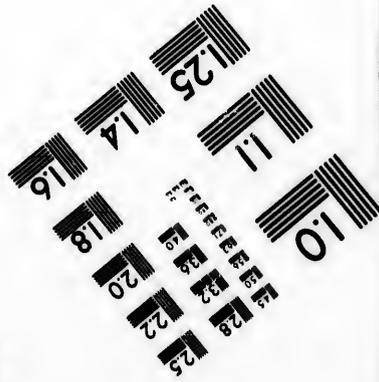
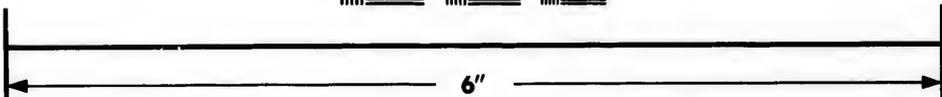
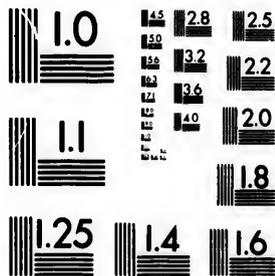


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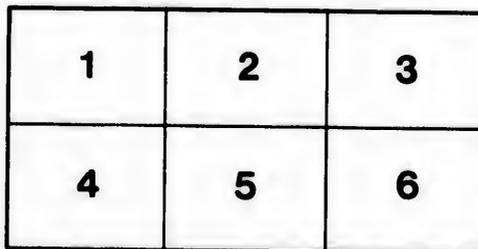
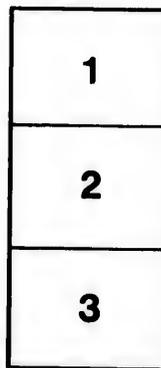
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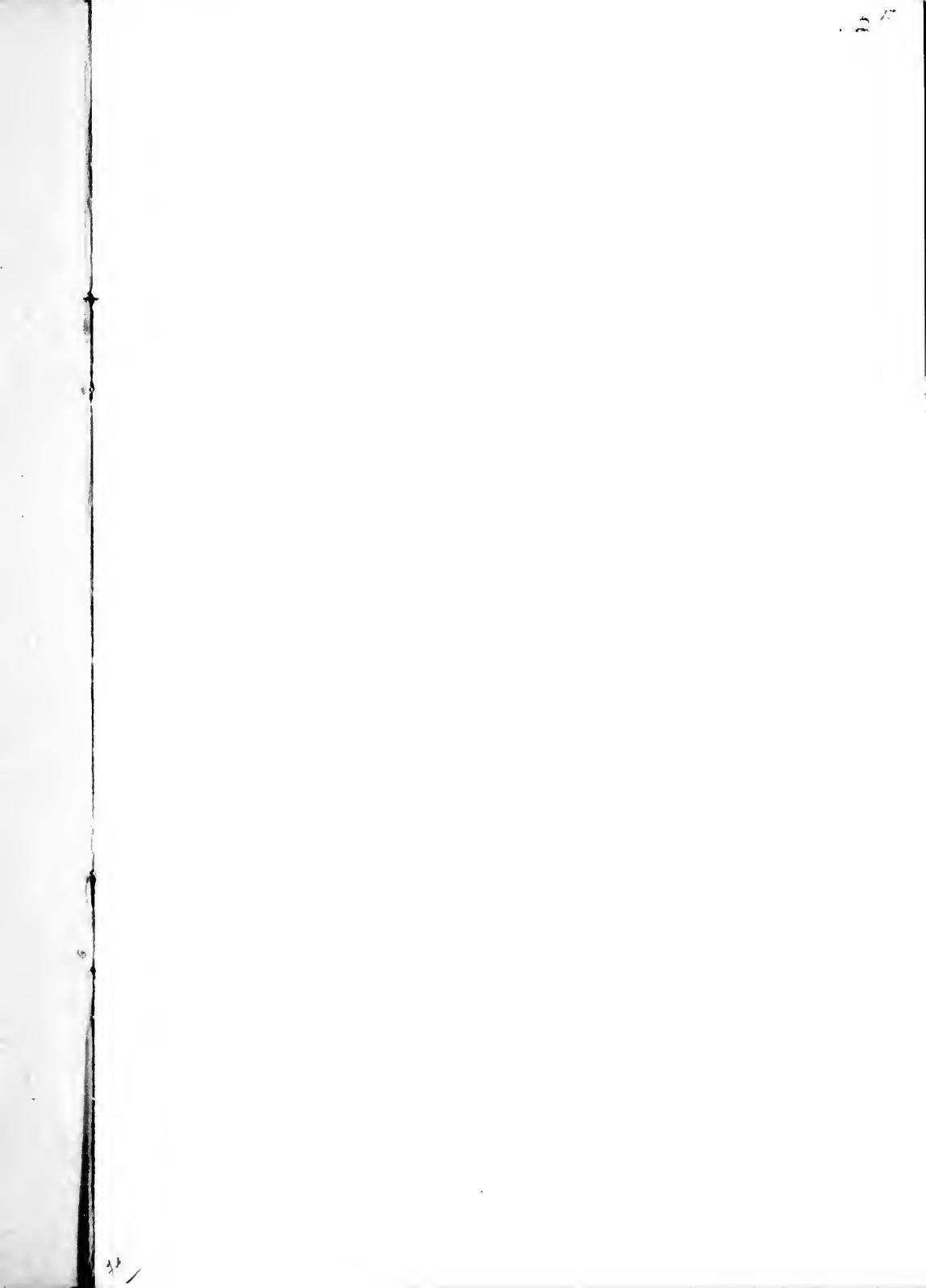
