

An account of the ravages committed in Ceylon by small-pox, previously to the introduction of vaccination; with a statement of the circumstances attending the introduction, progress, and success, of vaccine inoculation in that island / [Thomas Christie].

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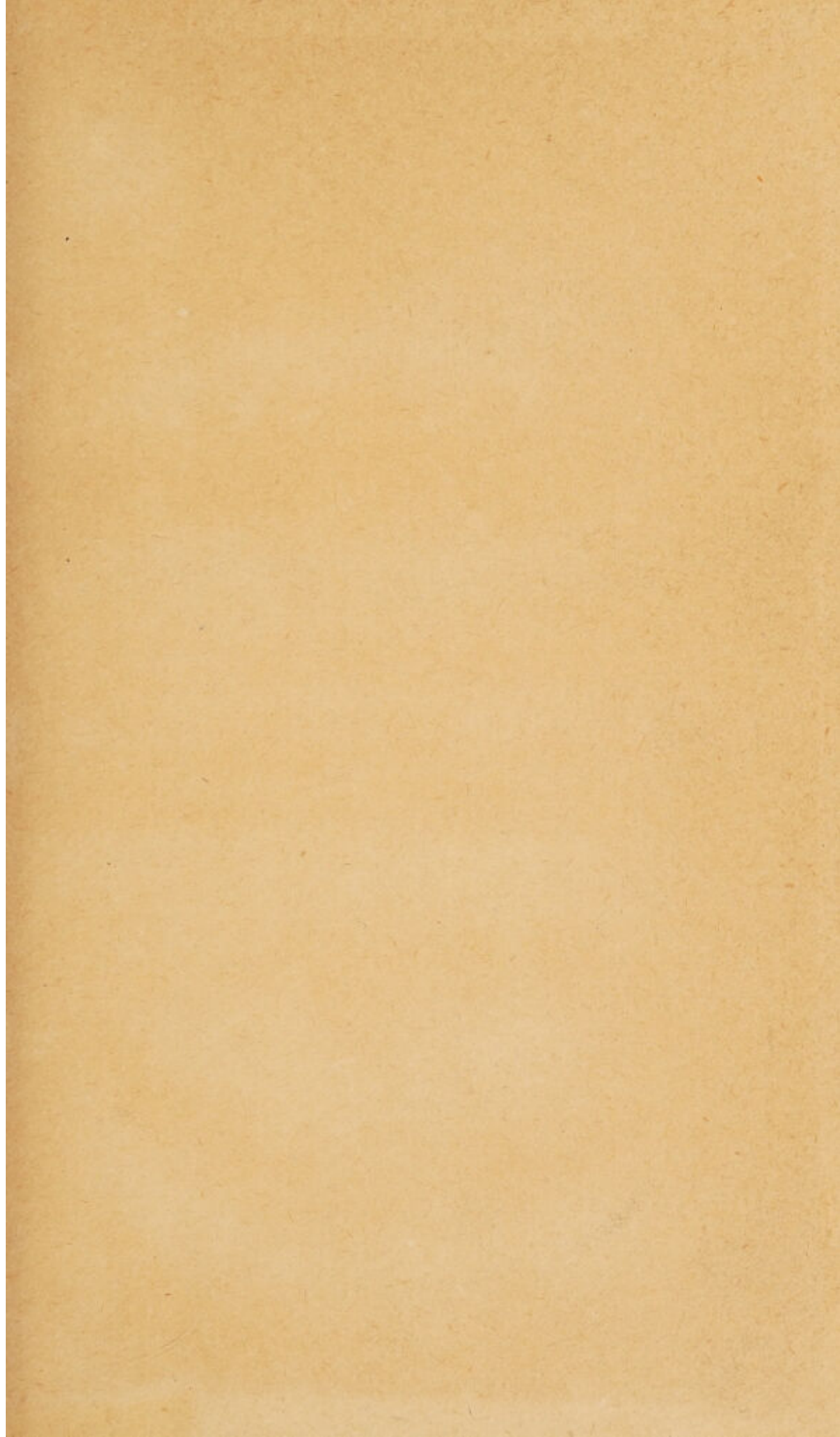


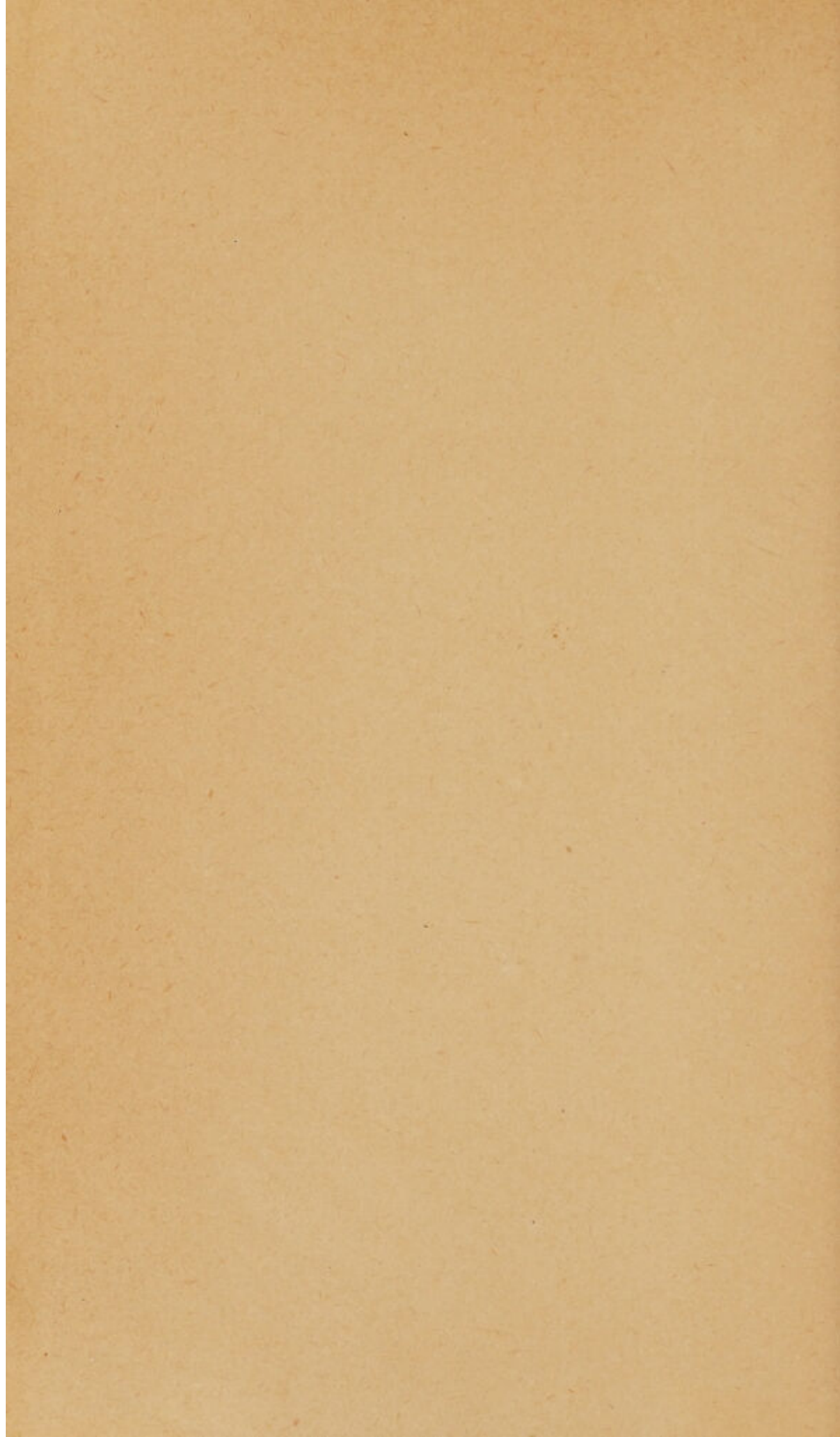
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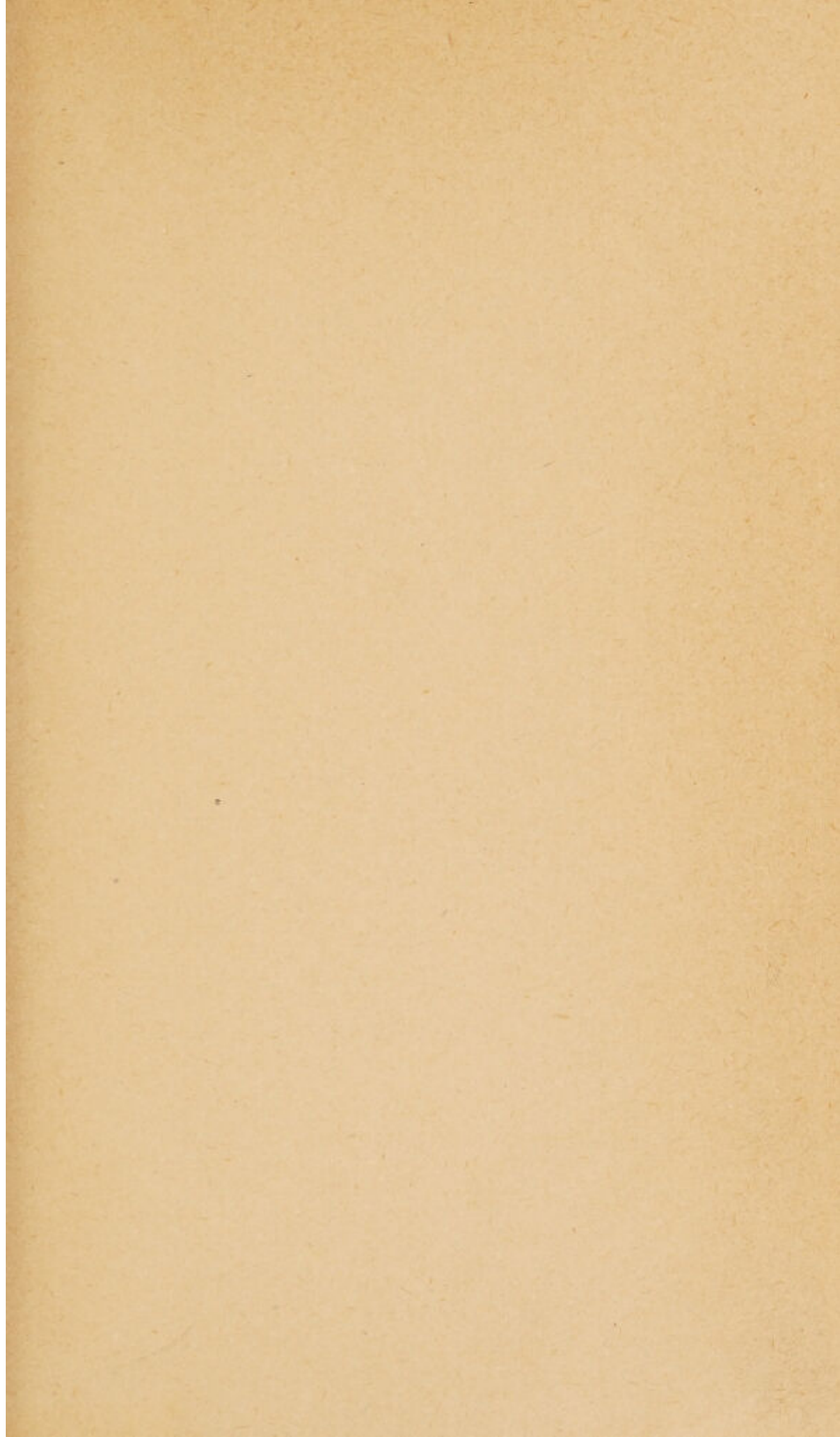


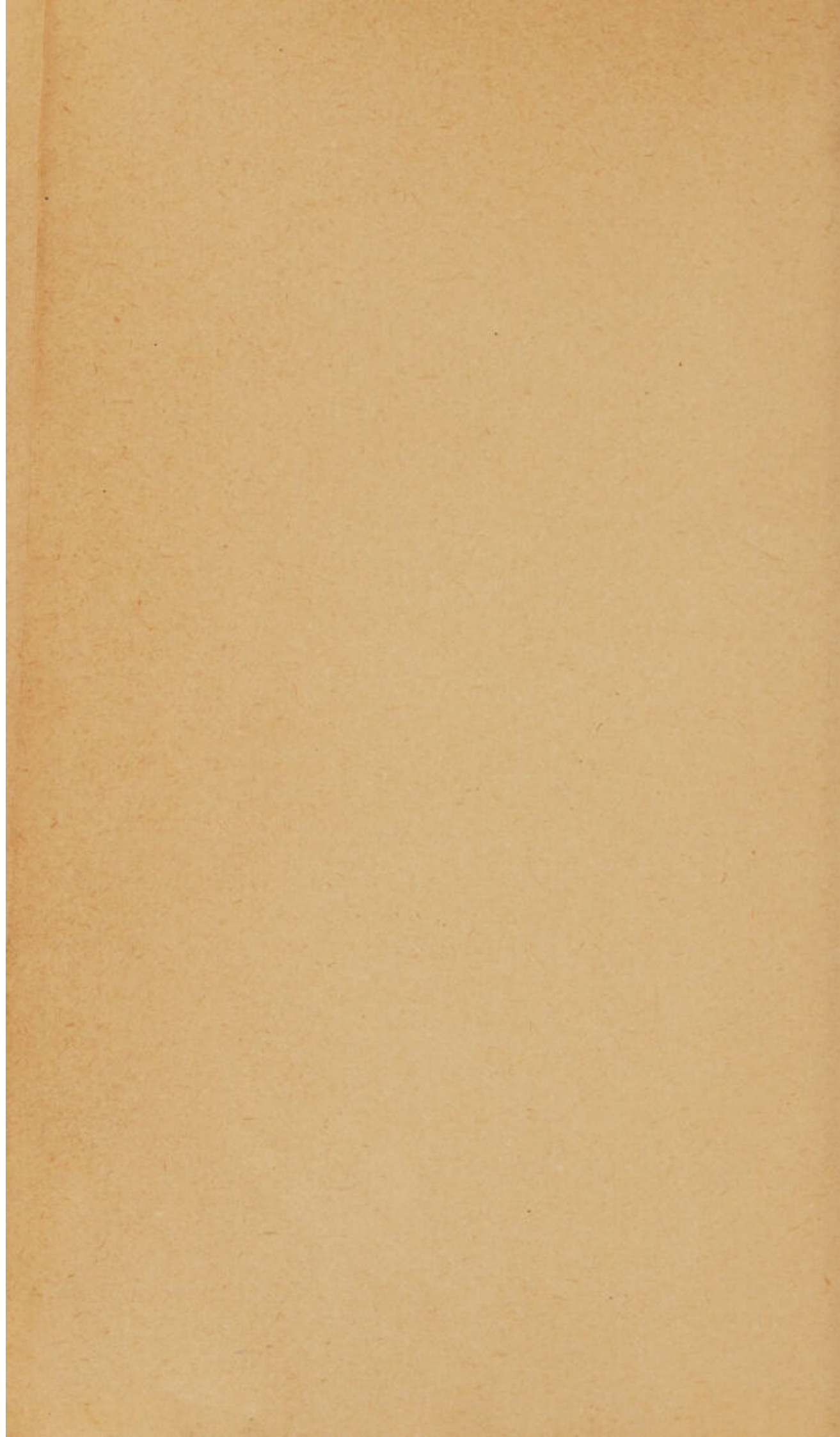
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AN
ACCOUNT
OF THE
INTRODUCTION, PROGRESS and SUCCESS,
OF
VACCINATION IN CEYLON.

