) A copy of Forchhammer's biography of Oersted (G. Forchhammer, *Hans Christian Oersted*, Kjoebenhavn, 1852) is in possession of Yale University Library, which kindly loaned its copy to the University of Wisconsin Library for use at Madison.
- (3) Such a list of Oersted's publications may be found in Forchhammer's biography already referred to.

(4) As Oersted states in a Latin brochure, a German translation of which appeared in *Gilbert's Annalen*, vol. 66 (1820), p. 295, this observation was first made in connection with one of his lecture experiments, and later repeated in the presence of personal friends. Inasmuch as he regarded the observation of fundamental importance, he mentions the names of those who saw the experiment as witnesses. The importance of the observation and the consequences derived therefrom, are dwelt upon by Rosenberger in his *Geschichte der Physik*, 3rd part, p. 173.

(5) For copy of this work, the University Library is indebted to the generosity of Mr. Otto J. S. Boberg, of Eau Claire, Wisconsin, who received his pharmaceutical education in Danish apothecary shops and at the University of Copenhagen.

(6) Rbdl. = *Rigsbankdaler*, *i. e.*, the dollar of the imperial bank, the equivalent of one-half dollar, U. S. coin.

DRUG STORE RECOLLECTIONS.*

BY J. N. HURTY, M.D.

Col. Eli Lilly beguiled me into the drug business. I was a callow youth of 16 years and 9 months, and was to graduate in high school the spring of 1870. It was April—Col. Lilly lived in a humble frame dwelling opposite the school house. He was raking his yard that bright spring morning, and I, a callow, conceited and centered youth, with strap-bound books, was trudging unwillingly to school. "Hey, John," said the Colonel, and I stopped. "Come in here, won't you, I want to speak to you." I went in and he unfolded his story which shaped my life work. Up to that time it had never entered my mind to become a druggist. The Colonel made a "center shot." All that day and the next, and the next, and for two weary weeks until school ended, I thought, I dreamed, I contemplated upon becoming a druggist. My expectations were keen, my enthusiasm was at a white heat. I walked by the Red Front Drug Store (that was the name of the Colonel's emporium of drugs and simples) at least twenty times a day. My salary was to be three dollars a week and what could I not do with such a princely income? Priorly I had earned one fifty per week selling and carrying papers, and here was a jump of one hundred percent. It isn't every boy—I said to myself who early in his life's career has his salary doubled. The morning of the first day I awoke at four and it seemed an interminable time until 6.30 A.M., when I was to meet the Colonel at the big double doors of the Red Front. I was there twenty minutes before time, having eaten scarcely any breakfast.

The Colonel appeared a little behind time, which surprised me greatly. He inserted his big iron key, which I remember was about eight inches long and weighed at least three ounces. The door opened and supposedly my life work was before me.

"Sprinkle the floor and sweep out," were the orders, and willingly I went at it. I had for a year sprinkled and swept the floor of the news stand by the post-office and so the work was done acceptably. The show cases, the counters and the base board of the shelves were then dusted with a feather duster and the store was ready for business. "Fix the lamps," was the next command. Eight coal oil lamps suspended from three two-armed fancy iron chandeliers lighted the room. I started to take down the lamps two at a time to show my efficiency.

* Read before Historical Section, A. Ph. A., Indianapolis meeting, 1917.