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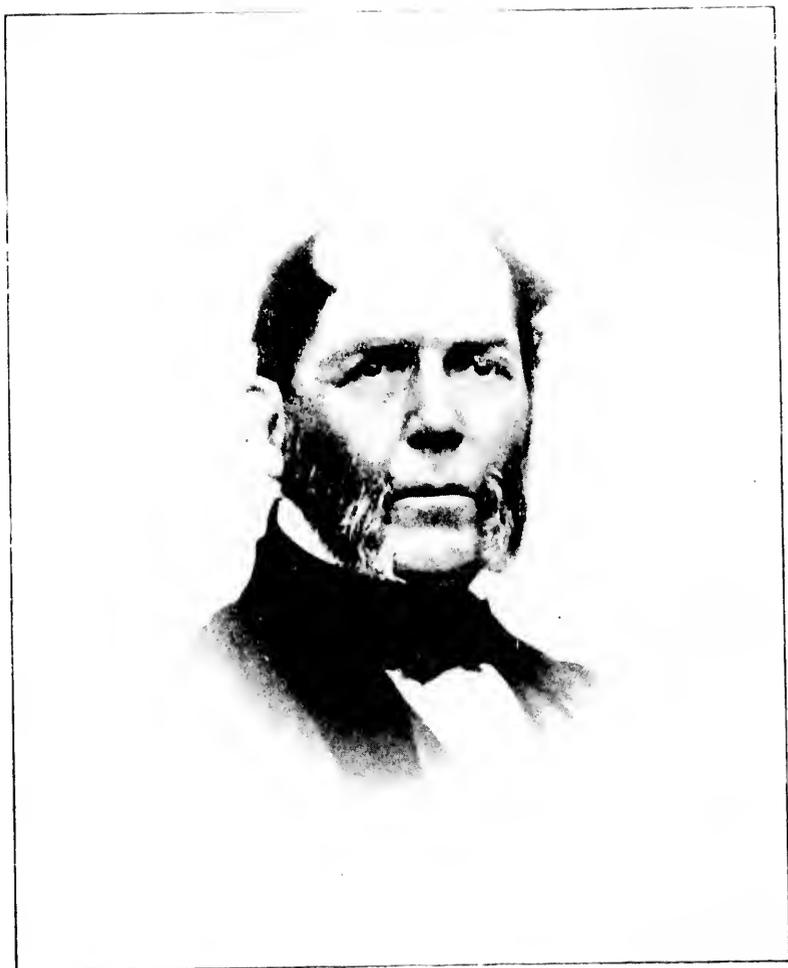
By G. W. Gesner.

Reprinted from Bulletin No. XIV, Natural History Society of
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Very truly and
Sincerely yours
A. Green

ARTICLE I.

DR. ABRAHAM GESNER—A BIOGRAPHICAL
SKETCH.

BY G. W. GESNER.