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Ravages committed in Ceylon
BY
SMALL-POX,
PREVIOUSLY TO THE
INTRODUCTION of VACCINATION;
WITH
A STATEMENT OF THE CIRCUMSTANCES ATTENDING
THE
INTRODUCTION, PROGRESS, and SUCCESS,
OF
VACCINE INOCULATION IN THAT ISLAND.

By THOS. CHRISTIE, M.D.

MEMBER OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON, AND
OF THE ROYAL MEDICAL SOCIETY, EDINBURGH; AND LATELY
MEDICAL SUPERINTENDENT-GENERAL IN CEYLON.

“ But now Providence has conferred on the Inhabitants of Ceylon, a
“ milder and more sure relief—by the introduction of the Jennerian
“ improvement.” *Cordiner's Description of Ceylon.*

CHELTENHAM,
PRINTED BY J. AND S. GRIFFITH, PORTLAND-PASSAGE;
AND SOLD BY
J. MURRAY, 32, FLEET-STREET, LONDON; J. BLACKWOOD, EDIN-
BURGH; AND GILBERT AND HODGES, DUBLIN.

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OF THE

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LONDON:

PRINTED BY J. AND S. GRIFFITH, PORTLAND-ROAD;

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W. MURRAY, 25, MARK-LANE, LONDON; J. BLACKWOOD, 22, N. BURGESS, AND GILBERT AND RICHARD, DUBLIN.

1811.



PREFACE.

THE substance of the following Pages has already been published in occasional Reports on the state of Vaccination in Ceylon, inserted in the Ceylon Government Gazette, for the purpose of exciting attention to the subject in that Island.

The intention of these reports having been in a great degree fulfilled, by the expulsion of Small-Pox from Ceylon, the general adoption of Vaccination by all classes of its Inhabitants, and the establishment of that practice on a broad and firm basis, by the liberal and decisive measures of Government, I had considered the question as at rest; and the more so, as in an extensive communication and correspondence with the Medical Men in different parts of India, I never heard of one who had the smallest doubts, as to the preservative efficacy of Cow-Pox, or the propriety of the general system of Vaccination, there adopted.

I had, therefore, no intention of ever again trespassing on the public, on the subject of Vaccination; but on my return to England last year, I was greatly surprised to find that some degree of scepticism and incredulity still existed about the efficacy of the practice; and several of my Reports having found a place in different periodical publications, it has been suggested by some of my medical friends, and particularly

particularly by the great author of the discovery, Doctor Jenner, that an essential service might be done to the community, by a detail of the circumstances attending the introduction of Vaccination into Ceylon, in August 1802; its progress there, and success at the time of my quitting the Island in February, 1810.

Since this Pamphlet was put to the press, I have received a copy of the Report of the National Vaccine Establishment, for the year 1810, laid before Parliament, in which the Board have done me the honor to include my Report of the State of Vaccination in Ceylon, for 1809; and at times, I confess, I am not without a hope, that the expulsion of Small-Pox from so large an Island as Ceylon, may excite considerable attention in Great-Britain, and that the measures pursued by the Government there, for prohibiting variolous inoculation, and encouraging Vaccination, may be thought worthy the attention of the British Legislature.

If, however, the publication of the following facts, which are in themselves incontrovertible, and were laid before the public, at the time and place where their fallacy, if any, could have easily been detected, shall induce one parent to secure his offspring from the contagion of Small-Pox by means of Vaccination, I shall be satisfied that my time has not been misemployed.

TO
Sir WALTER FARQUHAR, Baronet, M.D.

*Physician to his Royal Highness the Prince Regent,
&c. &c. &c.*

SIR,

The following pages contain the result of my observations on Vaccination in Ceylon, most of which were formerly submitted to your judgment, in private letters from Columbo; and I now beg leave publicly to inscribe them to you, as a testimony, however trifling, of the high respect and esteem I entertain for your professional talents and active benevolence, and of the deep sense of gratitude I feel, for the great obligations you have conferred on me, by directing my studies in youth; and affording me your uniform support and protection in more mature age.

I have the honor to be,

Your most attached friend,

And faithful servant,

THOMAS CHRISTIE.

CHELTEMHAM, JULY 1,
1811.

TO
MR. WALTER FARQUHAR, Barrister, M.D.

The following pages contain the result of
my observations on Vaccination in England, most
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Your most attached friend,

And faithful servant,

THOMAS CHRISTIE.

CHRISTIANIA, JULY 1,
1811.



AN ACCOUNT, &c.

ON my first arrival in Ceylon in 1797, when it was under the administration of the East-India Company, I was too little acquainted with the language or manners of the country, and too much occupied by the duties of a sickly regiment to which I was then Surgeon, to have acquired much information about the progress of Small-Pox, or other diseases, amongst the natives, even had I been in a more favourable situation for such enquiries, than Trincomalie, the country round which was then but thinly inhabited.

My attention was not in consequence directed to this subject, till the year 1799, when Small-Pox appeared in the Pettah, or Black town of Trincomalie, soon after which, a case occurred in the Fort, in the person of an European Woman belonging to the 80th regiment, who was near the time of her delivery. This patient, Margaret Carnie, sickened on the 10th of November 1799, was delivered on the

12th, and died on the 17th, of Confluent Small-Pox, the contagion of which was evidently traced from a native, affected with the disease. Her infant which was born in apparent health, died of convulsions a few days afterwards, antecedent to the appearance of any eruption.

These circumstances were detailed by me, in a letter to the late Doctor John Ewart then Physician-General in Ceylon, on the 18th of November; when with the consent of the commanding officer of the garrison, seventeen men, and a proportion of European children and natives attached to his Majesty's 80th regiment, were received into Hospital, and inoculated, all of whom did well.

A Proclamation was at the same time issued by the Magistrate of the place, exhorting the inhabitants to adopt inoculation, and offering my gratuitous services and attendance, but although at the time, numbers were daily dying from natural Small-Pox, not a single inhabitant would submit to the operation, except the Native followers of the 80th regiment formerly mentioned, and a few gun Lascars, who were inoculated by Mr. Rogers, Assistant Surgeon to the Madras Artillery. Indeed such was the prejudice of the Natives against inoculation, or any interference with
what

what they considered as a visitation of their Gods, that it was with the greatest difficulty, permission could be procured, to take a little matter from a child, for the purpose of inoculating the Europeans.

This, agreeably to the best information I have been enabled to procure, was the first trial of inoculation in Ceylon, since the capture of the Island by the English, and altho' the number inoculated at this time, did not exceed fifty or sixty, yet as all these cases were successful, it paved the way for its more general adoption, and for the establishment of Small-Pox Hospitals, the first of which was opened at Trincomalie, early in the following year, under my immediate superintendence.

The Small-Pox continued to make considerable ravages during 1799 and 1800, at Trincomalie, and still more so in the other parts of Ceylon, particularly in the SW. side of the island, where it occasioned so great a mortality as to be considered in the light of a Pestilence, in consequence of which the natives deserted their villages and infected relatives, on its first appearance, to the great diminution of the revenue, and the infinite distress and misery of the inhabitants.

In September 1800, I was witness to a scene of this kind, which I cannot find words fully
to

to describe, but shall merely attempt to give some idea of it, by copying the official Report, which I made at the time to the Committee for Superintending Charitable Institutions in Ceylon, of which the Hon. Frederic North Govenor, was Patron, and General M'Dowal, President.

“The Small-Pox broke out suddenly in the middle of July in Errore, and Undewally, two villages in the neighbourhood of Batticalloa, and so great was the panic occasioned amongst the Inhabitants, by the appearance of the infection, that all those in health immediately deserted their habitations, and left the helpless sick, without any assistance.

“I visited the village of Errore on the 4th of September, at which time the infection had ceased, and the people had begun to return to their usual habitations, but found their former residence (lately a flourishing village) almost entirely waste and desolate, in consequence of their precipitate desertion. Out of thirteen infected persons, six had died, and the others were just recovered, and in a miserable state.”

“The survivors made the following melancholy recital, which was too certainly verified by the appearance of the village. Soon after the village was deserted, by the inhabitants in health, the Elephants, Cheetas (*Panthers*) and

and wild Hogs, came down from the Jungle, broke down the fences, destroyed and rooted up the trees, ate the the stores of Paddy, (unhusked *Rice*) and other provisions, and what is still more horrible, carried off some of the sick, or at least consumed the bodies of the deceased. It is certain, that in one house where three sick persons had been left, not a vestige of even their remains, was to be found, on the return of the inhabitants."

The Reverend Mr. Cordiner in describing the same scene, says,

"On the 4th of September I accompanied the Superintendent of Hospitals in a boat, ten miles up the arm of the sea which beautifies this part of the country. His object was to inspect the villages of Vandermal and Eraoor, which had been lately deserted by the inhabitants, owing to the breaking out of the Small-Pox. On such occasions the Husband forsakes his Wife, the Mother her Children, and the Son his Father, often leaving them in their miserable huts, to the ravages of famine, and wild beasts of the forest. Sometimes however they contrive to furnish them with subsistence, without entering their dwellings, but in those sequestered hamlets, medical aid was only now beginning to be known.

For

For many years great desolation was committed annually by that exterminating malady, the natural Small-Pox. The Dutch inhabitants, being themselves enemies to the practice of Inoculation, never encouraged it, among the native Ceylonese.

“ After the inhabitants had left their villages, they became the prey of wild Elephants, Hogs and Cheetas. The Elephants broke down the feeble fences, took possession of the Gardens, tore up the plantain trees by the roots, levelled those of the Cocoa Nut, and browsed on their leaves. The ravaged orchards exhibited scenes of terrible devastation, the mangled trees were strewed on the ground, the straw stripped from the roofs of the Cottages, the surface of the earth broken up, and filled with hollows, the fences shattered; earthen pots, the simple utensils for culinary purposes, wheels, reels, looms and all the apparatus of the weaver, lying useless and forsaken. A Family of three infected Persons, who had been left in one of the gardens of Erraor, were supposed to have been devoured by the Cheetas, or wild Bears, as a vestige of them could not be seen. Of the diseased in Vandermal, forty people died, and ten recovered. The malady having then subsided

sided, the villagers were beginning to return, and setting about repairing their demolished hamlets."*

Such distresses as are here described, could not fail to attract attention, and soon after the Hon. Frederic North assumed the Government of Ceylon, amongst various benevolent institutions for the ameliorating the condition of those who had the happiness to be placed under his humane and benevolent administration, he established Small-Pox Hospitals, for the reception of patients labouring under the natural disease, and for the purpose of promoting inoculation; at the same time he appointed medical attendants to take care of the infected, who from necessity or choice remained in their villages, and who were likewise directed to watch over the Police, with a view to prevent the further propagation of the infection, or the desertion of the villages, which had occasioned much individual distress, and a great diminution of the revenue.

On the death of Dr. Ewart, I was in May 1800, appointed Superintendent of Military Hospitals, and soon afterwards placed by Mr. North, at the head of the Small-Pox Hospitals on the Island, some of which had been established a short time before.

* See Cordiner's Description of Ceylon, vol. i. page 253.

The plan of these establishments in the first instance, varied a little at the different stations; but an uniform system was soon introduced into the whole, and strictly observed, agreeably to the following plan, published by authority in the Government Gazette:

“Plan of the Small-Pox Establishment in Ceylon, in conformity to the minutes of Government.

“That the British possessions in the Island be divided into four principal districts, viz Columbo, Galle, Trincomalie, and Jaffuapatam.

“That over each of those districts be named an English Surgeon, as Superintendent, with a salary of Rds. 200 per mensem, and as many assistants as may be necessary with salaries of 150 Rds. per mensem.

“That at Columbo, Galle, Trincomalie, and Jaffuapatam, there shall be established permanent Hospitals, for the reception of persons of every description, who wish to be inoculated, and also for the admission of such patients infected with natural Small-Pox, who chuse to benefit by the institution, and who the Superintendent conceives, may be moved without risk of propagating infection.

“That in each of these Hospitals shall be placed an European Medical Person, with a salary

salary of 90 Rds. per mensem, who shall have the entire control of it, under the Superintendent of the district, to whom he shall make monthly reports, and from whom he shall receive orders.

“ That there also shall be appointed to each of them, a creditable Burgher as Purveyor, when the number of admitted patients will require it, with a salary of 40 Rd's. per mensem, who shall provide for the persons under cure, such sustenance as may be ordered by the Overseer, and shall manage the economy of the establishment.

“ That in each of these establishments shall be built a convenient and spacious Bungalow for the Medical Overseer, and another for the Purveyor, who shall be allowed to receive, on profitable terms, such Patients as may wish to pay for extraordinary attendance, or convenience.

“ That a Register shall be kept by the Overseer of all who enter the establishment, of the Medicines ordered, and of the number of days they remain there; and when the cure is perfected, he will give a certificate, and receive one from them, which being transmitted to the Superintendent, and presented by him to the Collector, or Civil Paymaster,

will entitle the Overseer to receive two Rd's. on account of Government.

“ The Purveyor will receive, at the end of each Month, pay for the expences of the Patients, at the rate of three fanams per diem, according to the Register the said Register being signed by himself, and the Overseer, and transmitted to the Superintendent, to be presented by him to the Collector, or Civil Paymaster, who shall have orders to pay it.

“ Cadjan Houses shall be built for the Patients, as occasion may require, and their repairs, as well as original fabrication, shall be reported to the Collector, by the Superintendent, who shall visit them as often as possible.

“ A sufficient number of Nurses must be engaged, and proper attention paid to the prejudices of the people, in point of Cast: If the families of the Patients wish to attend them, they may do so, but in that case they must submit to the Regulations of the Establishment, which they will not be allowed to quit, and return again to, and must live at their own expence.

“ No Person will be allowed to visit Patients in the establishment, or to go to it, and from it, but such as are specially appointed by the Overseers.

“ The Cloathes worn by persons during their illness, must be thoroughly washed, either on their death, or on their dismissal, in sight of the Overseer, who must certify the same.

“ A proper Guard will be given to the Overseer, to enable him to enforce these Regulations.

“ For the benefit of Persons infected with Small-Pox, whom it may be improper to remove into the established Hospitals, there shall likewise be appointed, to each of the districts of Columbo, Caltura, Galle, Matura, Batticoloe, Trincomalie, Mollativo, Jaffna, Manar, Putlam, Chilaw, and Negumbo, an European Medical Overseer, and such other Medical Assistants as may be required, who shall attend the sick at their own villages.

“ Each Overseer shall enjoy at all times a salary of 30 Rd's per mensem, but when on actual service, he shall receive at the rate of 90 Rd's per mensem. The other Assistants shall receive no permanent salary, but when employed in a village, where Small-Pox prevails, they shall be allowed at the rate of 90 Rd's. per mensem.

