the pyjamas is efficacious. Amputation of the uvula very seldom gives any relief, though it may change the pitch of the snore. Keeping the mouth closed by a special splint (the Andresen) or even by adhesive, is very helpful. Altering the texture of the pillars by sclerosing injections has been tried, but with only equivocal results. Possibly tonsillectomy helps by leaving a fixed fibrous band instead of soft mobile tissues.

When all is said, snoring is a symptom of unbalanced breathing which may be accompanied by either pathological or physiological conditions. The remedy must therefore fit the causes. Isolation may be the only effective measure.

MEN and BOOKS

ABRAHAM GESNER, M.D., SURGEON GEOLOGIST, 1797-1864*

Kenneth A. MacKenzie, M.D.

Halifax, N.S.

This is the story of a country doctor who practised in Nova Scotia over a century ago. His name has now a permanent place in the archives of the Maritime Provinces due to his work in geology which led him to invent a method of distilling an illuminating oil from coal. He practised medicine for twelve years while pursuing his hobby and it is fitting that we should place in our archives some record of his career and achievements.

Abraham Gesner was born at Cornwallis, Kings Co., Nova Scotia, in 1797. His father, Colonel Henry Gesner, a United Empire Loyalist, fought in the Revolutionary War; lost all of his worldly possessions; then moved to Canada where he was given a grant of four hundred acres of land in the Annapolis Valley. He married a Miss Pineo, and Abraham was their sixth child of a family of twelve. Abraham married Henrietta, daughter of Dr. Isaac Webster, of Kentville, and had eleven children, some of whom attained eminence in the learned professions—medicine, geology and theology. As a young man Gesner shared in a venture to sell horses in the West Indies. Two of his ships were wrecked, one at Brier Island where he almost lost his life by drowning. Later, he proceeded to London where he studied medicine and surgery, at St. Bartholomew's and Guy's Hospitals, under distinguished teachers including Sir Astley Cooper and John Abernethy.

Parrsborough Period, 1824-1837

In 1824, Dr. Gesner returned to Nova Scotia and settled in Parrsborough, one of the most picturesque and interesting localities in the Maritimes. He gives one reason for his choice of location, "that there was an abundance of rocks and minerals to be studied during his leisure hours".

Gesner's medical work is completely overshadowed by his work on natural history, especially geology. Unfortunately he has left no record of his medical activities. A brief reference may be made here to the conditions of medical practice of his time and to the physiography of the district in which he did his pioneer work. It was before the days of anæsthesia and antisepsis, and there was no clinical thermometer. Medical practice consisted of simple diagnoses, empirical remedies, minor surgery, including fractures, extraction of teeth, and the management of difficult labour, when the midwife failed. The physician had ample time for indulging in "hobbies", if so minded, and golf had not appeared to divert the busy doctor from more useful forms of recreation. To visit his patients he either walked, or rode on horseback. Carriages were not known in his district. Railroads had not yet been built; country roads were little more than footpaths. One can picture Dr. Gesner visiting his patients on horseback with his saddlebag full of empirical remedies, probably home-made, and returning home with a saddlebag full of rocks and fossils.

The common illuminant for the home was the tallow candle, home-made, and "dips" made from seal oil, whale oil or vegetable oils. Dr. Gesner burnt the "tallow candle" instead of the "midnight oil".

The physiography of this district is one of the most interesting in the world. Parrsborough, then only a village, situated at the mouth of a river flowing into the Bay of Fundy, was flanked by beautifully wooded hills and magnificent cliffs. Opposite the village, across Minus channel nine miles away, arose the majestic headland of Blomidon. The Bay of Fundy is noted for its remarkable tides which rise and fall forty to fifty feet twice daily. The movement of huge bodies of water produce treacherous currents and constant erosions make fresh exposures of rock for hundreds of miles. This magnificent panorama of cliffs has been a source of pleasure to travellers and lovers of nature, and a nightmare to mariners, many of whom have been ship-wrecked on the treacherous coast line. Even the Indians were intrigued by the grandeur of the district and built up legends about the abode and activities of their gods. The legend of Glooscap is a familiar feature of Indian lore. To Gesner, however, these cliffs made a different appeal. In few places in the world have the pages of geological history been so beautifully and wonderfully exposed, and Gesner, the lover of nature, made the most of his opportunities. On the shore of his village he could pick up

^{*}Read at the Seventy-ninth Annual Meeting of the Canadian Medical Association, Section of Historical Medicine, Toronto, June 25, 1948.

amethysts, opals, carnelian, agates, jasper, and other minerals from the trap rock—volcanic in origin—which had at some time pushed through the triassic sandstone. Every headland, gully and river bed for miles around was a fruitful field for the amateur geologist. Some miles away he studied the strata of the Carboniferous Period along the famous Joggins shore. For thirty miles along this shore may be seen seventy seams of coal separated by beds of sandstone, shale and slate, representing a thick-On the shore one finds ness of ten miles. magnificent fossils, giant trees, lepidodendra, cyads, ferns, calamites and sigilaria, many of which have found their way to, and may now be seen in many museums of North America and Europe.