Read April 7th, 1896.

Abraham Gesner was born in Cornwallis, Nova Scotia, May 2nd, 1797. His ancestors originally came from Germany, where Conrad Gesner three hundred years ago was so distinguished for his scientific attainments as to be called the Pliny of Germany, and was ennobled by the Emperor. A branch of the family afterwards settled in Zurich, Switzerland, where Solomon Gesner became distinguished as a poet, and where his fellow citizens afterwards erected a monument to his memory.

Another branch of the family settled in Holland, from which country Dr. Gesner's grandfather, Nicholas Gesner, emigrated to New York, and settled on the banks of the Hudson River at Tappantown, in Rockland Co., about twenty miles from the city of New York.

Henry Gesner, the father of the subject of the present sketch, one of the sons of Nicholas Gesner and his twin

brother, Abraham, were about sixteen years of age when the American revolutionary war began. They were royalists, and incensed by the ill treatment of their father, Nicholas, by the cowboys of the time, one of whom removed the hat of the old man and substituted his own, saying that it was good enough for a damned tory, they crossed the Hudson at night and joined the British forces, then on the eastern bank of the Hudson, near Tarrytown.

Nicholas Gesner possessed a large property at Tappantown. The place where Major Andre was executed was upon the property of the Gesner family at Tappantown.

After serving in the war, the brothers were exiled with other royalists when New York was evacuated by the British, and went to Nova Scotia, where they were granted lands in lieu of those confiscated by the Continental Congress; the lands of Henry were situated in Cornwallis, near Cornwallis Dyke; those of Abraham in Annapolis Valley, near the mouth of the Annapolis river.

The brothers both remained staunch loyalists all their lives, and Henry often declared to his grandchildren that he believed in no other government but that of God and the king.

Among the sons of Henry Gesner were Abraham, the subject of the present biography, Gibbs and Henry. There were also several daughters.

Abraham, with the exception of the time he passed at Guy's and St. Bartholemew's hospitals in London, and "walked the hospitals," as it was termed, enjoyed no more than the ordinary instruction of the grammar schools of the day, but was always a great reader and a diligent student.

His diary, begun on the 2nd May, 1818, when he came of age, gives some revelation of his character at that time. He made several ventures in business, one of

which was carrying horses to the West Indies. None of these were profitable, however, from causes beyond his control.

On one of his voyages he was wrecked in a gale at Wreck Hill, Somerset Parish, Bermuda, the vessel fortunately pounding over the reef before it went to pieces. He and the survivors were brought to Halifax by one of Her Majesty's frigates.

On another of his voyages he was wrecked in the schooner "Mason's Daughter" on Briar Island, at the entrance of St. Mary's Bay, Nova Scotia. The crew were washed ashore in a wintry surf, and barely escaped being frozen to death.

But his courage and industry were not quelled by these misfortunes.

At the age of twenty-eight he became a student of surgery at Guy's Hospital, and of medicine at St. Bartholemew's hospital, the first being under the direction of Sir Astley Cooper, and the other under that of Dr. Abernethy.

He was noted while at Guy's Hospital for his earnest application and also his deep spirit of piety. When any physiological mystery became a subject of speculation his ultimate reason was always, "God made it so," and the phrase came to be known as Gesner's reason, and was habitually used among the students.

He was married in 1824 to Harriet, daughter of Dr. Isaac Webster, of Kentville, Nova Scotia. His children, beside three who died in infancy, were Henry, William, George Weltden, Abraham Herbert, Brower, John Frederick and Conrad. Of these two survive at the present time, George Weltden and John Frederick, both of whom are chemists and metallurgists and patentees of improvements in various branches of applied science.

They reside in New York. Brower became a surgeon in the United States army, and Herbert an eminent clergyman of the Episcopal church. Herbert's sons Anthon and Richmond are also clergymen.

After taking his degree in medicine and surgery in London, Dr. Gesner resided at Parrsboro, Nova Scotia, and was for a long time a country medical man, travelling along the shores of Minas Basin in his neighborhood and returning after visiting his patients with his saddle bag laden with specimens from along his route. His way lay in a district which was extremely rich in finely crystallized mineralogical specimens.