“ Whenever the Small-Pox appears in any village, the Vidaan will immediately report it to the Moodiliars, who must instantly represent

sent the circumstance to the Magistrate of the district, who will, without delay, order the Medical Overseer, or Assistant, to transport himself to the infected village, where he shall reside as long as the infection continues there.

“ As soon as the Overseer arrives at a village, where Small-Pox prevails, he will undertake the regulation of the Police, and will be careful by every possible means, to prevent the spreading of infection; all egress and ingress into infected houses must be absolutely prohibited, without a passport from him; and the Overseer, or ordinary Magistrate, will be empowered to inflict summary punishment by the rattan, on all offenders against the regulations of the Police.

“ The Overseer will afford to the sick every possible medical assistance, which the nature of the case, or the prejudices of the people will allow, and he will be particularly attentive to ventilation, and cleanliness. The same regulations with respect to washing the Cloathes of infected Persons, must be observed, as in the established Hospitals.

“ Inoculation shall not be allowed except in the established Hospitals, or infected villages, where it shall be practised by the Overseers, with the approbation of the Superintendent;

intendent; and, in that case, the families inoculated, must submit to the same restrictions, as in cases of natural Small-Pox.

“ The Overseers of Districts, as well as those of Hospitals, shall make regular reports of their proceedings to the Superintendents, on whom they shall also indent for Medicines.

“ The Abstracts for the expences of the Hospitals, and of the several Overseers, must be countersigned by the Superintendent, previously to their being discharged.

“ Young Men who wish to be employed as Assistants to the Overseers, must be regularly licensed, and for that purpose an adequate attendance, in one of the established Hospitals, is absolutely required.

“ The Overseers of Districts when not employed, ought also to take every opportunity of visiting the Hospitals, for information.

“ *A true Extract.*

(Signed) “ WILLIAM BOYD.

“ Acting Secretary to Government.

“ Tangalle, August 24, 1800.”

The general superintendence of these establishments was vested in me, by another minute of Government, by the orders of which, I received Monthly Reports, from each of the Superintendents,

perintendents, which were framed into a General Report, and transmitted to the Committee for superintending Charitable Institutions, of which the Governor was Patron.

This system continued in force till the introduction of Vaccination, and certainly contributed greatly to the relief of the distress occasioned by the Small-Pox, by preventing the desertion of the villages, diminishing the frequency of the natural disease and mortality amongst those infected with it, and promoting Inoculation.

But notwithstanding the very liberal encouragement given by Government, and the great expence incurred for the Hospitals, Medical Attendants, and maintenance of Patients, the benefit conferred on the community was comparatively small, as a considerable dread of Inoculation continued to exist; which was indeed justified by the proportion of deaths which occurred from it, notwithstanding the greatest care and attention.

On reviewing the Reports made to the Committee of Superintendence, it appears, that from the 1st of October, 1800, to the 30th Sept. 1802, the number of Patients with natural Small-Pox, treated by the Medical Overseers in the different Hospitals and Villages in Ceylon, was 2110, of which number

473 died, being nearly 1-4th of the whole; and the number of Inoculated Patients amounted to 4158, of which number 108 died, being nearly 1 in 38.

This considerable mortality occurred under the most favourable circumstances of treatment, and it is conceived from my own observations, and those of the different persons with whom I have conversed on the subject, that the mortality from natural Small-Pox amongst the inhabitants of Ceylon, when left to themselves, was much greater.

Inoculation had never been practised to any extent in Ceylon, by the Europeans, and I believe not at all by the Natives, so that no comparison can be drawn in this respect; but it is probable that under no circumstances, could the practice be more successfully conducted amongst adults in that Island, where the thermometer is seldom so low as 70°, and in general many degrees higher.

The Variolous inoculation by European Surgeons, in most parts of India, has been chiefly confined to the children of European Parents, and from every information I have been enabled to procure, it is conceived that not less than one in forty of these died. Dr. Fleming, the distinguished head of the Medical Department in Bengal, has, I am told, calculated

calculated the mortality at a still higher rate; and conceives that nearly one in thirty of the children of Europeans, inoculated with Small-Pox at Calcutta, died.

I am aware, that it has been said, that the proportion of deaths from inoculation by the itinerant Bramins in Bengal, has been very small indeed, and as they avail themselves of the cold season for their operations, and their patients are generally the children of Natives, I can readily believe that the mortality was infinitely less than in Ceylon, where we cannot be said to have any cold season, and where a great proportion of our patients were adults, but as the Bramin Inoculators, after inserting the infected thread, or applying the infected pledgit, leave their patients to their fate, and proceed to other villages, there must be a great degree of uncertainty in their reports, and perhaps some degree of misrepresentation; and considering the veneration in which they are held as the religious order, it is not probable, that in the event of death ensuing, much will be said on the subject by the friends of the deceased.

At the time of the first establishment of the Small-Pox Hospitals in Ceylon, no *authentic* account of the success of Doctor Jenner's discovery had reached us, but soon afterwards

afterwards we received his own original publication, that of Dr. Aikin, and the greater part of Mr. Ring's work on that subject.

The perusal of these carried conviction to the minds of many in Ceylon, and the most anxious solicitude was felt, and expressed, for the introduction of the Vaccine Virus into the Island, as the means of preventing the ravages of Small-pox, and saving the expensive establishment of Hospitals, for the reception of Patients with that disease.

Several packets of matter were received from England by various Surgeons; all of which were tried, but the length of the voyage had rendered it effete* and we were

* Doctor Jenner and others were strenuous, and persevering, in their efforts to transmit the Vaccine Virus to India by sea. The first attempt of this kind, it is believed, was made by Doctor Jenner himself, who sent out packets of matter with ample instructions, by the Queen, Indiaman, which was unfortunately burnt on the Coast of South America in 1800.

A plan was also concerted by Doctor Jenner, under the auspices of the British Government, to send out the Vaccine to India, with a detachment of Royal Artillery, which sailed in the Wyndham, and Walpole, from England, in February, 1803, destined for Ceylon, but the disease had previously reached India by Bagdad, Bussorah, and Bombay.

After this, Dr. Jenner forwarded by Lord Wm. Bentinck, Governor of Madras, a number of coloured drawings of the Vaccine Pustule, with a variety of Pamphlets on the

equally unsuccessful in our researches after the Vaccine disease on Cows, or the true Grease in Horses, which formed a principal object of enquiry in a Tour round the Island, in which I accompanied the Governor in the early part of 1802.

The precaution had also been taken of writing to the Medical Men at Bombay and Madras, respecting the mode of forwarding the Virus to Ceylon, in the event of the disease being produced at either of these Presidencies, and Mr. North with his usual anxiety for any improvement likely to contribute to the welfare of the people under his Government, or the cause of humanity, had proposed that vessels with proper subjects, should be sent to Bombay and the Persian Gulph, for the purpose of importing the Virus on Inoculated Patients, if Lord Elgin should be fortunate enough to succeed in transmitting it from Constantinople.

At length we had the pleasure to learn, that the object of our wishes was accomplished, and that the disease was produced at Bombay, and soon afterwards at Trincom-
subject, which were distributed throughout the Continent of India, by the late highly respected Physician-General of Madras, Doctor Anderson, than whom no person could be more assiduous in promoting Vaccination.

malie,

malie, whence it was diffused over Ceylon, transmitted to the Coromandel ^{Coast} Court, and thence by Dr. Anderson in the ship Hunter to Bengal; but as it seems of importance to trace distinctly, the source of the Matter which is so extensively diffused in the Eastern World, and to account for its rapid extension throughout Ceylon, it will be satisfactory to copy some letters and other documents on this subject, which were written at the time, and most of them published in the different Indian Papers.

At the period of the first introduction of the Vaccine Virus into Ceylon, a regular establishment existed for the promotion of Small-Pox Inoculation, to which the Natives were in a great degree familiarized, and it was only necessary to transfer the services of the individuals composing this Establishment, to the preservation, and diffusion of Cow-Pox, which the Natives in the first instance, seemed to consider as a milder species of the same disease; and it is to the decisive measure of Government, in immediately adopting this plan, and the steady and liberal support afforded to it, that we ought to attribute the more rapid extension of the practice on its first introduction into Ceylon, than in Bengal, and some other ^{of} ports of India, where
though

though similar measures were adopted, yet the establishment remained to be organized, and the prejudices of the Natives against Inoculation in general, at least as received from the hands of Europeans, to be overcome.

To the Editor of the Bombay Courier.

SIR,

Bombay, July 2, 1802.

“ For the satisfaction of the Public, and the information of Professional Men in India, we beg of you to publish the following account of the introduction of Cow-Pox into this place. We have it now in our power to communicate the benefit of this important discovery, to every part of India, perhaps to China, and the whole Eastern World.---- We shall spare no pains in accomplishing a purpose so desirable, an object by which one of the greatest evils that has afflicted humanity, may be diminished in a great degree, or even extinguished altogether.

“ In the course of the last twelve months, we have repeatedly received by sea from England, the Vaccine Matter, and many children have been Inoculated to no purpose. We were not more successful with Matter, which was sent to us directly by land from Constantinople. Fortunately, Dr. Short, a surgeon

of

of this Establishment residing at Bagdad, produced the disease at that place.

“He immediately forwarded the matter to Bussorah, where Mr. Milne the Surgeon of that Presidency, also succeeded in infecting a patient with it. Mr. Milne soon afterwards inoculated a number of other Children, and he sent the Vaccine Matter to Bombay, by several ships. Even with this matter, we were for a time unsuccessful, and after thirty or forty trials, by various methods, and by different surgeons.

A fortunate inoculation at length produced the vaccine disease in Anna Dusthill, who is perhaps the first human being who underwent it in India. This child, the daughter of a servant of Capt. Hardie's, is about three years of age. She is very healthy, and certainly never had the Small-Pox. It is necessary to mention these circumstances, as from her alone, the whole of the matter that is about to be sent all over India, was first derived.

“We have received no history of the patients from whom it was taken at Bagdad, and Bussorah, but we rest with confidence from the knowledge of the Medical Gentlemen at those places, that no pains have been spared to make it pass through unexceptionable bodies.

“From

“ From Anna Dusthill on the 8th day of her disease, and on the 22d of last month, seven children were inoculated, five of those who certainly never had the Small-Pox took the infection, and have already gone through nearly the whole course of the Vaccine Disease. The other two were not infected, but there is some probability that one of them has had the Small-Pox. From the five children that were infected, about thirty more have been Inoculated, and a great many of them no doubt will take the disease. From these last, we shall send the Vaccine Matter to the other Presidencies, to Surat, Poonah, &c. &c.; and care shall be taken, that none shall be employed but from an unexceptionable source.

“ The Vaccine Disease in Anna Dusthill passed as we have said through its ordinary course, as described by writers on the subject.

“ The Pustule began to show itself about the third day; during the course of the fifth and sixth, she had slight symptoms of fever, and some uneasiness in the arm-pit of the Inoculated side. The Pustule on the 8th day was of the proper size for that period.--- It was flat, rather concave, and it consisted of many cells, which on being pricked gave out a transparent fluid. By the tenth day
the

the inflamed Areola round the Pustule was extensive, and very distinct, in spite of the blackness of her skin. She had only a single Pustule on the Inoculated part, nor during the whole time did she suffer any material inconveniency from the complaint. All the five children who were Inoculated from her, had a similar train of symptoms. On two, whose Parents were Europeans, the inflamed Areola, from the whiteness of the skin, was much more distinct, than it had been or Anna Dusthill.

“ We have thus detailed the progress of the symptoms, and we have no doubt but that this is the genuine Cow-Pox. Some Surgeons here, who have seen the disease in England, are of the same opinion; we hope, therefore, that this will tend to quiet the apprehensions of Parents, which in some instances, we find to be very great, and that our experience at this place, so far as it has gone, will give confidence to Practitioners.

“ Almost all the Medical Men at this presidency have witnessed the disease, many of them are inoculating for it, nor do I understand that any difference of opinion has arisen concerning its nature.”

One test indeed we still want of its genuine nature, and that is, its power of preventing the

the Variolous infection; to this test, it shall shortly be put. As this Island does not contain less than 150,000 people, sufficient supplies of children must arise, to keep up the disease, even without any dependence on Salsette, or the neighbouring Continent.

“ The Hindoos and Persees here both shew the utmost desire of having their children inoculated with the Vaccine disease. We shall instruct the native Practitioners of Physic regarding it, but on this part of the subject we are not without apprehensions. Whoever is sufficiently acquainted with what has been done in Europe, with regard to the Cow-Pox, is aware that some foreign poison, such as that of the Small-Pox, is apt to be mixed with it, whence a compound disease arises, or some other poisonous matter may be, from various causes, introduced, instead of the Vaccine Virus, whence a disease altogether different is produced. The History of the Count de Moffet, as detailed by Dr. de Carro, affords a most instructive lesson on this subject. The greatest care, therefore, should be employed, to warn the Native Practitioners, that the Vaccine Matter may be degraded, by many causes, and their utmost attention is necessary to prevent it.

“ We can affirm from our own knowledge, that this Government have anxiously assisted
our

our wishes for procuring the Vaccine disease, by the way of Bussorah. They represented to Lord Elgin, the importance of it to this great society of mankind, and they called for the aid of the Residents of Bussorah and Bagdad. Dr. De Carro, of Vienna, who has distinguished himself so honourably in this career, transmitted in the first instance the Vaccine Matter to Lord Elgin, who several times before had shewn us his attention to the subject. By his Lordships' orders, it was sent to our Resident at Bagdad, and again to the Resident at Bussorah. To both those Gentlemen the public are under great obligation, for the interest they took in the subject. Finally it fell into the hands of Dr. Short, and Mr. Milne, as we have already said, nor could it have been more fortunately placed.

“ We have been more particular than was necessary, for the Medical Profession, who must be supposed to be in possession of every fact, that has occurred, on the subject in Europe; but as we shall disperse the Vaccine disease very widely, and as it will affect, and as we hope it will promote the happiness of every family, we wish to satisfy the public at large, concerning the sources from which

we have derived it, and the foundation of our belief, that it is of a genuine kind.

(Signed) " WILLIAM MOIR,
" H. SCOTT."

To WILLIAM SANDWICH, Esq.

Secretary to the Medical Board, Bombay.

" SIR, Columbo, 1st September, 1802.

" I have sincere pleasure in acquainting you, for the information of the Medical Board at Bombay, that after various failures at the different stations on this Island, the Vaccine Inoculation has at length happily succeeded at Trincomalie, with Matter taken from the arm of a child of European Parents, at Bombay, on the 8th day from Inoculation, being the 10th of July. This Matter was sent by Doctor Helenus Scott, under cover to Mr. North, and did not reach Trincomalie till the 11th of August. Several Patients were on that day Inoculated with this Matter, by Mr. Rogers, Medical Superintendent at Trincomalie, but as in former cases it failed of success in all, except in John Sybille, a half-cast boy, of 12 years of age, in whom it very fortunately took effect. On the 20th of Aug. being the 9th day from Inoculation, a distinct Pustule was formed, on the Inoculated part, bearing

bearing the characteristic marks of the Cow-Pox, and attended with pain in the axilla, and slight fever, so that Mr. Gilbert Hall, Surgeon of the Malay Corps, who, in consequence of the absence of Mr. Rogers had charge of the Patient, had no hesitation in pronouncing it to be the true Vaccine Disease. He immediately Inoculated thirteen Patients from the arm of the boy, in all of whom he informs me, the Inoculation had evidently taken effect, on the 26th of August. The most effectual measures have been ordered by this Government, for keeping up the disease, and extending it as expeditiously as possible, to the different stations on this Island, and to the Coromandel Coast, by means of Inoculated Patients. The fortunate event of John Sybille's Inoculation with Matter thirty-two days old, should teach us not to despair of success with dried matter, which has even been kept a considerable time in a hot climate, but the very frequent failures with dried Matter, both in Europe and in India, shew that it is at best but a very uncertain means of conveying the contagion, to any considerable distance.

