healthy children, never having miscarried, or had puerperal convulsion. She has now been sixteen years in England, and from the day of her return from India, she has not once had an appearance of epileptic seizure.

(To be continued.)

HISTORY OF THE FIRST EPIDEMIC SCARLET FEVER WHICH PREVAILED IN AUCKLAND, NEW ZEALAND, DURING THE YEAR 1848.

By ARTHUR S. THOMSON, M.D.,
SURGEON OF THE 58TH REGIMENT OF FOOT.

To the Editor of THE LANCET.

Army Medical Department, Jan. 2, 1850.

SIR,—I am directed to forward to you the inclosed "History of the First Epidemic Scarlet Fever which prevailed in Auckland, New Zealand, in the Year 1848, by Surgeon Thomson, 58th Regiment;" and should you be of opinion that the remarks therein contained are worthy of publication, through THE LANCET, they are at your service; if of an opposite opinion, you will have the goodness to return the document to this office.—I have the honour to be, Sir, your most obedient servant,

ANDREW SMITH, M.D.
Dep. Inspector-Gen.

History of the Town.—Auckland, the seat of the colonial government in New Zealand, is situated in the Gulf of Hanksara, on the eastern side of the north island, in south latitude 36—51, and east longitude 174—45. The island at this place is only six miles broad, and at one point the seas on the eastern and western coasts are only separated from each other about three-quarters of a mile. The harbour is deep and well protected, and the rise and fall of the tide averages nine feet.

Auckland at present stands crowded together in a narrow valley, formed by two hills which rise abruptly from the sea to the height of seventy feet. The distance from the ridge of one hill to that of the other is less than half a mile; but this distance gradually lessens as the hills run inwards and approach each other.

The valley in which the town stands is a blind one, open to the water. It extends inwards and upwards about half a mile, and is lost in the country around. The soil on which the town stands is a soft, clayey, conglomerated sandstone, under which beds of scoria ashes are found in some places. In the immediate vicinity of the town there are several dormant volcanic craters, around the base of which are found large blocks of scoria. The highest and nearest to the town is Mount Eden, which rises to about 500 feet above the sea.

The aspect of the country around Auckland is not at present agreeable: the wood having all been destroyed, nothing meets the eye but dark fern and short tea-tree shrubs.

The European population of the town and districts around Auckland, during the year 1848, was 7003; but the actual number of inhabitants in the town and immediate suburbs was 3615 persons.

The town is almost entirely built of wood. In the town and suburbs there are 17 stone houses, 25 brick, 814 wood, and 41 huts constructed of dried reed, called raupo, (*Typha Angustifolia*.)

The only stone or brick buildings of any size are the military hospital, the commissariat stores, the Roman-catholic, Wesleyan, and Protestant churches, and a few merchants' stores. Most of the dwelling-house are one storey, and they all have a partial wooden verandah.

The ventilation and drainage of the town is not much attended to. In the town there are four inhabitants to each house. The native population of the town is not numerous, but in the neighbourhood there are a good many of them, who supply the markets with many of the articles of life. During the year 1848, every person able and willing to work could have got employment: there was no poor in the town but the sick and weak. The site for the town was chosen in 1841, and its progress since then has been very rapid. The average temperature of the climate is about 60 Fahr. The mean temperature of the winter months is 52, and the summer is 67; so that the difference between these two periods is only 15 degrees. The average pressure of the barometer is similar to that in London, and the quantity of rain is about 33 inches.

The following memoir was drawn up from materials taken from the records of the regiment, and also from returns of all

the cases of scarlet fever which occurred in the practice of the different medical men in town, of which there are six in practice. There are, however, many other members of the profession of medicine in Auckland, embarked in other pursuits, who do not practise. With these preliminary remarks, I shall now proceed to the immediate subject of this paper.

1. *First Appearance of the Disease.*—The two first cases of scarlet fever occurred in different streets, on the 5th April, 1848, and for the seven succeeding months it prevailed among the population of the town. This is the first time scarlet fever has been observed among the native or European inhabitants of New Zealand.

2. *The Origin of the Disease.*—There are no facts sufficiently strong (which I could obtain) to entitle me to conclude that the above cases arose from specific contagion brought by emigrants either from Sydney or Great Britain,* I am therefore obliged to quote the epidemic as an instance of the independent origin of scarlet fever, an opinion which is strengthened by the circumstance of scarlet fever having appeared at Sydney (not the first time there) much about the same time as at Auckland, and from its having prevailed as an epidemic in England during the same period.

Dr. Gregory states that "fever attended with scarlet eruptions, and possessing all the characters of this disease, does occasionally arise from exposure to cold."