In 1836 he published "Remarks on the Geology and Mineralogy of Nova Scotia," and in 1838 was appointed Provincial Geologist of the Province of New Brunswick, and moved to St. John, making it his headquarters while engaged in the explorations embodied in his reports on the Geological Survey of the Province of New Brunswick, printed by the government of that province.

While living at St. John, Dr. Gesner established the Gesner Museum, afterwards purchased by the Natural History Society of New Brunswick. Its formation began with his personal collections in his various explorations. Many specimens he obtained at Parrsboro. Blomidon, on the opposite side of the Minas Basin, was a favorite locality for his researches, and all the places mentioned in his "Remarks on the Geology and Mineralogy of Nova Scotia" were visited by him in person. The animal portion of the museum was brought together at St. John. The birds were a portion of what had fallen before his own gun, as he was an excellent shot.

The moose, deer, caribou and larger animals were all stuffed and preserved at St. John, at his residence on McNab's Hill, and in setting them up several Miemae

Indians were employed, and almost any evening during the progress of the work a group of them could be seen sitting about the fire, at the end of a large attic, smoking killikiniek and chattinø in their soft tongue before wrapping themselves in their blankets and going to sleep.

These Indians, many of whom were Dr. Gesner's guides in his surveys, and who were good judges of the natural attitudes and appearance of the stuffed animals, were very capable assistants in setting them up. Dr. Gesner's own study of the forest and its denizens had been careful and observant, and made him proficient for the work in hand. The Indians gave him a title, signifying "Wise Man."

After leaving St. John he returned to Cornwallis, Nova Scotia, and resided at the old homestead of his father, Henry Gesner, and there wrote his "New Brunswick, with Notes for Emigrants," and the "Industrial Resources of Nova Scotia."

He engaged meanwhile in such medical practice as the country offered, and in further study of science as applied to arts and manufactures. The dynamo of the present time was foreshadowed by many of his experiments at this place. The appliances used for covering wire with insulating material by a peculiar winding apparatus were a portion of his work.

He also constructed an electrical engine, or motor, which was driven by a voltaic battery, the principle being practically identical with that now used in electrical motors, electrical lighting and other electrical applications.

In 1850 he removed to Sackville, near Halifax. He moved to Halifax in 1852.

At Halifax he met Lord Dundonald, then admiral of B. N. A. station, who was the original discoverer of illuminating gas, and with him examined the asphaltum of

the pitch lake of Trinidad, and from it extracted a burning oil for lamps. Afterwards he extracted an illuminating oil from coal and other bituminous substances, and in 1854 patented it under the name of Kerosene in the United States. This invention laid the foundation in America of a large industry, leading to the use of petroleum for illuminating purposes and to the enormous petroleum industry as it now exists.*

At the time Dr. Gesner began the manufacture of Kerosene at New York, camphene—a mixture of alcohol and spirits of turpentine and whale oil—and certain vegetable oils, were with tallow and spermaceti candles used for affording light as well as gas.

In the manufacture of oil from coal and bituminous matter, a waxy substance called paraffin was produced in considerable quantity, and in naming the new oil it was thought best to call it “wax oil” from the Greek words *keros* “wax,” and *elaion* “oil.” The term “Keroselene” was first proposed and afterwards shortened to “Kerosene” to distinguish oils of this kind, and under that name was patented.

Even with the best skill at command the first kerosene, or coal oil, as it was also called, had when prepared for market, very considerable odor. The kerosene oil works on Newton Creek, near Penny Bridge,

* A copy of this paragraph was sent to the Commissioner of Patents, Washington, D. C., U. S. A., with a request for an official confirmation of the claims of Dr. Gesner to this important discovery, and the following reply has been received:

DEPARTMENT OF THE INTERIOR.

UNITED STATES PATENT OFFICE.

Washington, D. C., June 4, 1896.

MR. PERCY G. HALL, Secretary of N. H. S. of N. B.

Market Building, St. John, New Brunswick.

Sir,—In reply to your letter of May 30th, you are advised that patents Nos. 11,303, 11,304 and 11,305 were issued June 27, 1854, to Abraham Gesner, assignor to the Asphalt Mining and Kerosene Gas Co., of Williamsburg, N. Y., for manufacturing kerosene oil.

Copies of the drawings of above patents can be furnished for ten cents each, and manuscript copies of the specifications for ten cents per hundred words.