“ I beg leave to congratulate the gentlemen of the Bombay Medical Board on the success of their endeavours in the cause of humanity,
and

and to return them my thanks, for the benefits they have conferred on this settlement, by introducing the Vaccine disease into India, and extending it to Ceylon.

(Signed) “ THOMAS CHRISTIE.”

The following letter from Dr. Anderson, Physician-General at Madras, which was published by authority of the Governor-General of India, on the 1st of December 1802, when the Vaccine Disease reached Calcutta, will shew through what channels the Virus was transmitted from Ceylon to Madras, and thence to Bengal:—

“ DEAR SIR, Fort George, October 11, 1802.

“ Not having heard of the Bombay Cow-Pox Matter succeeding in Bengal, I take the opportunity of the ship Hunter sailing, to Inoculate two boys of European Parents at Botany Bay, (where the Small-Pox has never appeared,) belonging to the ship, by whom Captain Anderson, the Commander, hopes of being able to continue the disease in succession until his arrival at Calcutta.

“ The matter with which these two boys have been inoculated, was taken last night from the arm of a healthy child, inoculated at Chingleput, on the 1st instant, with threads

sent

sent on the 9th ult. from Trincomalie by Mr. Rogers, the disease appears to all here to be of the genuine kind, and confident of your attention to promote the benefit of this invaluable discovery.

“ I am, very truly your’s,
 (Signed) “ JAMES ANDERSON.”
 “ John Fleming, esq. Calcutta.”

The Vaccine disease after the fortunate inoculation of John Sybille at Trincomalie, was speedily communicated by vaccinated Patients, or by impregnated threads, to every part of Ceylon, and on the 4th of September, 1802, the following letter was addressed to his Excellency the Governor:

“ The Vaccine disease, that safe and certain antidote against the Small-Pox, being at length successfully introduced into Ceylon, I consider the Small-Pox Hospitals as now unnecessary, and therefore beg leave to recommend to your Excellency, that the future admission of patients into these Hospitals be prohibited, and that as soon as the cases at present under treatment are terminated, the Hospitals be shut up, and the establishment suppressed.

“ The Cow-Pox is a disease of so mild and innocent a nature, as not to require any particular

ticular confinement or treatment, but as it is of the utmost importance, that the Virus should be kept up in an uncontaminated state, and that the Vaccine disease should be propagated throughout the Island, with as much certainty and expedition as possible, I think the present establishment of Medical Superintendents and Overseers, may with great advantage be employed for this purpose, as well as for affording Medical aid to the Natives, in case of accidents or epidemics, superintending quarantines, and watching over, and reporting every circumstance connected with the health of the people.

“ The care of keeping up the Vaccine Matter, ought I think to be particularly entrusted to the Medical Superintendents at each station, who will see that all the Overseers in their districts, are well instructed in the practice of Vaccine Inoculation, and that they are actively employed in disseminating this most beneficial practice.

“ The Medical Overseers received ninety Rd's, when employed in actual service in an infected village, and I would recommend that the same allowance should be continued to them, when actively employed in propagating the Vaccine Disease, in any village of ten miles distance from their usual residence; probably

probably two months in the year would be sufficient for Inoculating all the children in the more remote parts of the Country, when the different Overseers might make the circuit of all the villages in their district, during which time, they should be allowed to draw ninety Rd's. per mensem, and at all times they would receive the regular salary of thirty Rd's. monthly.

"Should these proposals meet with your Excellency's approbation, I shall immediately write to the different Medical Superintendents, informing them of your Excellency's commands, and at the same time forward them instructions with respect to reports of their practice," &c. &c.

(Signed) "THOMAS CHRISTIE."

To this letter his Excellency was pleased to order the following reply to be made, and the necessary directions were accordingly written to the Medical Superintendents.

TO THOMAS CHRISTIE, Esq.

Medical Superintendent General.

"SIR,

"His Excellency the Governor has received your letter of this day's date, and has directed
me

me to acquaint you, that he approves highly of the measure you recommend, of not allowing any more patients to be inoculated for the Small-Pox, and as the successful introduction of the Vaccine disease, has rendered all Small-Pox establishments unnecessary, his Excellency will give orders for their suppression at the end of this month.

“ The Medical Superintendents, and Overseers will be continued, and employed in the manner you suggest.

(Signed) “ R. ARBUTHNOT,

“ *Chief Secretary to Government.*”

“ Columbo, 4th September, 1802.”

(CIRCULAR.)

TO THE

MEDICAL SUPERINTENDENTS IN CEYLON.

“ I am directed by his Excellency, the Governor, to desire that after the receipt of this, you will prohibit the further admission of Patients into the Small-Pox Hospitals under your charge, as in consequence of the successful introduction of the Vaccine disease, into this Island, his Excellency deems the further continuance of the Small-Pox Establishments

ishments unnecessary, and means to suppress them at the end of the present month.

“ The Medical Superintendents, and Overseers, will, however, be kept up, and employed in propagating the Vaccine disease, and in other duties conducive to the health of the people in their districts.

(Signed) “ THOMAS CHRISTIE.”

“ Columbo, 4th, September, 1802.”

(CIRCULAR.)

To the Medical Superintendents in Ceylon.

His Excellency the Governor being desirous to promote as much as possible, the salutary practice of inoculation for the Vaccine disease throughout the Island, by which means we may hope to extirpate that dreadful malady the Small-Pox, from these settlements, has directed me to send you the following instructions on this subject.

“ 1st. You will in future prohibit all Variolous Inoculation in your district, unless in cases where the symptoms of Cow-Pox have been distinctly marked, and in which you may wish to prove the efficacy of that disease, in preventing the Small-Pox.

“ 2d. You will consider yourself as entrusted with the care of keeping up the Vaccine Matter in your district, and of constantly preserving the Virus in a recent state, for which purpose you will be careful by successive Inoculations, at the principal station in your district, to perpetuate the disease, on living subjects, so that you may at all times be provided with Patients, from whom recent Matter may be taken.

“ 3d. You will consider it as your particular duty to extend by every possible means, the practice of Vaccine Inoculation throughout your district, and with this view, you will appoint an hour, at which you will daily Inoculate (gratis) all Persons who may present themselves for that purpose, with Matter taken immediately from the arm of an infected Person, and you will take pains to explain to the Natives, the nature of the disease, and to convince them, by ocular demonstration, of its mildness, and its efficacy, as a certain preventive against the Small-Pox.

“ 4th. You will carefully instruct the different Medical Overseers in your district, in the principles of Vaccine Inoculation, and the nature of the Cow-Pox, and for this purpose, you will cause them for a considerable time, to attend to your practice, when
you

you will have an opportunity of particularly pointing out to them, the distinguishing marks of the Vaccine Pustule, and the other symptoms of the disease.

“ 5th. When you consider them as sufficiently instructed in the principles of Vaccine Inoculation, you will send them to practise it in their particular districts, and when they have Inoculated as many Patients as possible, at the stations where they usually reside, you will direct them to make the circuit of the different villages in their districts, and Inoculate as many inhabitants as possible, which I trust will be the greater part of those who have not had the Small-Pox. It is conceived, that two months in the year will be sufficient for the inoculation of persons in the more remote parts of the country, but of the time required in particular cases, you will be the best judge.

“ When the Overseers are employed in propagating the disease at or above ten miles from their usual residence, they will receive an allowance at the rate of ninety Rix Dollars per mensem, for drawing which your certificate will be necessary; at all other times they will receive the regular salary of thirty Rd's.

“ 6th. Every patient inoculated by you or the Overseers, must be seen daily, until the
disease

disease has passed through its course, and the pustule begun to scab, and during the whole period of attendance, the succession of symptoms must be regularly noted.

“ 7th. You will require from each of the Overseers under you, a Report of the persons inoculated by them, agreeable to the enclosed form, which after examination, you will transmit to me, along with a similar one of the patients inoculated by yourself.

“ 8th. Each person successfully inoculated with the Vaccine disease, must be furnished with a certificate to the following effect, printed copies of which will be forwarded to you.

‘ I do hereby certify that A. B. resident in C. was inoculated by me for the Cow-Pox the day of and has passed through the disease regularly.’

“ 9th. You will as frequently as possible, visit the subordinate stations to see that the respective Overseers are actively employed in propagating the disease, in an uncontaminated state, and you will report to me your observations with respect to their diligence and attention, that they may be rewarded or reprehended according to their merits.

(Signed) “ **THOMAS CHRISTIE.**”

“ Columbo, 9th Sept. 1802.”

Return

*Return of Patients Inoculated for the Vaccine Disease by A. B. Medical *****, the District of ***,
in the month of September, 1802.*

Numb.	Date of Inoculation	Patients' Names.	Age.	Sex.	Cast.	Place of Residence.	From what Patient Inoculated.	Nature and Period of the Fever.	Nature and Number of the Pustules.	When Discharged.
1.	20th Aug.	Moutow - -	2 years - -	Male -	Pariah -	Trincomalie	John Sybille	Slight on the 27th	One distinct - -	2d September
2.	20th Aug.	Janet James	5 years - -	Female	European	Trincomalie	John Sybille	None observable -	One distinct - -	2d September
3.	27th Aug.	Murga - -	6 months -	Male -	Pariah -	Mullaiwo -	Moutow - -	Slight 3d Sept. - -	One distinct - -	9th September
4.	28th Aug.	Ram Sammy	28 years - -	Male -	Pariah -	Cottiar - -	Moutow - -	Severe 2d and 3d -	Numerous variolous	20th Septemb.
5.	3d Sept. -	Coutly - -	20 years - -	Male -	Pariah -	Trincomalie	Murga - -	Slight 10th Sept. -	One distinct - -	15th Septemb.

TABLE SHEWING THE NUMBERS AND EVENTS.

Casts.	Number.	Discharged.	Remaining.
European - -	1	1	0
Pariah - - - -	4	4	0
Total - - - -	5	5	0

NOTE.—Moutow and Murga after having passed through the Cow-Pox were at the request of their parents, inoculated with variolous matter, which failed to produce any effect. The Disease in Ram Sammy was evidently variolous, and on enquiry it was found that previous to inoculation, he had been exposed to the contagion of Small-Pox, which is prevalent at Cottiar.

These instructions continued in force, at the time of my leaving Ceylon, with the exception of that ordering the patients to be seen *daily*, which was found to be unnecessary, and after a time the Overseers being almost constantly engaged in propagating the Vaccine, were denominated Vaccinators, and had a regular salary of 60 Rd's per mensem, and an additional allowance at the rate of 30 Rd's. monthly, when actively employed, which was certified by the Medical Superintendent General, after the returns had been received and examined.

The salaries of the Medical Superintendent General, and Superintendents of Districts, were soon after the introduction of the Cow-Pox, reduced to one half of what they received during the existence of the Small-Pox establishments, the duty being considered as of a less fatiguing or disagreeable nature.

This circumstance is mentioned, because it has been unjustly insinuated, by some of the opponents of Vaccination, that the promoters of that practice, have often been influenced by interested motives.

At the same time that these instructions were issued, the following address by Government was printed in the English, Dutch, Malabar, and Cingalese languages, and generally circulated throughout the Island.

Address

Address to the Natives of Ceylon.

“ The experience of several years has fully proved, that inoculation for the Cow-Pox is a certain preservative against the Small-Pox, and is besides so mild and safe a disorder, when compared with the inoculated Small-Pox, that it has been generally introduced among the inhabitants both of Great-Britain, and of various parts of Europe.

“ In order therefore to impress strongly on the minds of the Natives of this Island, the usefulness and superior advantages of this new plan of Inoculation, Government has thought proper to state, in this public manner, the following observations for the serious perusal of all those persons, who feel a proper affection for their Offspring, and who are desirous of promoting their own interest and comfort.

“ 1st. Inoculation for the Cow-Pox has been practised for several years with constant success in various parts of the world.

“ 2nd. It has never failed to prevent the infection of the natural Small-Pox, nor has any person ever died of it, although millions have been Inoculated.

“ 3d. It may be communicated with safety to persons of every age and sex; and at all times and seasons of the year, with equal advantage.

“ 4th.

“ 4th. The Cow-Pox is much preferable to the Inoculated Small-Pox, as being a milder and safer disease, and not capable of infecting the persons living in the same family, or even sleeping in the same bed.

“ 5th. It does not produce eruptions which scar or disfigure the face; and is never attended with any other marks of the disease, than what appear on the arms from inoculation.

“ 6thly. Neither swellings, blindness, lameness, nor any other complaints which are known frequently to be the consequences of the natural Small-Pox (and sometimes, tho’ but seldom, of the Inoculated Small-Pox) have been observed to follow the Cow-Pox.

“ 7th. Alarming fits frequently seize children when sickening of the Small-Pox, and while cutting their teeth, this disorder often proves dangerous; but no such objections lie against the Cow-Pox.

“ 8th. So far from proving hurtful, delicate and sickly children are often improved in health, by having passed thro’ this complaint.

“ 9th. Scarcely any remedies or attendance are required for the Cow-Pox.

“ 10th. There is no necessity for a course of physic either before or after inoculation.

“ 11th. The time of the parents will not be taken up in attendance upon the sick, to the

the injury of the support of the rest of the family, and to poor families this is an object of great importance.

“The prejudices of the natives of this Island against inoculation for the Small-Pox, by which thousands of lives have been annually saved, have been often lamented, and if they suffer unjust prejudices to prevent their laying hold of the advantages now offered to them, by the inoculation of the Cow-Pox, they will neglect the performance of a duty they owe to themselves, to their families, and to society at large.

“For surely it is little less than criminal, to expose their helpless children to the attacks of so terrible and fatal a malady as Small-Pox, when it may be readily avoided, by the inoculation of so mild, simple, and safe a disease as that of Cow-Pox.

“Government has entrusted the care of preserving this disease to the Inspector of Hospitals, and Medical Superintendents and Overseers, at the different stations, who will Inoculate gratis all persons who wish to secure themselves against the Small-Pox, and who will convince by ocular demonstration, any native doctor or other person, of the innocence of this disease, and the perfect security it affords against that dreadful malady the Small-Pox.”

The success of these measures surpassed our most sanguine expectations. The Natives flocked in crowds to the Inoculators, and many of the Medical Men at Columbo Vaccinated above a hundred Patients in a day. The prevalence of Small-Pox at the time, encreased the anxiety for Vaccination, and also afforded us an opportunity of putting the genuine nature of the Cow-Pox to the test, by Inoculating many of our Patients with Variolous Matter, and exposing them to its contagion in every form.

In all these cases, the efficacy of the Virus stood the test of experiment, and of various letters published at the time, the following extracts need only be given.

To the Editor of the Ceylon Government Gazette.