To give some idea of the climate at Auckland during the year 1848, so far as regards the temperature, I insert the following table:—

1848.	The Mean Temperature.	Number of Days on which Rain fell.
January	72	12
February	66	10
March.....	69	5
April	66	11
May	56	22
June	54	17
July	54	15
August	51	16
September	51	23
October	57	15
November	62	16
December	66	5
Average	60	167

The highest temperature during the year was 80 Fahr., and the lowest 34, so that neither snow nor ice was seen.

3. *The Number of People attacked.*—The population of the place where the disease was observed, is as follows:—

According to the Census of 1848.	Males.	Females.	Total.
Town and suburbs of Auckland	1973	1642	3615
Onehunga and Epsom	333	271	604
The military population	631	153	784
Total.....	2937	2066	5003

Out of the above population of 5003, of all ages, 146 cases of scarlet fever were seen by medical men, and 18 died.

4. *The Monthly Progress of the Disease.*—The epidemic took three months of reaching its greatest prevalence, and three months to disappear.

During July and August it was most prevalent, as will be seen in the subjoined register.

During April, 2 cases occurred, and 0 died.

" May, 11	"	2	"
" June, 16	"	1	"
" July, 45	"	9	"
" Aug., 43	"	3	"
" Sept., 15	"	1	"
" Oct., 13	"	2	"
" Nov., 1	"	0	"

5. *Females much more liable to the Disease than Males.*—Out of 146 cases, 76 were females, which is one case for every 27

* Two vessels arrived from England with immigrants during the year 1848. In one ship, which arrived in January, measles, small pox, and fever prevailed during the voyage; in the other vessel, which arrived in May, no epidemic disease occurred during the voyage, although some obscure cases of either measles or scarlet fever occurred before sailing from Belfast.

of the female population, whereas only one male was attacked out of every 41 persons.*

6th. *The Disease followed its usual Law of attacking the Young.*—The average age of the females who suffered from scarlet fever was 10 years, that of the males nine. No person above 40 had it.

7th. *The Varieties of the Disease.*—59 had scarlatina simplex, and nine died; 78 had scarlatina anginosa, and 11 died; nine had scarlatina maligna, and seven died.

8th. *The Intensity of the Cases.*—Out of 146, 18 died, or one death out of every eight attacked. This shows a severe epidemic, for from the records of the London Fever Hospital I find, that in 1824 the mortality among the cases of scarlet fever treated in the hospital was one in 21; in 1825, one in 13; in 1827, one in 41; in 1828, one in 10; in 1829, one in six; in 1832, one in 40.

9th. *The Cases were most severe during the first four Months.*—On referring to paragraph 4, it will be seen that during April, May, June, and July, one case proved fatal out of every eight attacked, whereas, during the last four months, one case died out of every twelve attacked.

10th. *The Female Cases were most severe.*—Out of 70 males affected, seven died, or one in 10; out of 76 females, 11 died or one in six and three-fourths.

11th. *The frequency with which Sequelæ followed the cases.*—Out of the 59 cases of scarlatina simplex, 3 had sequelæ.

"	72	"	"	anginosa,	20	"
"	2	"	"	maligna,	1	"

Of the 24 patients with sequelæ, 11 had dropsical symptoms, and 13 either cervical abscesses, low fever, sore eyes, or discharges from the ears.

12th. *The Average Duration of the Disease.*—Those who had scarlatina simplex were ill about six days, those with scarlatina anginosa, 14.

13th. *Remarks on the Deaths.*—Of the 18 deaths, 13 occurred, as it may be said, from scarlet fever, and five from sequelæ. The average duration of the former cases was three and a half days, of the latter, 41. It was chiefly the youngest who fell victims, for the average age of the 18 fatal cases was only four years. Congestion, followed by coma, or the inflammation of the throat extending to the trachea, was the immediate cause of 13 fatal cases. Anasarca, terminating in effusion, or low fever, with gastric derangement, was the cause of death in the five which died from the sequelæ of the disease.

14. *The Epidemic was Contagious.*—For example: a girl had sore throat, and scarlet eruption, in Auckland, and on the third day was able to walk home to Onehunga, a distance of six miles. Two days afterwards her sister got ill, and died in forty-eight hours; and two boys in the same house were attacked, and one died. This occurred in August last, but by careful separation no other case occurred at Onehunga.

15. *Scarlet Fever will likely diffuse itself among the Native Population.*—The natives in the town of Auckland under puberty are not numerous, so that during the epidemic very few were attacked; however, one New Zealand woman, one woman a native of Otaheite, and four half-castes, had the disease—sufficient proof that the native race are liable to the malady.† One or two cases occurred among the Europeans at the Bay of Islands, and I am informed that, some months ago, two native children died, among a tribe some distance from Auckland, from scarlet fever. During the month of April, 1849, several cases occurred in the town, so that the disease has now taken its place as a regular endemic.