Dr. Gesner practised for twelve years in this district and, as far as we know, his practice was his only source of income. During his leisure hours he explored the whole district, at first near his home, later in more remote parts of the country. He kept careful notes of his findings, and in 1836 he was able to complete a book which was published in Halifax by Gossip and Coade. It was entitled "Remarks on the Geology and Mineralogy of Nova Scotia' Abraham Gesner, Surgeon. In his preface he apologizes for the imperfections in his work by stating, "that it has not been prepared with leisure and retirement. On the contrary, amidst the arduous duties of a laborious profession and under the annoyance of perpetual interruption, most of the pages have been written; or during the silent hour of midnight when the labour but not the fatigue of the day had departed". This statement indicated that he was still a busy practitioner. At this point, it should be noted that Dr. Gesner did this work alone. Geology was in its infancy. Darwin's work did not appear until thirty years later. The hypothesis of the Ice Age had not yet been advanced. Gesner, reputed to be a religious man, must have had many struggles to reconcile the evidence of his eyes with the biblical accounts of creation and the flood. One may surmise that he had many arguments with the theologians of his day.

SAINT JOHN PERIOD, 1838-1843

Gesner's book attracted immediate attention and brought him before the public as a geologist. In 1837, he explored certain regions in New Brunswick—Grand Lake, Salmon River and Richibucto. The following year he was appointed Provincial Geologist for New Brunswick, a position which he held for three years. He made three annual reports which are preserved. At the end of this period he wished to continue his explorations but the Legislature did not see their way clear to continue his services and he was stranded in Saint John without funds. At this time he was the possessor of a large natural history collection,

said to number 4,000 specimens. Most of these were gathered in Nova Scotia while he was still in medical practice. They included animals, birds, reptiles, fish, Indian relics, as well as minerals, rocks, and fossils. He attempted to interest the Government in the formation of a museum but met with no success. He had an exhibition of his collection in Halifax, in 1841, and in Saint John, in 1842. His next move was to open a private museum in Saint John hoping that the admission fees would cover the expenses. He obtained a suitable room in the building of the Mechanic's Institute, issued a prospectus and prepared a catalogue. He was, by this time, hopelessly in debt, having borrowed money from prominent citizens of Saint John. He tried to sell his collection but found no buyers. Finally, his creditors agreed to accept his collection in payment. The Gesner museum was the first Natural History Museum in Canada, 1842, and was the nucleus of the present New Brunswick Museum which contains many of Dr. Gesner's original specimens.

In 1843, he returned to Nova Scotia and resumed medical practice at his old home, Cornwallis. He continued to write extensively on the natural resources of the Maritime Provinces, and carried out experiments on coal gas and coal oil which led him to fame.

Kerosene Period, 1846-1863

Gesner's important invention was a retort which enabled him to distil an oil from coal. The probable date of his earliest experiments is 1846 and the special type of coal used was Albertite found in New Brunswick; the patents were taken out some years later. In 1850, Gesner met at Halifax the Commander-in-chief of the British North American Station, Lord Dundonald, who is said to be the original discoverer of illuminating gas. He had a commission from the British Government to inquire into the possibilities of producing fertilizer, from the asphalt deposits in Trinidad, for the coffee and sugar plantations of the West Indies and Gesner was employed to assist him. This gave Gesner an opportunity to continue his oil researches with asphalt. The oil which he was able to produce from asphalt, and various types of coal, was a clear oily liquid which proved to have better illuminating properties than the gases already in use. Gesner coined the word "kerosene". At first he called it "Keroselain", from two Greek words meaning "wax" and "oil" and later contracted it to kerosene. He formed a company in Halifax which did not prove to be a success. In 1853, he went to New York, took out patent rights and sold them to the New York Kerosene Company. He remained there for ten years taking an active part in the construction of an oil plant at Hunter's Point, N.Y. The old Gesner refinery is still in existence, the property of the Standard Oil Company. Discovery of natural oil wells in Pennsylvania, in 1859, produced cheaper oil and interfered seriously with the New York industry. In 1863, Gesner sold his interests and returned to Halifax to take the chair of Natural History at Dalhousie University. He died the following year, 1864.