“ Finding that the experiment of Inoculating with Small-Pox Matter, Patients who have passed through the Cow-Pox, has not yet been practised in other parts of India, I request you will state in your next Gazette, that the power of the Vaccine disease in preventing the Small-Pox, has been put to this last test at Jaffnapatnam, where two Patients who had passed through the Cow-Pox, were
Inoculated

Inoculated with Small-Pox Matter without any effect being produced.

“ The Patients alluded to, were the children of Lieut. Thiel, an intelligent Dutch Officer, who with a zeal for truth and an anxiety for his offspring, highly commendable, desired that they might be submitted to this experiment in order that he might be perfectly satisfied, that his children were completely secured against the effects of Small-Pox, and that the Vaccine disease had lost nothing of its specific qualities, in passing through such a variety of persons and climates.

“ I beg leave to mention this as an example worthy of imitation, and to state that all the Medical gentlemen on this Island, are ready to make the same conclusive experiment on any patients who have passed through the Cow-Pox, being perfectly satisfied as to its safety.”

(Signed)

“ T. CHRISTIE.”

“ Columbo, 10th October, 1802.”

*Extract of a letter to the Editor of the Ceylon
Government Gazette.*

“ As I observe by Doctor Anderson’s late correspondence inserted in the Madras
Papers

Papers, that the fact of the Cow-Pox in India securing the constitution against the subsequent effects of Small-Pox contagion, is still doubted at Madras, I consider it as my duty again unequivocally to state, that the preventive effect of the Cow-Pox has been fully demonstrated by repeated inoculations with Small-Pox Matter, by most of the Medical Gentlemen at the different stations on this Island; and as it may be of importance, that this fact should be authenticated by the testimony of different Surgeons, I have enclosed in addition to Mr. Orr's letter, some other extracts from my official correspondence on this subject.

“ I have also the satisfaction to mention, that notwithstanding the prevalence of natural Small-Pox in Columbo and Jaffnapatam, none of our numerous Patients, who have passed through the Vaccine disease, have been affected with Small-Pox, although they have all been desired to use no precautions against exposing themselves to the contagion, and some of them by my directions have been particularly subjected to its influence.

“ This has been most remarkably the case with the relations of Adrian de Roderigo, an inhabitant of Columbo, who was seized with the natural Small-Pox on the 27th of October.

ber. On visiting him on the 5th of November, in company with Mr. Orr, we found him covered with a load of distinct Small-Pox, and were informed that his father and brother who never had the Small-Pox, but had passed through the Vaccine disease, were living in the same House with him. We assured them they were perfectly safe, and directed them to continue with him as usual, and even to sleep on the same mat. On visiting this man to day, I was extremely happy to find, that my directions on this head had been complied with, and that although his father and brother had slept with him during the whole of his illness, they remained in perfect health.

“ From the same patient, Adrian de Roderigo, who is now nearly recovered, I Inoculated on the 6th November, two servants of Capt. Short, who had passed through the Cow-Pox. The one, a boy of the name of David, I took with me to the house of the patient, and carefully inserted the Variolous Virus in both arms; the other, a female, was Inoculated half an hour afterwards, with the same Matter while still in a fluid state. In both these subjects, the Punctures healed as in the case of a simple scratch, and to this day

day they have felt no inconvenience from the Variolous Inoculation."

(Signed) "THOMAS CHRISTIE."

"Columbo, 16th of November, 1802."

To Thomas Christie, Esq.

"I have further the pleasure to acquaint you, that the infant son of Lieut.-Col. Robertson, after having undergone the Vaccine disease, was Inoculated on the 6th instant, in both arms with active Variolous Matter, and has completely resisted its action.

(Signed) "JOHN ORR,

Med. Sup. Columbo District."

"Columbo, 15th November, 1802."

"I wrote you on Wednesday last, acknowledging the receipt of the lancets armed with Variolous Matter. With one of them I Inoculated an European female, who had passed through the Vaccine disease early in last month. The result of this trial under my own observation, is incontestibly decisive that we are in possession of the true Vaccine disease. On the 4th day, the arm shewed a slight inflammation round the puncture which

which continued slightly encreasing till the 7th; and yesterday the 8th had entirely disappeared. The Inoculation was performed on the same day that I received the lancets (7th Nov.) so that the Matter had not been taken from the Patient in Columbo, more than thirty hours; there can be no doubt therefore of its having been in an active state, especially as the inflammation on the arm was much more considerable, than could possibly have been produced by a slight Puncture.

(Signed)

“ W. YATES,

“ *Med. Sup. Galle District.*”

“ Galle, 14th November, 1802.”

“ Agreeable to your wish I have now to state, that besides the persons inoculated by myself with Variolous Matter, and who resisted its action after going through the Cow-Pox, I also saw those who had been repeatedly inoculated by Mr. Vandeputte Medical Overseer of Jaffnapatnam, and in whom also no effect was produced, although the incision was extensive, and had been made to a considerable depth.”

(Signed)

“ J. CARNIE,

“ *Lately Med. Sup. Jaffna District.*”

“ Columbo, 6th November, 1802.”

“ I

"I have nothing particular at present to say, further than I conceive it to be my duty to acquaint you, that this is now the fourteenth day since the experiment was made here, and of which I sometime ago informed you, of inoculating with Small-Pox matter, two young subjects who had passed through the Cow-Pox, and not the smallest eruption, or any other symptom of an unpleasant or disagreeable nature, has yet made its appearance, to affect the credit of the new disease.

(Signed)

"G. HALL."

"Trincomalie, 7th November, 1802."

"Of those persons I mentioned in a former letter, who after passing through the Vaccine disease were inoculated with Variolous matter, on four it had no effect, but one had a smart fever and pain of the axilla for two days, and the place where the puncture was made, was a little inflamed, but no eruption whatever. He took the fever on the third day, and all of them are long since well.

(Signed)

"J. STUTZER."

"Jaffnapatnam, 7th November, 1802."

Experiments of this kind were repeated at all the stations with the same event, but the continuance

continuance of our success up to the end of this year, will be best explained by the following advertisement, which was published and circulated in the different Native languages spoken on the Island :

“ Government Advertisement.”

“ In an address to the natives of Ceylon, Government had formerly the satisfaction of announcing the introduction into this Island of the Cow-Pox, as a safe, mild, and certain preventive against that worst of maladies, the Small-Pox, and of pointing out the numerous advantages that had attended the Vaccine Inoculation in Europe, and other quarters of the world.

“ Government has now the additional gratification of calling the attention of the inhabitants to the wonderful success, and advantages that have already attended the practice in this island.

“ It is little more than three months since the first introduction of Cow-Pox into Ceylon, and in that short space of time, upwards of Ten Thousand People of all ages and descriptions, have been Inoculated in the different parts of this Island ; and in no one case, has any sinister event, or dangerous symptom supervened in consequence of the Inoculation.

“The efficacy of the Cow-Pox in preventing the Small-Pox, has also been fully demonstrated throughout this Island, to every reasonable mind, for in no one case has it happened, that a patient who has passed through the Cow-Pox, and obtained a certificate to that effect from any Medical Man on the island, has ever afterwards had the Small-Pox, although a great many, after having had the Cow-Pox, have been for the sake of experiment, Inoculated with the most active Small-Pox Matter, and have also slept with patients, during their whole illness, who laboured under the most malignant and confluent disease.

“The natives are, however, warned, that if they have caught Small-Pox before they have had the Cow-Pox fever, or areola,* they may possibly have both diseases, and that a few cases of this kind have occurred, one or two of which have terminated fatally.

“It has also happened, that one or two patients who had been inoculated, conceiving they had had the Cow-Pox, have not returned

* Recent observations have shewn that the existence of an areola is not absolutely necessary to secure the constitution, if the Vaccine Vesicle has in other respects been regular and correct.

to shew themselves to the Surgeon, and procure his certificate, have afterwards been seized with Small-Pox, but on a strict enquiry into all these cases, it has always been proved, that the patients had been deceived by false appearances, and had not had the true Cow-Pox, for as has been said before, in no one instance has a patient, who has regularly attended the inoculating Surgeon, and received his certificate, ever afterwards had the Small-Pox.

“ This safe and mild inoculation continues to be practised every morning by all the European Surgeons on this Island gratis, and the natives are hereby earnestly entreated to embrace the opportunity of benefiting by this inestimable discovery as soon as possible, without longer exposing themselves or their offspring, to that dreadful malady the Small-Pox, which still continues to prevail in many parts of this Island; but to obtain perfect security against the latter disease, they are informed that after Inoculation, they must regularly attend the Surgeon who Inoculated them, until he declares they are safe, and gives them certificates to that effect.

“ By his Excellency’s command,
 (Signed) “ R. ARBUTHNOT,
“ Chief Secretary to Government.”

“ Columbo, 22d December, 1802.”

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The language of this Address, in stating that in no one instance had a patient who had regularly attended the Inoculating Surgeon, and procured his certificate ever afterwards had the Small-Pox, may appear strong to many, but it is no more than the success of the practice at the time justified, for notwithstanding the most particular enquiries were instituted into the circumstance of every case of supposed failure, no one had hitherto been detected, although the Small-Pox was at the time prevalent at Columbo.

The following letter, published soon afterwards, will shew that there was no wish to conceal any fact that might militate against the success of the practice of Vaccination, as it candidly states two cases of apparent failure, and it may be proper to add, that although failure did in a few instances afterwards occur in different parts of the island, particularly where the Inoculation had been entrusted to natives, yet the one here mentioned, is the only case that ever came to my knowledge, in the neighbourhood of Columbo, and indeed it had escaped my memory, till I began to collect every thing I had written on the subject of Vaccination, for the purpose of compiling this pamphlet. I regret much, that it was not adverted to in a letter published

lished at Columbo on the 30th of Jan. 1808,
stating the complete success of Vaccination.

To the Editor of the Ceylon Gov. Gazette.

“As I wish to rest the merits of the Cow-Pox Inoculation upon truth alone, and a full and candid exposition of facts, and am anxious to inculcate in the strongest manner, the necessity of guarding with the utmost vigilance, against the introduction of a spurious disease, of attending most carefully to the progress and completion of the symptoms, before granting a certificate of security, and of persevering in frequently subjecting Vaccinated patients to Variolous Inoculation, as the most certain test of a true disease, I think it my duty to publish for general information throughout the island, two cases, which have come to my knowledge, since the publication of the Government Advertisement on this subject, under date the 22d December, in which, the patients have had Small-Pox, after it was conceived they had had Cow-Pox, and which had all the circumstances not been particularly enquired into, and considered, would have tended to invalidate the proofs of the preventive efficacy of the Cow-Pox.

“The one, an old man of fifty-five years, resident in the Sinna Corle, had been Inoculated

lated at Columbo on the 29th of October, with Vaccine Matter; and it appearing that he had the true disease, he was on account of the distance of his residence, his infirm state, and the great press of patients for Inoculation, indulged with a certificate on the 5th Nov. or the 8th day of the disease. It proved, however, that this had been prematurely granted, for on exposure to Small-Pox contagion, he caught the disease though in a mild form.

“ With respect to this case, it may be observed, that from the age of the patient, consequent flaccidity of the skin and thickness of the cuticle, it must have been peculiarly difficult to detect a spurious disease, and that nothing but particular circumstances could justify the granting a certificate at such an early period of the disease, as from experience we have reason to believe, that although the Inoculation may have taken proper effect in the first instance, yet if the vesicle is scratched, or otherwise injured at an early period, the specific action of the virus may be destroyed, the pustule degenerate into a simple ulceration, and the inoculation prove non-effective. On this account I have ever recommended repeated inoculation in such instances, unless the areola was extremely distinct, and the fever

fever very evident; and in cases where there is only a pustule on one arm, we ought if possible, to avoid wounding it much at an early period, even for the purpose of taking matter for Inoculation.

“ Too much indulgence, however, cannot be granted to the Medical Gentlemen at Columbo, who, anxious to stop the progress of Epidemic Small-Pox, and to satisfy the eager wishes of the natives to secure themselves against that dreadful malady; often laboured all day, and after inoculating upwards of a hundred people each, were sometimes obliged for want of time to put off many of the people attending for Inoculation till another day.

“ In such circumstances, it surely cannot appear surprising, that one mistake should have occurred out of six thousand cases, but what will convince every person that this was an accidental spurious case, and that the preventive effect of the true Cow-Pox, must continue unimpeached, is, that the whole of this man's family, who were Inoculated at the same time with himself, continued to live in the house with him, while he laboured under Small-Pox, and still remain in perfect health.

“ The other case occurred in the person of a native child of eight months, who was inoculated

oculated in a distant part of the Island, by a Gentleman who at that time had seen few cases of Cow-Pox. No certificate was, I believe, in this instance granted, but there is no doubt that the Gentleman who inoculated this child, conceived it had the genuine disease, as he lately subjected this patient, with four others inoculated with Cow-Pox from the same source, to Inoculation with Variolous Matter, the action of which they all completely resisted, except the child in question, who, on the 8th day had fever, and on the 9th and 10th, there appeared about a dozen of Pustules, which had all the appearance of Small-Pox.*

* Although I am willing to allow that this may have been a case of failure, it ought not to be forgot, that it has been shewn by the observations of Doctor Jenner, and others, that the Inoculated Small-Pox, or even the natural disease, does not always render the constitution *totally* unsusceptible of the Variolous poison.—On the insertion of Variolous Matter, a pustule capable of communicating the disease is often produced on the part, even in those who have passed thro' the Inoculated or casual Small-Pox, in whom also some degree of fever, and an eruption of pustules have occasionally been produced from Inoculation, or casual exposure to Variolous effluvia, as in nurses.—Some rare cases have occurred and been well authenticated, in which the Confluent Small-Pox has occurred twice in the same person.—^{See Facts} ~~Two parts~~ respecting Variolous Contagion published in 1808, by Dr. Jenner.

A child who had never had either disease, has been Inoculated with Matter from these Pustules, in order to ascertain the fact; but time has not yet been given to know the event.

“Allowing, however, that this was a case of Small-Pox, it is surely more reasonable to suppose, that the child had a spurious Pustule, the insidious appearance of which had deceived the inoculator, than to doubt the preventive efficacy of the Cow-Pox, after the numerous and decisive experiments that have been performed by Inoculation, and exposure to natural infection, at every considerable station on this Island, as well as in many other parts of India, and every part of Europe.

“The occurrence of these cases, however, ought to impress on the mind of every person engaged in this pursuit, the necessity of paying the greatest possible attention to the discriminating appearances of the disease, of frequently inspecting the Inoculated patients, of noting down every symptom, and of repeating the Inoculation, where there is the smallest ground of doubt.

“After this, it is scarcely necessary to observe that it is impossible for professional men to perform their duty to their patients, by affording them perfect security against the Small-Pox, unless after inoculation they regularly

gularly attend the Inoculating Surgeon at the period he desires, in order that the progress of the pustule may be carefully examined, a circumstance which I am sorry to say has been frequently neglected by the Natives, from a mistaken idea with respect to the simplicity of the disease, but although the Cow-Pox is extremely mild in its nature, it certainly requires the nicest attention and discrimination to distinguish between the true and spurious disease, particularly in Indians, in whom the darkness of the skin renders the areolæ one of the principal diagnostics, much less distinct than in Europeans.