16. *Scarlet Fever is the third disease introduced into New Zealand by Europeans.*—Syphilis is now endemic, and hooping-cough was prevalent during 1847, among the native population, for the first time.

17. *General Remarks.*—The facts which are given will enable a comparison to be drawn with other epidemics; and, without presuming to state more than the facts, I beg to add a few remarks, suggested by the preceding computation.

During the epidemic, the worst cases appear to have occurred in crowded or badly-ventilated houses. In airy situations, (where the severe disease was not conveyed by contagion,) the cases were generally mild; during the epidemic many grown-up people complained of slight sore throat, without any other inconvenience.

The severity of the fatal cases will be at once allowed, when

* This shows a greater difference than really exists, in consequence of the constitution of the Auckland population. Dr. Tweedie states, in the "Cyclopædia of Practical Medicine," that from his own experience, he thinks females are more liable to the disease than males.

† In 1735, scarlet fever appeared in North America, and according to the usual character of the disease, it spread slowly among the native races.

it is seen, that out of eighteen deaths, thirteen occurred on an average after eighty-four hours' illness; in none of the thirteen fatal cases, so far as I can find, was bleeding resorted to on the first day of the disease. I mention this, because several medical men who have written on the subject state that it is the only remedy which has any chance of doing good in very severe cases; but my own opinion is, that in the cases of scarlet fever I saw, bleeding could not have been borne. During the epidemic, I saw three fatal cases, which appeared hopeless from the commencement. I give an outline of one case.

Fatal Case of Girl, A. B.—, aged four years. Disease, Scarlatina Maligna; Duration of Disease, Forty-Four Hours; Quite well the day she was taken ill.—A healthy child, subject to attacks of croup. One of the family ill with the scarlet fever. On the 2nd of October she was seized with symptoms of scarlet fever.—On the 3rd, the eruption began to appear, with redness of the fauces, and symptoms of cerebral congestion at two A.M.—On the 4th, convulsions took place; and at seven A.M., coma supervened; and death occurred at eight A.M.

The treatment consisted in an emetic and purgative; afterwards small doses of calomel; diaphoretic mixture; hot bath; cold to the head, &c. Two ounces of blood were taken from the jugular vein, during the convulsions, without benefit.

On the frequency with which Dropsy followed Scarlet Fever.—It will be seen, by referring to paragraph 11, that out of 133 cases, only eleven had the sequelæ of dropsy. This I believe to be a small proportion, although I cannot find any modern numerical statement to compare it with. At Newcastle, during the year 1778, out of 131 cases of scarlet fever twenty-three had dropsy.

Dr. Bird, one of the physicians to Guy's Hospital, in his work on Urinary Deposits, states, "I scarcely recollect, during a large experience, a case of dropsy after scarlet fever occurring, when the warm bath was daily used as soon as the skin began to exfoliate, and continued until a perspiring healthy surface was obtained"—an opinion which several other writers confirm, to a certain extent.

In three cases of dropsy which came under my notice, the urine was chemically examined, and at the commencement of the dropsy it was found albuminous, (coagulating by heat and nitric acid,) with an acid reaction, and of a specific gravity about 1030—facts which indicate that the kidneys were in a state of congestion.

In conclusion, let me add, that the proportion of deaths among the European population in Auckland and its suburbs, increased during the prevalence of the scarlet fever.

In 1847, according to the census, one death occurred out of every ninety living; in 1848, one death out of every sixty-six living.

This last ratio of deaths shows, however, that a higher state of health existed among the inhabitants in the town and districts around Auckland than is to be found in almost any town or country in Europe.

(Signed) A. S. THOMSON, M.D.
Surgeon, 58th Regt.

(A TRUE COPY.)

Auckland, May 10, 1849. A. SHANKS, M.D.
Staff Surgeon, Principal Medical Officer.

REPORT OF CASES OF UTERINE HÆMORRHAGE, AND REMARKS.

By JAMES SYME, Esq., L.R.C.S. Edin.

The few brief remarks appended to the following cases have been suggested by a fatal case of uterine hæmorrhage, which very lately came under my notice.

Having been sent for in great haste, by another practitioner, to visit Mrs. B—, the wife of a clergyman, reported to be dangerously ill, I immediately proceeded to the patient's residence, which being quite near, I was at her bedside in a few minutes. On my arrival, I found the patient in *articulo mortis*. Her face was blanched; her extremities were cold; and her pulse was scarcely perceptible. She seemed either unable or unwilling to swallow teaspoonfuls of brandy from time to time put into her mouth. I was informed that the usual means for arresting hæmorrhage had been adopted. I immediately introduced my hand; I found only a small clot in the vagina. The os uteri was so much contracted that I could not get my whole hand introduced. The hæmorrhage had abated, and the uterus seemed empty; pressure and cold cloths were continued to be applied externally. For a short time after I entered the room, she was conscious, and uttered