This remarkable man's activities covered a wide field. He was in turn a farmer, trader, surgeon, geologist, author, inventor, manufacturer and lecturer. His writings covered a wider field than geology, he wrote on the fauna and flora of the country and was especially interested in the commercial possibilities of the natural resources. While in his earlier years he toiled alone, in later life he made contacts with distinguished men. In 1842, he conducted Sir Charles Lyell and J. W. Dawson along the Joggins shore. In 1840, he was made a Fellow of the Royal Geological Society of London. Later he was made a corresponding member of the Geological Society of Canada, Academy of

Natural Sciences of Philadelphia, and the Geographic Society of New York.

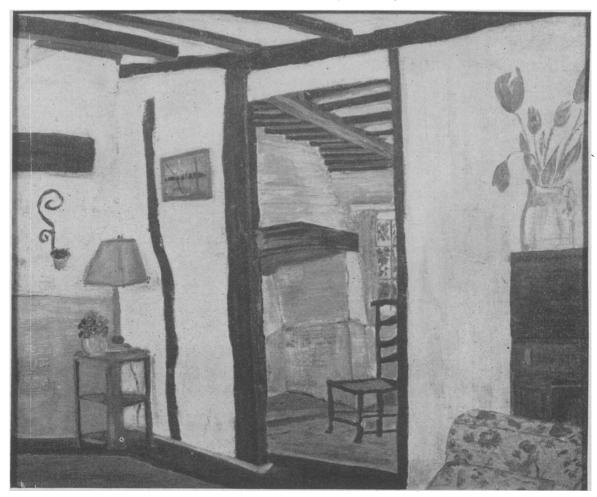
In one of Dr. Gesner's papers he refers to the natural philosopher in the following prophetic words:

"Although he may toil in silence, and remain unknown, and may not receive the least encouragement among his labours, or reward for his pains, yet, when he disappears he leaves something in the hands of his successors that may administer to their wants, and render them wiser and happier."

For seventy years Gesner's grave was unmarked, known only to the caretaker of Camp Hill Cemetery. In 1933, the Imperial Oil Company, erected a fine black granite shaft to "Abraham Gesner, M.D., the inventor of Kerosene Oil". The following is from Imperial Oil Review, June, 1933:

"Although the process invented by Dr. Gesner is in use today with certain mechanical improvements, he himself reaped little benefit and until the Curator of the Nova Scotia Museum called attention to his unmarked grave, he has been practically a forgotten man. As a

Fine Art and Camera Salon, Toronto, 1948



"County Cottage". By Dr. Adrian Anglin, Toronto. One of the prize-winning oil paintings.

tribute to his achievements and in gratitude to one whose work has meant so much to one of the world's greatest industries, Imperial Oil Limited has donated a sum of money to be spent on a suitable monument which will be erected to Dr. Gesner."

In collaboration with the Nova Scotia Historical Society and Nova Scotia Institute of Science the monument was erected in 1933, to a man who started life as a country doctor, sacrificed his material interests for his love of science, experienced the pangs of poverty and shattered hopes, and died poor. Yet, his invention has brought wealth to many and light and comfort to millions of homes.

MEDICAL SOCIETIES

The Canadian Rheumatism Association

The annual meeting of the Canadian Rheumatism Association was held in Toronto on June 22, 1948. The morning session, at Sunnybrook Hospital, opened with a business meeting of the Executive Committee, followed by a discussion of the problem of Ankylosing Spondylitis and a presentation of a variety of clinical cases by the staff of the Arthritis Centre of Sunny-

brook Hospital.

Following a luncheon at Sunnybrook Hospital, the afternoon session was held at the Royal York Hotel where the program comprised the following presentations: (1) "Denervation of Hip Joints", Dr. R. I. Harris, Toronto; (2) "Report of Investigation of Hyaluronidase Inhibitors in the Sera of Patients with Hyaluronidase Inhibitors in the Sera of Patients with Rheumatic Disease', Dr. Hugh Starkey and Dr. Lyon Lapin, Montreal; (3) "Some Aspects of Rheumatic Treatment in Great Britain", Dr. H. S. Robinson, Banff, Alberta; (4) "Some Observations on Nutrition and Protein Metabolism in Rheumatoid Arthritis", Dr. Victor Schencker and Dr. L. G. Johnson, Montreal; (5) "Milkman Syndrome", Dr. J. A. Blais, Montreal; (6) Remarks by Dr. Philip S. Hench, Rochester, Minnesota; (7) Motion Picture by Dr. W. S. Barnhart, Ottawa. Ottawa.