“These circumstances have hitherto prevented my recommending the Vaccine Inoculation to be entrusted to the Native Physicians, but I have reason to believe that many of them have taken up the practice of their own accord, particularly in the Galle district, where I am informed by Doctor Yates, a Boudha Priest has been practising Vaccine Inoculation, with considerable success.

“It affords me the most sincere pleasure to add, that notwithstanding the occurrence of the perverse accidents above mentioned, and malicious reports in consequence, the practice of Vaccine Inoculation continues to extend throughout this Island, and that the natives,
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in general, place the most perfect confidence in its efficacy, in preventing the Small-Pox.

In many villages almost every person susceptible of infection has been Inoculated, and at Hambantotte a remote station, which has little communication with other parts of the Island, the Small-Pox, which prevailed there in October last, has been banished from the district, by the beneficial influence, of the Cow-Pox Inoculation, which last circumstance, I must consider as *af*figuring favourably for the speedy extirpation of the Small-Pox, from the Island of Ceylon, and the whole of India."

(Signed)

" T. CHRISTIE "

" Colombo, 1st Jan. 1803."

I have not been able amongst my papers, to trace the sequel of the case of Inoculation from the pustular eruption on the child above mentioned, but our progress in Vaccination suffered a serious interruption at this time, from the breaking out of the Candian war, in consequence of which, almost all the Medical men employed in Vaccination, were sent into the interior, with the troops which marched from Columbo, and Trincomalie, in the end of January 1803.

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The nature of that warfare, with the consequent grievous sickness amongst the troops, and the state of insurrection in some of the British provinces which followed, greatly retarded the practice, notwithstanding which unfavourable circumstances, we were fortunate enough, to keep up the disease, at almost every considerable station, and to inoculate in the course of the year 1803, nearly 9000 patients, chiefly in the South-West side of the Island. We also added to the proofs of its preservative efficacy, by variolous Inoculations, and exposure, but what was most pleasing, in the course of the year, we succeeded in banishing the Small Pox from the district of Columbo, though for the last eight years previous to the introduction of Vaccination, it had at all times been in a certain degree prevalent in the Pettah of Columbo, and generally epidemic in the months of October, November, and December, when the port is open, and much resorted to by small craft from the opposite coast.

We were not however without opposition to the practice of Vaccination, reports prejudicial to which, were often circulated with the greatest industry, and there is reason to believe originated in general, with the native practitioners whose emoluments were greatly diminished

diminished by the expulsion of Small-Pox from the district.

An intelligent native of this description, Don Juan Appoo, afterwards became my patient for Diabetes Mellitus, and informed me, that in consequence of the extermination of Small-Pox, in the treatment of which his practice chiefly consisted, he had been obliged to set up a school, as a means of subsistence. He allowed that for a long time he had opposed Vaccination, although, after the strictest enquiries, he had never been able to detect above one instance of failure. When I last spoke to him in 1809, he had not seen a case of Small-Pox for nearly three years. It is a remarkable circumstance, that this man who lost his usual means of subsistence from the consequences of Doctor Jenner's grand discovery of Vaccination, had his health restored, and his life apparently saved, by another of the late European improvements in Medicine, the treatment of Diabetes by animal diet as recommended by Doctor Rollo.

The following letters which were published in the Government Gazette of the 11th of May 1803, will shew that not only the Medical men were solicitous to enquire strictly into every case of supposed failure, but that even

even His Excellency the Governor, with that zeal for truth, and anxiety for the welfare of all under his Government, for which he was so remarkably distinguished, sometimes made personal enquiries on this subject.

"To the Editor of the Ceylon Government Gazette.

"The progress of Vaccine Inoculation having lately been considerably retarded in Ceylon, by idle, and I am afraid in some instances, malicious and interested reports, of its inefficacy in preventing Small-Pox, I think it may be of use to state in a public manner, that the Medical gentlemen here, have at all times courted a strict enquiry into that subject, and whenever a report of this nature was made known to any of them, they have made it their business to trace it to its source, and to visit the persons said to be affected with Small-Pox.

"In much the greater number of cases, as in the instance detailed in the accompanying letter from Mr. Reynolds, the reports have been found to be without any grounds whatever; in some others it has appeared, that the patients had been Innoculated with Vaccine matter, without having taken the disease,
or

or afterwards shewn themselves to the Surgeon, but in no one instance, since the publication of my letter to you of the 1st January, has it been found, that any person who had been declared by a Medical gentleman to have had the true Cow-Pox, or received a certificate to that effect, has ever afterwards had Small-Pox, although the latter disease, has been prevalent during the intervening period, in most parts of the Island.

“ The circulation of reports prejudicial to the efficacy of Cow-Pox, the employment of many gentlemen who promoted Vaccine Inoculation, in other professional duties, and above all the apathy and prejudice of the natives on this subject, have contributed to render our success for the last three or four months, much less rapid than during November and December 1802, but still we have happily been enabled to keep up a succession of patients with the true disease, at a considerable number of stations, and to obtain, after eight months experience, the most ample proofs of its efficacy in preventing Small-Pox.

“ The number of patients who have had the true Vaccine disease in this Island, may, I believe, at the least be estimated at fourteen thousand, and it is surely fair to argue, that none of these have had the Small-Pox, although

though prevalent in Ceylon, since no such instance has been brought forward, notwithstanding the fabrication of false reports on this subject, shews sufficient inclination in some interested persons most probably native practitioners to depreciate the merit of this new discovery.

“ You did me the favour to insert in a former paper, a letter of Mr. Ludovice’s, containing an account of a case of Vaccine disease communicated by accidental contact ; I have now the pleasure to transmit you a second letter from that gentleman, containing the sequel of that case, and another curious instance of the same nature, which gave rise to an experiment, the success of which must, I think, prove interesting to your medical readers.

(Signed)

“ T. CHRISTIE.”

“ Columbo, 4th May, 1803.”

To Thomas Christie, Esq. Medical Superintendent General.

SIR,

“ In compliance with your orders yesterday, I waited on his Excellency the Governor, and accompanied him to the village of Bamblepetty, situated on the South side
of

of the Cinnamon Garden, where a woman named Francisca Perrera, of the Chandoo cast, was reported to have taken the Small-Pox, after having had the Cow-Pox, it was also stated that she had a certificate from a surgeon to that effect; under these circumstances, I considered it necessary to be very particular in my enquiries, as I was informed the report came from respectable authority.

“ I have infinite satisfaction in being able to inform you, that this report, like many others, (tending to bring Vaccine Inoculation into disrepute) has proved to be unfounded; for the woman had no symptom whatever of Small-Pox, nor had she a certificate of her having had the Vaccine disease.

(Signed) “ M. REYNOLDS,

“ Surgeon H. M. Ceylon reg.”

“ Columbo, 26th April, 1803.”

To William Yates, esq. Medical Superintendent Galle and Matura Districts.

SIR,

“ I have the honor to transmit you an extract of the register of the Vaccine patients at Matura, for this month, along with that for January. The woman whom I formerly

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mentioned

mentioned to you, as having received the disease by accidental contact, has since been Inoculated twice with Vaccine virus, and once with variolous Matter, the action of both of which, she has completely resisted."

"A case of a similar nature occurred to me in the course of the present month, which afforded me an opportunity of making the following experiment :

"On the 13th of January, I inoculated the infant child of the MahaMoodeliar, of Matura, which was suckled by a nurse, who had not had the Cow-Pox ; on the 19th I visited the child and found the disease distinctly marked, and on that day, inoculated in the arm, the nurse named Gimira, of 23 years of age.

"This inoculation failed, but on the 6th of February, I was requested by the Moodeliar to visit this nurse, when I found she had a distinctly marked Vaccine Pustule on her chin, which I must conceive was occasioned by contact with the child's arm. From the Pustule on the chin, I immediately inoculated seven patients, five of whom had the disease distinctly marked, the two others have not since returned to me.

"The nurse had smart fever on the 8th and 9th, and the pustule on her chin was a good deal inflamed, in consequence of being frequently

frequently punctured, but a poultice with Goulard water soon produced relief.

(Signed) " J. H. LUDOVIC.

" *Medical Overseer.*"

" Matura, 28th Feb. 1803."

In the beginning of the year 1804, I made the tour of Ceylon, for the first time since the commencement of the Candian war, and had the pleasure to find, that the Vaccine disease existed in perfect purity, at all the principal stations on the Island, and that the inhabitants generally placed confidence in the preservative efficacy of Cow-Pox, except in the district of Jaffnapatnam, where the disease had become extinct, and the practice of Vaccination got into disrepute, in consequence of a spurious disease having been introduced, after passing through which, several persons caught Small-Pox and died.

This unfortunate circumstance was in a great degree to be attributed, to the practice having, soon after its introduction, fallen into the hands of Native practitioners, who after a few proofs of its success, were satisfied, if a puncture were made, and some irritation and inflammation produced.

On enquiry, it was found that they frequently had taken matter at a late period of
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the disease, and that in many instances, a conical pustule with turbid matter was produced, and in others a high degree of inflammation succeeded by ulceration; but all of these patients were equally supposed to have passed through the Cow-Pox, and if any of them afterwards took Small-Pox, the practice of Vaccination was thereby brought into disrepute.

It may be here observed, that however simple the practice of Vaccination may appear, few Native practitioners are possessed of that neatness, attention, perseverance, freedom from prejudice, and discrimination necessary for carrying it on with success, which is considerably more difficult with native subjects, in whom the dark colour of the skin renders the Areola less distinct than with Europeans.

On the South West side of the Island, where hitherto we had been most successful, we never committed the practice to any but European Surgeons, or young men Natives of the Island, who had been bred at the European Hospitals, and it was difficult to convince even these of the necessity of watching the disease, through it's whose progress, as they were too apt to be deceived, by the apparent simplicity of the operation, and to conceive that if a puncture was made, and a
pustule

Pustule of any form excited, it was sufficient without attending to the more nice distinctions of the disease.

With a view of re-establishing the practice of Vaccination at Jaffnapatnam, and restoring confidence in it's preservative efficacy to the minds of the inhabitants, I spent the greater part of March 1804 at that station. I brought two patients with the genuine Vaccine disease from another station, Trincomalie, and after Inoculating from these, the children of some of the principal families of the place, waited till the disease had run its course, in the regular manner, and then Inoculated many of them with Small-Pox, the influence of which they all resisted. The propagation of the disease was then entrusted to Doctor Stutzer, Medical Superintendent of the district, in which the practice was, after this, as successfully and rapidly extended, as in any other part of Ceylon, though the inhabitants, who are a race of Malabars from the opposite coast, and worshippers of Bramah, had shewn much more aversion to Vaccination, than the Cingalese Boudhists of the South West part of the Island, who adopted the practice most readily.

With a view of proving as far as was possible at the time, the permanent efficacy of the Cow-Pox, I took an opportunity, while
at

at Jaffnapatnam, of inoculating some of the patients first Vaccinated in Ceylon, with Small-Pox matter, the success of which is detailed in the following letter, published in the Government Gazette of the 25th of April.

“ Although a great many of the Vaccinated patients here, have been subjected to Small-Pox Inoculation without any disease having been produced, yet in the minds of several inhabitants, who admit the force of the experiments, as to the efficacy of Cow-Pox in preventing for a time, the effects of Small-Pox contagion, there seems to remain a doubt, whether the system is permanently sheathed against the Small-Pox, by the influence of the Vaccine; I therefore think, that the publication of the following account of the Inoculation with Small-Pox, of a most respectable family, very generally known on this Island, some of whom passed through the Cow-Pox in 1802, and another in 1804, may in this respect be of general utility.

“ When lately at Jaffnapatnam, I inoculated a number of persons with Cow-Pox, and amongst others the children of Captain Driberg. In the three eldest, who had been Inoculated by Mr. Carnie, in August, 1802, when the Vaccine was first introduced into Ceylon, this last Inoculation produced no effect, but the youngest child who had not
been

been previously Inoculated, had a very distinct Vaccine Pustule, on each arm, with a moderate degree of fever.

“ As the most certain means of removing every possible degree of apprehension, from the minds of the Parents, I recommended to Mrs. Driberg, to have all her four children afterwards Inoculated with Small-Pox, which I performed on the 3d of April, with active Matter taken from a patient on the 10th day of the disease. In the two youngest, only a slight degree of elevation was produced by the puncture, which disappeared on the third day, but in the two eldest, a tolerably distinct Pustule appeared on the Inoculated part, which occasioned apprehension to some of the friends, and did not die away till the tenth day. These local Pustules were not however attended with any pain or fever, and their occurrence only served to shew, the active nature of the Matter employed, and the impossibility of producing Small-Pox fever, or eruption, after Vaccination.*

* Subsequent observations shew that this remark ought in some degree to be qualified, as a pustule in the part, nay sometimes fever and eruption, may be excited by insertion of Variolous Matter, even in patients who have had the Cow-Pox, or Small-Pox, from inoculation or casual infection.—See note page 56.

“ In a letter dated Jaffna, 15th April, Mrs. Driberg writes to me as follows:

“J'espere, Monsieur, que vous avez reçus ma precedente lettre, dans laquelle je vous ai marquée la suite de L'Inoculation, maintenant, je puis vous assurer, que mes enfants ont echappés au danger de prendre la petite verole. Les Pustules sur la partie inoculée etant sechées le dixieme jour, a l'etonnement de quelques uns de mes amis; Cependant ils sont persuadés, dans ce moment, de l'utilité de la Vaccine. Je me rappelai, que vous m'avez dit pendant votre séjour ici, que peut-être ils auroient des Pustules sur la partie, mais que cela ne signifia rien; de maniere que je n'en fus pas un instant inquieté, malgré les craintes de mes amis.

“ It must be pleasing to the friends of humanity to learn, that, notwithstanding many disadvantages, the Medical Gentlemen on Ceylon have succeeded in keeping up a succession of patients, with the genuine Cow-Pox, at all the principal stations on the Island, for nearly two years; that the disease has already been communicated to upwards of twenty-one thousand inhabitants, who are thus for ever secured against the influence of Small-Pox, and that this latter disease, which according to the most moderate calculation, formerly

formerly carried off *a sixth part of the population of this Island*, has by the benign influence of the Vaccine Inoculation, been entirely banished from the populous districts of Colombo, Galle, and Matura.

“ Small-Pox still prevails in the province of Jaffna, where a considerable degree of prejudice has hitherto, unfortunately, existed against Vaccine Inoculation, which is chiefly to be attributed to some accidents having arisen from spurious pustules, in the hands of native practitioners, who had adopted the practice before they were sufficiently acquainted with the distinguishing marks of the true disease.

“ I trust, however, that the force of truth will soon dispel the prejudices of the natives of Jaffna; and it is principally with a view of promoting that important object, that I trouble you with the publication of this letter; for I am happy to say, that in the other parts of this Island, a perfect confidence in the preservative efficacy of the Cow-Pox, very generally pervades all ranks of people.

(Signed) “ THOMAS CHRISTIE.”

“ Colombo, 22d April, 1804.”

From the time of the disappearance of Small-Pox at Colombo, the apathy and in-

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difference of the natives about Vaccination, encreased daily, and instead of their flocking in crowds to the Inoculators, these were frequently obliged to search for patients in the villages, so that notwithstanding every exertion, the number of inoculations in 1804, did not exceed 8,000.