By order of the Commissioner,

Very respectfully,

GEO. L. MORTON, Chief Clerk.

Per W. W. H.

Please refer in answer to letter 72,814.

a locality now termed "Blissville," was in 1856 quite a landmark among the factories along the creek.

In 1861 Dr. Gesner published "Coal, Petroleum and other Distilled Oils," and in 1863 returned to Halifax, where he resided until his death. He was a man of great energy and industry, and capable of enduring enormous labor. His explorations, particularly those of the Tobique and Madawaska rivers in New Brunswick, were enough work for most men in his profession, but when to these is added the effort necessary to give to his invention of Kerosene and its introduction, which was very difficult at first, the magnitude of his labor can be appreciated.

Sir Charles Lyell and Sir Roderick Murchison understood and expressed their appreciation of his geological abilities.

Shortly before his death he was offered the chair of natural history in Dalhousie College, Halifax. He was a fellow of the Geological Society of England, corresponding member of the Royal Geological Society of Cornwall, member of the Literary and Historical Society of Quebec, corresponding member of the Academy of Natural Sciences of Philadelphia, and a member of the Geographical Society of New York.

Dr. Gesner was a man of medium height, but with deep chest and square shoulders. He had black eyes, which shone brilliantly when he was excited, or in earnest conversation. His face in repose always showed reflection and deep thought, and gives one the impression of strong intellectual power. His hair was black to the end of his days — he died at the age of sixty-seven.

He had a habit when telling a good story of scratching his head with his hand, in a quick, nervous way, when he came to the point, and laughing heartily. His lively disposition probably came from his French blood

—his mother being a Pinco—a member of the Acadian family of that name.

Dr. Gesner was popular with those with whom he came in contact, and suggestions of political success and preferment were often made to him in consequence, but he could not be induced to enter the political arena, but remained true to his beloved science. He was an enthusiastic sportsman, both with rod and gun, and we have seen how he made these accomplishments the handmaids of his scientific labors.

He was very fond of music and quite a capable performer on the flute and violin in the family circle. After a wearing day's work he would seek recreation and pleasure in playing over old airs, especially the Scotch music, of which he was particularly fond. He was always abstemious and temperate in his habits of life, but liked and would smoke a good cigar. He rose early and retired early, believing in the old maxim with reference to sleeping.

Many anecdotes might be told showing the geniality and generosity of his disposition.

He remained a firm churchman all his life, and was a warden for many years of Christ Church, Brooklyn, N. Y. Here he had an opportunity of entertaining many of the clergy, some of whom had large parishes in New York. On one of these occasions he somewhat disturbed the pious serenity of a very wise looking theologian who was dining with him, and whose name was Walton, by smilingly inquiring if he was any relation to the famous Isaac Walton, author of the "Complete Angler."

A story is told showing the natural generosity of his character when superintending a Sunday-school picnic of the church to which he belonged. The picnic was held in grounds surrounded by a high board fence to protect

the scholars from a great band of waits from the street, who had collected on the outside and were clamoring for something to eat. It was not long before the doctor had a barrel well packed with provisions throw over the fence to the great delight and satisfaction of those outside, although they did not belong to a Sunday-school, as it broke on the ground and scattered its dainties far and wide.

Dr. Gesner lies buried in Camp Hill cemetery, Halifax, Nova Scotia.

Dr. Gesner's Reports on the Geology of New Brunswick are now difficult to obtain. Prof. L. W. Bailey and Dr. G. F. Matthew each possess a full set, the Library of Parliament has the third report, Boston Public Library two or three reports, Boston Society of Natural History two or three reports, Harvard has none, and Prof. W. F. Ganong has the first report.

The reports were issued as follows :

- First Report on the Geological Survey of New Brunswick, 1839,
Henry Chubb, St. John, 87 pages.
Second Report on the Geological Survey of New Brunswick,
1840, 76 pages, eleven woodcuts.
Third Report on the Geological Survey of New Brunswick,
1841, 80 pages, nine woodcuts.
Fourth Report on the Geological Survey of New Brunswick,
1842, 101 pages, eight woodcuts.
Topographical and Geographical Report, 1843, 88 pages.

The size of the page is five by eight inches.

Dr. Gesner's geological map of New Brunswick, now the property of the Natural History Society, embodies the observations contained in Reports 1-3.