Dr. Philip S. Hench, of the Mayo Clinic, Rochester, Minnesota, was made the first honorary member of the Canadian Rheumatism Association in recognition of his extraordinary contributions to the objects of this

organization.

The following officers were elected for the term of 1948-1949: President—Dr. Henry P. Wright, Montreal; First Vice-president—Dr. A. W. Bagnall, Vancouver; Second Vice-president—Dr. W. S. Barnhart, Ottawa; Secretary-Treasurer—Dr. Donald C. Graham, Toronto.

CANADIAN ARMED FORCES

News of the Medical Services

The annual meeting of the Defence Medical Association of Canada is being held at the Chateau Laurier, Ottawa, on November 4, 5 and 6, 1948, under the chairottawa, on November 4, 5 and 6, 1948, under the charmanship of the President, Colonel L. H. Leeson, O.B.E., of Vancouver, B.C. The provincial branches are each sending delegates, but the executive wishes it made known that the meeting is open to all members, and hopes for a large attendance. The annual dinner takes place on Friday evening, November 5.

The Association was founded in 1892 and has since held central meetings in various Canadian cities once

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and sometimes twice annually except during and immediately following the two World Wars, when most of the members were on active service. Its function is to consider all medical problems affecting the Armed Forces, and it has lent much good counsel and faithful support to the Medical Services. Membership is drawn from medical officers and retired medical officers of the Navy, Army and Air Force.

Dr. J. Paul Laplante, Ste. Anne's Hospital, Ste. Anne de Bellevue, Quebec is the Honorary Secretary-Treasurer.

The first and second year medical cadets of the Canadian Officers Training Corps took part in exercise "Hippocrates II" at Meaford, Ont., on August 7, 8 and 9, 1948. The officer cadets and the directing staff from the R.C.A.M.C. School proceeded from Camp Borden to the Meaford Tank Range in convoy on the morning of Saturday, August 7. The first year cadets acted as combatant troops, those of the second year as medical personnel. The use of smoke bombs and blank ammunition gave the scheme a decided air of actuality. The second year students had an opportunity of testing their teaching in the establishment and moving of Regimental Aid Posts and Casualty Collecting Posts. The final siting of the C.C.P. in an abandoned farmhouse was realistic enough to recall wartime scenes to veteran medical officers. Brigadier W. L. Coke, O.B.E., Director General of Medical Services, Canadian Army, was present throughout the exercise, and spoke to the cadets at the conclusion, complimenting them upon their enthusiasm and efficiency.

Four Reserve Force field ambulance commanders arrived at Camp Borden on August 11, 1948, for a three-day visit at the R.C.A.M.C. School. As the School offers courses to members of the Reserve Force as well as to the Active Force and the C.O.T.C. the visitors were particularly interested in observing the training methods and materials which are now in use. The officers were: Lieut.-Col. R. A. Hicks, 8 Fd. Amb., Calgary; Lieut.-Col. R. A. Gordon, 7 Fd. Amb., Toronto; Lieut.-Col. C. R. Stephen, 9 Fd. Amb., Montreal and Lieut.-Col. J. H. Shaw, 21 Fd. Amb., Charlottetown.

S./L. E. O. Campbell has been transferred from the Institute of Aviation Medicine, Toronto, as Senior Medical Officer, R.C.A.F. Station, Goose Bay.

SPECIAL CORRESPONDENCE

The London Letter

(From our own correspondent)

INDEPENDENT DOCTORS

Throughout the later stages of the negotiations preceding the introduction of the national health service the veteran Lord Horder became the unofficial leader of the not inconsiderable section of the profession who were opposed to accepting the final compromise. He has now been largely instrumental in setting up an informal committe with a view to sounding the profession as to whether there is any support for the view that a professional organization should be formed for those doctors who do not wish to take part in the new service. In a statement to the press Lord Horder, who is a member of the council of the British Medical Association, has said that "there is no intention of opposing the British Medical Association, but rather of seeing that the British Medical Association does not in the future give way on any vital points'. What he is anxious about is that, "should the Ministry of Health turn the screw, economically or otherwise", there should be