In the course of that year, the Vaccine virus was forwarded on a succession of patients, from Ceylon to the Island of Sumatra, the circumstances attending which, as published at the time, seem deserving of record, although the public have since been made acquainted, with the success of an expedition on a much more extensive scale, fitted out by the Spanish Government, for conveying the Vaccine to South America, the Philippines, and China.

“ To the Editor of the Ceylon Government Gazette.

“ It will prove gratifying to the friends of Vaccination, to learn that by the late arrival of the Venatchy Schooner at Trimcomalie, from Bencoolen, I have received intelligence of the successful introduction of the Cow-Pox into Surnatra, from whence I trust that blessing will be speedily diffused throughout all the Islands to the Eastward, and extended to China and New Holland.

“ It

“ It may be in the recollection of some of your readers, that on the 1st of January last, the Schooner *Umpire* sailed from Columbo, with Mr. Vanderhoven, a Medical Assistant, on board, and six persons who had not had Small-Pox, for the purpose of conveying by successive Inoculations, the Vaccine disease to Fort Marlborough, where many attempts to introduce it, by dried matter had failed.

“ The following correspondence will shew the success of this measure, and although the arrival of the *Umpire* was anticipated a few days, by that of another vessel, which had also Vaccine patients on board, it may prove useful, by pointing out the great degree of certainty, with which this most important discovery may be conveyed to the most distant regions, by a succession of patients, and encourage others to persevere in transmitting it by these means to such parts of the world, as it has not yet reached.

(Signed) “ T. CHRISTIE ”

“ Colombo, 4th June, 1804.”

To the Senior Medical Officer at Bencoolen.

“ Having been directed by his Excellency, the Governor of Ceylon, to concert measures for the transmission of the Vaccine disease to
Bencoolen,

Bencoolen, by the schooner Umpire, I have recommended as the most certain means of effecting this important object, the sending on board a sufficient number of persons who have not had the Small-Pox, for the purpose of keeping up a succession of the disease, on living subjects during the voyage, and as I conceive that the successful practice of this Inoculation, requires more nicety and discrimination, than is generally supposed, or could well be acquired by a gentleman not of the Medical Profession in a few days, I have also recommended, that instead of entrusting the preservation of the disease to the Commander of the vessel, a Medical Assistant should be sent from this in charge of the patients.

“ For this purpose, I have selected Mr. Vanderhoven, who has long been in the habit of attending my Inoculations, and also of performing the operation himself. I beg leave to enclose for your information, a copy of my instructions to him, and I have directed him as soon as he shall arrive at Bencoolen, to wait on you with his register and journal of patients.

“ I trust he will be successful in conveying the genuine disease to your quarter of the world, and that it will prove as valuable a
 blessing

blessing in the Island of Sumatra, as it has already done in Ceylon, and most other parts of India.

(Signed) "T. CHRISTIE."

"Columbo, 30th Dec. 1803."

To Thomas Christie, &c.

"I have to report to you my return from Bencoolen and arrival here on the evening of the 24th instant. After a long passage from Columbo, which we left on the 1st of January, the Umpire touched on the 15th February a Tappenoolly, where we were obliged to anchor on account of wanting more patients, the last of those I brought from Columbo, being then in the 7th day of the disease. I immediately landed there, and applied for two more subjects, which the commandant had the goodness to supply me with.

"The Surgeon of Tappenoolly was absent at this time, but I left an abstract of my instructions, and inoculated one of his slaves.

"At 6 a. m. we left Tappenoolly, and arrived at Bencoolen on the 23rd.

"I immediately landed, and delivered to Doctor Campbell, a patient with a distinct pustule on the 8th day of the disease, also a Journal and Register of my patients agreeably

ably to your instructions. Doctor Campbell informed me, that they had already received the disease by a Bengal ship, but he received my patient, and inoculated a few subjects.

"Enclosed is a letter from Doctor Campbell, which he requested me to forward to you, and I also transmit for your perusal, a copy of the Register and Journal of patients inoculated by me, during my passage to Bencoolen, which will I hope meet your approbation.

"J. VANDERHOVEN."

"Trincomalie, 26th May, 1804."

RETURN

REGISTER OF PATIENTS INOCULATED WITH THE VACCINE ON BOARD THE UMPIRE,

On a Voyage from Columbo to Fort Marlborough, in January and February, 1804.

Numb.	Date of Inoculation.	Patients' Names.	Age.	Sex.	Casts.	From whom inoculated.	Nature & Period of the Fever.	Nature and Number of the Pustules.	REMARKS.
1	Columbo, 1st Jan.	Pandaram	15	Male	Chingalise	Andrie	Slight the 7th	One distinct	
2	At Sea, 8th Jan.	Nappe Hattane	19	Male	Ditto	Pundaram, No. 1	Slight the 14th	Three distinct	
3	At Sea, 15th Jan.	Hattane	23	Male	Ditto	Nappe Hattane, No. 2			
4	At Sea, 19th Jan.	Hattane	23	Male	Ditto	With threads from ditto	Slight the 23d	Four distinct	Failed, reinoculated.
5	At Sea, 26th Jan.	Pologonally	30	Male	Ditto	Hattane, No. 4	Slight the 30th	Four distinct	
6	At Sea, 2d Feb.	Wapoo	24	Male	Ditto	Pologonally, No. 5	Slight the 1st	One distinct	
7	At Sea, 9th Feb.	Apoonally	25	Male	Ditto	Wapoo, No. 6	Slight the 17th	Four distinct	Delivered to Dr. Campbell, at Ben- colen, Feb. 23d
8	Tapanooly 16th Dec.	Lashy	30	Male	Ditto	Apoonally, No. 7	Slight the 21st	One distinct	

NOTE.—For greater security, all the Patients were inoculated with two punctures in each arm.

(Signed) J. VANDERHOVEN.

A true Copy.

(Signed) T. CHRISTIE.

To

To Thomas Christie, Esq. Medical Superintendent General, on Ceylon.

“ Previously to Mr. Vanderhovens arrival here, we were fortunate enough to procure Vaccine matter from Bengal; it was conveyed hither by successive Inoculation. We have still to acknowledge ourselves greatly indebted to you, for the prompt and decisive measures you adopted, with a view to its transmission, and for the remarks and observations which have occurred to you in the course of a very extensive and successful practice. We have succeeded in some degree, in our endeavours to naturalize the disease to this Island, but the prejudices of the Malays are not wholly overcome. Still we are in no immediate danger of losing the virus from want of subjects. The results of our practice, are not yet worthy of communication, and very indifferent health hinders me from entering into any detail. I will hope for the pleasure of some further correspondence on this subject, at no distant period. Mr. Vanderhoven brought one patient to Marlbro’ with a Pustule in a very fit state to Inoculate from, and although we had of course no occasion to try the Matter, yet this does not diminish the credit due to his exertions. He has acquitted himself very respectably, and
his

his whole conduct since his arrival here, has been marked with great correctness and propriety.

(Signed)

“ J. CAMPBELL.

“ *Senior Surgeon.*”

“ Fort Marlborough, April 3d, 1804.”

In 1805, the practice of Vaccination continued to be followed with the most perfect success, and although the Small-Pox prevailed in the Candian Country in the month of May of that year, it did not extend to the British possessions, but on the contrary, the alarm created by it on the frontier, encreased the number of applications for Vaccination, and it appears from the report of May, 1805, that the number of patients Vaccinated during that month, in the Columbo district alone, amounted to 486, and that on the South-West side of the Island, we enjoyed a perfect exemption from Small-Pox.

The impression which the security from Small-Pox acquired by the practice of Vaccination, made on the minds of all classes of inhabitants in Ceylon, will be best expressed by extracts from the Addresses presented to our most excellent Governor, on his departure from the Island in July 1805.

Extract of an Address from the Civil, Judicial, and Military Officers resident at Colombo, to his Excellency the Honourable Frederic North, Governor.

“ The Natives under your Government will long remember your Excellency with reverence and gratitude, as the founder of Seminaries for their improvement in religion, and knowledge, and of various institutions of charity, for the relief of their sick and poor, and most particularly for the incalculable blessing you have brought on this Island, by the successful introduction and rapid extension of Vaccination.”

Extract from the humble Address of the Native Headmen, &c. to his Excellency the Honourable Frederic North, &c. &c.

“ Your Excellency’s care for their well-being, extended itself so far as not only to favour them with lands for cultivation, but also, perceiving that the Small-Pox made every year a sad slaughter amongst the Natives, (who from nature are fearful of the same in the highest degree) did not spare any expence to accustom them to inoculate, by which means at present that fatal complaint being extirpated, the old men and women in the interior of the country, declare that they are become happy parents, through the preservation
tion

tion of their children by inoculation, [*vaccination.*"]

In the year 1806, the number of our Vaccinations considerably increased, and in January of that year, the contagion of Small-Pox became extinct in the district of Jaffnapatnam, by means of Vaccination, which had been very successfully and extensively practised there, since its re-establishment in March 1805.

In February 1806, the only part of Ceylon where Small-Pox existed, was Aripo, where a great concourse of strangers was assembled from the different parts of India, for the purpose of attending the Pearl Fishery, and where the disease was introduced by a man who landed from the coast with Small-Pox, which unfortunately was communicated to a few other persons, before the necessary measures for prevention could be taken.

On the breaking up of the Fishery in April, the disease was brought to Columbo, where we had enjoyed an exemption from it since 1804 but it did not spread to any extent, and the alarm occasioned by its appearance, greatly encreased the number of our Vaccinations, at the same time that the existence of the contagion, afforded us an opportunity of proving by variolous inoculation and exposure of our patients,

patients, the continuance of the purity of our Vaccine matter, and as far as possible in the Island, the permanency of its preservative efficacy, in opposition to the idea of Mr. Goldson, whose cases begun at this time to be talked of in Ceylon.

An account of the success of these inoculations was published on the 22d of July 1806, with the following instance of accidental exposure, which is so striking as to appear deserving of insertion here.

“ On the morning of the 11th inst. when visiting with Doctor High, Staff Surgeon, the Small-Pox patients near the Leper's Hospital, I was informed that a boy in one of the neighbouring houses was affected with Small-Pox, which surprized me much, as I had been informed, that agreeably to my instructions, every person in the village, who had not had Small-Pox had been vaccinated.--- We immediately repaired to the house, where we found a boy named Gorkanige Savary, labouring under Small-Pox, on the fourth day of the eruption.

“ On enquiry I found he had not been Inoculated, because he and his friends said, that four years before, he had passed through an eruptive disease, believed to have been Small-Pox. The family consisted of seven
other

other persons, three of whom were aged and had passed through the Small-Pox, two had been Vaccinated in 1802, and two in May 1806.

“ The whole of them continued by my directions, to live in the house with, and attend on the boy with Small-Pox, who is now recovering without having communicated the disease to any of them.

(Signed) “ T. CHRISTIE.”

A few cases of Small-Pox continued to occur at Columbo for some time, but no patient who had been Vaccinated caught it, and our Vaccinations which were greatly encreased by the circumstance, amounted in all to 54,958 at the end of the year 1806.

In the year 1807, the Small-Pox appeared, and spread in the district of Trincomalie, in consequence of which his Excellency, Governor Maitland, who saw the importance of Vaccination, in the same light as his predecessor, and supported it with equal zeal and liberality, issued the following Advertisement, the success of which will be best shewn by the report of Vaccination which was published at the end of the year.

“ Government

"Government Advertisement."

"The practice of Vaccination, which was introduced into this Island in 1802, and which has since been followed with such success, that above 50,000 inhabitants have been for ever secured against the effects of Small-Pox, a disorder which antecedently swept off many thousands, His Excellency the Governor is sorry to find has not been carried to the same extent in the district of Trincomalie, that has fortunately taken place in the other parts of the Island. The consequence of which, as might naturally be expected, has been, and is at present there, many individuals are falling daily sacrifices to this dreadful disorder.

His Excellency the Governor can have no views to interfere with any well founded prejudice of the natives; on the contrary it is a principle with him, to respect all prejudices founded either in reason, or on ancient practice; but at the same time he feels it a duty incumbent on him, where the recent practice introduced has tended in so extraordinary a manner to the happiness and comfort of the inhabitants of this Island, to give every support to an institution, calculated on the one hand to preserve the lives, and on the other to secure the health of the inhabitants."

"And

“ And with this view, he directs that Mr. Christie, the Medical Superintendent General do forthwith send to Trincomalie, two of the ablest Vaccinators on the Island, at an increased allowance, and the Agent of Revenue of that district, do furnish provisions, when necessary, to such of the inhabitants, as may feel inclined to get Inoculated with the Cow-Pox; and his Excellency the Governor further calls upon all the public officers of every kind, to make use of every influence in their power, to induce the inhabitants to take advantage of the present opportunity, which has only for its object their health and comfort. “ By his Excellency’s Command,

(Signed) “ JOHN RODNEY,”

“ *Chief Secretary to Government.*”

“ Columbo, 21st Jan. 1807.”

To the Editor of the Ceylon Gazette.

“ I beg leave to enclose for publication, an Abstract of the number of patients vaccinated on Ceylon in 1807, which will shew the successful progress we have made in disseminating the practice of Vaccination throughout the Island during last year.

“ The number inoculated has been considerably greater than in any former year, particularly

ticularly amongst the Malabar inhabitants of the Trincomalie and Jaffna districts, who in the first instance seemed less disposed to adopt the practice, than the Cingalese in the South West part of the Island; but a conviction of the perfect innocence of Vaccination, and its preventive influence against Small-Pox, is now very general amongst all ranks throughout the British possessions in Ceylon, though from the unfrequent occurrence of Small-Pox, the Natives in many places, shew more indifference and apathy about shielding themselves from that malady.

“ We do not however find any difficulty in keeping up the disease, at the respective stations, but the Vaccinators are now frequently obliged to visit the different villages, and urge the inhabitants to avail themselves of the benefits of inoculation, whereas on the first introduction of the Cow-Pox in 1802, when the Small-Pox raged at Columbo, the Natives of their own accord, flocked in crowds to the inoculators, and expressed the greatest anxiety to be immediately vaccinated.

The Small-Pox was prevalent at Trincomalie in January last, and from thence found its way to Jaffna, but has since been banished from both places, by the beneficial influence of Vaccination, which has been
very

very extensively practised in these districts during last year. The very successful propagation of the disease at these places, may, I think, be attributed to the alarm created by the appearance of Small-Pox, conjoined with the beneficial effects of a Government Advertisement on the subject, circulated in the Malabar language, to which must be added the extreme assiduity of the collectors, in promoting with their influence, a diffusion of the practice, and the very meritorious exertions of the Medical Superintendents and Vaccinators, in the discharge of their duty.

“ Previously to the introduction of the Cow-Pox in 1802, the Small-Pox scarcely ever failed to visit us at Columbo, during the prevalence of the south-west monsoon, when the port was open, and generally carried off a great proportion of the inhabitants; but of late we have comparatively, suffered very little from that disease. It is true, that since May, 1806, we have had occasional cases of Small-Pox in the Pettah of this place, which, in some instances, there was reason to believe was introduced from the Candian country, but the contagion never spread as formerly, and is at present extinct, not only in the Columbo district, but throughout the whole of the British possessions in

Ceylon, agreeably to the most certain information I have been enabled to procure from the respective Vaccinators, who are directed to report on this subject.

“ From a Review of the Registers of Vaccination, I find that the total number of patients reported to me, as having regularly passed through the disease up to the end of 1806, was 54,955 which with 21,870, included in the abstract for last year, will make a total of 76,828 persons, a large proportion of the limited population of these settlements.

“ It would be absurd to expect, that in such an extended practice, often conducted by persons not regularly educated to the profession of Medecine, some failures and mistakes, may not have taken place, but I can with truth affirm, that in the neighbourhood of Columbo, where Small-Pox has most frequently occurred, I have been at great pains to trace to its source, any report prejudicial to Vaccination, and to investigate the circumstances of every case of supposed failure, and in no one instance have I found that persons who have been Vaccinated and declared secure by the Inoculator ever afterwards had Small-Pox.*

* For one apparent exception to this see Page 55.

“ In a former letter, I had occasion to mention for the information of your medical readers, the fact of the Vaccine disease having been communicated to a boy affected with Leprosy,† and from a melancholy instance, which has since occurred, it is certain that persons affected with that disease, in the most malignant form, are not exempt from the contagion of Small-Pox.

“ Clara de Silva, a woman aged about 50 years, who had been confined in the Lepers’ Hospital since May 1775, with Leprosy in the worst form, having been exposed to Variolous contagion, sickened about the 1st of August 1806, and died on the 11th of that month of confluent Small-Pox. On the appearance of Small-Pox in the neighbourhood of the Leper’s Hospital in May 1806, Vaccination was practised amongst the patients of that institution, but this old woman declared she had had Small-Pox when a child, and refused to be inoculated.

“ The fact may be useful, by shewing that no disease of the skin, however virulent, gives

* The boy here mentioned Peter de Baro who had been long confined with Arabian Leprosy, from which his features were much disfigured, was vaccinated on the 4th of June 1806, and passed through the disease regularly, after which he was exposed to Variolous contagion without effect.

perfect

perfect security against Small-Pox, and that in the event of an Epidemic contagion, no consideration of that nature, ought to prevent us from shielding the constitution against its influence by Vaccination."

(Signed) "THOMAS CHRISTIE."

Columbo 30th January, 1808.

The progress of Vaccination in 1808 and 9, is detailed in the following letters, and an abstract of the reports for the last year is subjoined, collected from the Registers kept by the respective Superintendents and Vaccinators, agreeably to the form page 33.

To the Editor of the Ceylon Gov. Gazette

"I beg leave to inclose an Abstract of the number of patients Vaccinated, throughout the different districts in Ceylon during 1808, amounting to 26,207 which exceeds the proportion of any former, year, and when added to 76,828, the number previously Vaccinated, makes a total of 103,035 persons who have been officially reported to me, as having regularly passed through the Vaccine disease, since its first introduction into this Island in 1802.

"The dreadful ravages which the Small-Pox usually committed in Ceylon, previously

viously to the introduction of Vaccination must be in the recollection of every one, and it affords me infinite pleasure to observe, that agreeably to the most certain information I have been enabled to procure, that destructive malady has not existed in any part of the British possessions on this Island, during the year 1808, except in the district of Galle into which it was brought on the 31st of Jan. by a Maldivian boat last from Bengal.

“A large proportion of the crew of this boat died, and the disease was communicated by a Fisherman who visited it on its first arrival to two or three inhabitants in the neighbourhood of Galle but spread no further, which must be attributed chiefly to the favourable influence of Vaccination, which has been so extensively diffused in that and the other districts of the Island.”

(Signed) “T. CHRISTIE.”

“Columbo, 10th Feb. 1809.”

“I beg leave to subjoin for more general information, an abstract of the number of patients Vaccinated in the different districts in Ceylon, during 1809, amounting to 25,697 which added to 103,035, the number Vaccinated in former years, makes a total of

128,732

128,732 persons who have been officially reported to me by the respective Superintendents and Vaccinators, as having regularly passed through the Vaccine disease, since its first introduction into this Island in 1802, besides a few others inoculated by individuals, not belonging to the Vaccination establishment.

“ Agreeably to the best information I have been able to obtain, the Small-Pox has not existed in any part of this Island since Feb. 1808, till October last, when the disease was brought to Jaffnapatnam, by a country boat from Quilon on the Malabar coast. The contagion spread to a few individuals, who had not been vaccinated in the Pettah of Jaffnapatnam, and by means of a Civil Prisoner, was introduced into the Jail of that place, but its progress was immediately arrested by the indiscriminate Vaccination of all the other prisoners.

“ By a late report from Mr. Stutzer, Superintendent of Vaccination at Jaffnapatnam, it appears that there were only six individuals ill of the Small-Pox in that district, and it has found its way to no other part of the Island except Putlam, where a Coolie from Jaffna was taken ill with Small-Pox in Dec last,

last, but has since recovered without communicating the disorder to any other person.

“ The Vaccine disease has now been so extensively diffused throughout this Island, that while Inoculations continue so frequent as at present, we can have no reason to apprehend that the contagion of Small-Pox will ever spread epidemically, in any part of the British possessions in Ceylon, and its occasional appearance here, has the good effect of proving the preservative efficacy of the Vaccine, and of rousing the natives from their apathy on the subject, as exemplified at Jaffnapatnam, where 1830 people have been Inoculated during the two last months, and amongst them several Bramins, men and women, who had hitherto declined submitting to the operation.

“ I shall only add, that with a view of proving the permanency of the preservative efficacy of Cow-Pox, and the continuance of the purity of the Virus on this Island, Mr. Stutzer has, at my request, in November and December last, Inoculated with Small-Pox Matter, several patients who had passed through the Vaccine disease in 1804, and in 1809, all of whom have resisted the contagion.

(Signed) “ THOMAS CHRISTIE.”

“ Columbo, 24th Jan. 1810.”

IN THE ABSTRACT OF THE NUMBER OF PERSONS VACCINATEDDIFFERENT DISTRICTS in CEYLON during the Year 1809.

SUPERINTENDENTS.	DISTRICTS.	VACCINATORS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
A. HUGH, esq. - - - - -	Calcutta - - - - -	J. W. Pieterz - - - - -	141	92	129	146	129	127	143	137	148	140	118	114	1,564
	Colombo - - - - -	H. W. Schemmelkette - - - - -	103	234	237	122	247	107	150	123	152	158	169	134	1,936
	Negombo - - - - -	M. Mack - - - - -	153	108	126	118	102	105	46	88	87	98	95	91	1,217
	Chilaw - - - - -	J. H. Vansanden - - - - -	31	29	38	29	90	26	43	74	56	55	67	22	490
	Calpewlyn - - - - -	B. H. Tussaint - - - - -	43	50	55	20	000	000	22	56	000	34	44	28	332
J. A. STUTZER, esq. - - - - -	Putnam - - - - -	J. L. Janzen - - - - -	61	59	62	57	70	69	41	40	33	39	28	34	598
	Mannar - - - - -	H. Mattheis - - - - -	104	103	117	121	151	156	157	90	97	117	89	143	1,445
	Jaffna - - - - -	C. Keegell, 1st - - - - -	218	248	229	209	182	313	334	264	240	263	429	537	3,466
	Jaffna - - - - -	N. Claess, 2d - - - - -	235	223	324	343	271	323	291	293	298	291	335	569	3,816
	Mullativu - - - - -	C. Schneider - - - - -	75	61	58	64	69	66	57	39	40	24	22	20	575
J. BATH, esq. - - - - -	Trincornalie - - - - -	F. Vansanden - - - - -	107	58	42	106	120	69	115	88	64	61	59	66	955
	Batticaloa - - - - -	J. W. Sevp - - - - -	85	129	195	180	122	99	104	103	108	104	78	64	1,371
	Hambantotte - - - - -	C. G. Hopman - - - - -	13	14	17	10	12	13	13	13	14	19	16	14	168
	Tangalle - - - - -	C. Gersse - - - - -	121	108	177	116	133	140	182	242	215	267	132	195	2,028
	Matura - - - - -	F. W. de Hoedt, A. S. - - - - -	415	417	433	445	405	372	382	394	422	322	307	523	4,837
V. REYNOLDS, esq. - - - - -	Point de Galle - - - - -	J. Zeybrands - - - - -	117	71	33	61	78	64	70	80	87	93	79	71	904
Total - - - - -			2,942	2,904	2,952	2,917	2,111	2,049	2,130	2,124	2,061	2,085	2,067	2,625	25,697

To this account of the progress of Vaccination in Ceylon, it may be proper to add, that the inhabitants of that Island, continue to manifest a lively sense of the benefits conferred on them, by that inestimable discovery, and in a Farewell Address to the Author, dated January 1810, the Dutch and Native inhabitants of Columbo, expressed in strong terms, their sense of "the great good rendered to the community at large by Vaccine Inoculation," and thanked him for the share he had in propagating it.

Having thus closed what is conceived to be the most important part of this work, the history of the ravages committed by Small-Pox in Ceylon, of the measures taken to lessen them by the establishment of Small-Pox Hospitals, and lastly of its expulsion from the Island by the rapid extension of Vaccination, it only remains to say a few words respecting the laws, by which the Vaccine disease appears to have been governed, in a tropical climate.

The Author fears that he may have appeared too diffuse in the former part of this pamphlet, which has proceeded from a solicitude, to shew in a distinct point of view, the misery occasioned in Ceylon by Small-Pox, the great attention paid to this subject by Government, and the failure of the best directed efforts, to

lessen in any great degree, the mortality from that cause, till the happy introduction of Vaccination, which was rapidly and extensively diffused, in consequence of the steady support, and liberal measures of Government.

According to the most attentive observations, the Vaccine disease in India, seems to have been governed by the same laws as in Europe, and the ordinary course of the disease as remarked in Ceylon, agrees perfectly with the description given by the Medical Board of Bombay, in their letter page 23.

The Vaccine matter had been constantly kept up in Ceylon, by a succession of patients, since its first introduction in the case of John Sybille, in August 1802, till the time of my leaving the Island in February, 1810, during which it had passed through at least 390 persons in succession; but its genuine nature had not been in the smallest degree altered, and its preservative efficacy remained the same, as proved by experiments at Jaffnapatnam in November 1809, and when properly applied to a person who had not had the Cow-Pox or Small-Pox, and was free from eruptions, and otherwise healthy, it seldom failed to produce the true Vaccine vesicle.

Considerable inflammation and ulceration were however, occasionally excited in Ceylon, from the insertion of Vaccine virus; but these

these were of rare occurrence, when the Vaccinators observed the directions given, to take it on the 8th day, or earlier.

The conical turbid Pustule was more frequently met with, when the matter was taken at a late period, when a bad lancet was used, or when psora, or other herpetic eruptions existed on any part of the skin; but in these cases the inoculation was always repeated, and very generally with success.

Diseases of the skin, and particularly Psora, are so frequent with the natives of Ceylon, that had we objected to the inoculation of such cases, we should have excluded a great proportion of the mass of the people from the benefits of Vaccination. We therefore made it a rule, to give all such patients a trial, and by perseverance in repeated inoculations, choosing a clean part of the skin, and cautioning them against scratching, or irritating the vesicle, often succeeded.

It has already been shewn, that the most malignant disease of the skin which appears in Ceylon, or perhaps in any country, the Arabian Leprosy, or Elephantiasis of the Ancients, of which there is a good description and drawing in Doctor Adam's 'Treatise on morbid Poisons,' does not, in every case at least, render the constitution unsusceptible of either Small-Pox or the Vaccine disease.

It

It ought, therefore, it is conceived, to be laid down as a rule, that in cases of epidemic Small-Pox, no other disease of the skin ought to prevent us from giving the patient a chance of protection from Small-Pox, by Vaccine Inoculation.*

The more slight deviations from the regular vesicle, as described by Dr. Jenner, Doctor Willan, and others, were also occasionally observed in Ceylon; and although these in general appeared to give security, and render the constitution unsusceptible of Small-Pox, or the Vaccine disease in its regular form, the inoculations were in all such cases frequently repeated. A son of my own, who had a vesicle, regular in form, but premature, the areola having commenced on the 7th day has been since inoculated six times without effect.

The prevalence of Small-Pox, at the time of the introduction of the Vaccine, afforded us frequent opportunities of seeing the occurrence of Small-Pox pustules in patients under Vaccination, when the diseases were mo-

* It may be here mentioned, that I have successfully vaccinated in Ceylon, two or three Albinos born of Indian parents, in whom the Areola from the want of colouring matter in the skin, appeared as in Europeans, though this deviation from nature, must be considered as a lusus, not a disease.

dified, or suspended by each other; but in this respect, we observed no deviation from the appearances which have been so often and so well described, as occurring under similar circumstances in Europe.

We have also met with cases in which the eruption of measles occurred on patients who had been vaccinated, and both diseases seemed to run their course at the same time, only that the progress of the Vaccine areola, was occasionally retarded for some days.

Chicken-Pox is of frequent occurrence in Ceylon, and often mistaken for Small-Pox, but I never chanced to meet with a case, where it occurred in a vaccinated patient.

Scarlatina is not known in Ceylon, nor agreeably to my information in any part of India, where contagious Typhus seldom or never occurs, so that we have had no opportunity of observing the effect of these diseases, in modifying the action of the Vaccine virus.

The effect of some chronic eruptions, in sometimes rendering the constitution unsuceptible of the Vaccine disease, or occasioning spurious pustules, has already been mentioned, and it is only necessary to add, that during the seven years in which the Cow-Pox was so extensively diffused in Ceylon, I never saw one case of eruptive disease, which could

could with propriety be attributed to the effects of Vaccination.

Diseases of the skin, particularly the various species of Psora,* Herpes, and Tinea, were remarkably frequent in Ceylon, before the introduction of Cow-Pox, and are so still, but certainly they have not been encreased in frequency, by that cause: on the contrary, I have occasionally seen slight cutaneous affections removed by Vaccination.

In the letter of Mr. Ludovice, page 65, a case is mentioned, where the disease was communicated from one human subject to another, by casual contact, a circumstance which occurred three or four times in Ceylon. and which is not to be wondered at, when the habits of the people are attended to, in wearing very little clothing, and crowding together in the night, whole families often sleeping on the same mat.

The circumstance of the disease being communicated by casual contact, induced me to try, if it could be produced without any wound, the idea of which, alarmed many of the na-

* I have occasionally in Ceylon, met with a species of Psora, in which the live insect could be picked out with a needle or pin, and seen with the naked eye. I have not had an opportunity of examining it with a Microscope, but conceive it must be the same, as that described by Doctor Adams as occurring at Madeira.

See "Adams on Morbid Poison."

tives, but all attempts to communicate it in this way, by applying Vaccine matter to a sound part of the skin, and retaining it there by pledgits and sticking plaister, failed of success.

It was remarked, that during the rainy season, we more frequently failed in communicating the disease, which might in some degree be owing to the greater frequency of Catarrh at that season, but was also attributed to the matter being diluted, or washed away by the rain, few of the natives of the lower order, wearing any covering on their arms, on which account I used to caution them, against exposing their arms to wet, or bathing on the day of the Inoculation.

Secondary pustules were not an unfrequent occurrence, on the first introduction of the Vaccine disease, when Small-Pox was prevalent in the Island, and were probably in some instances, dependant on Variolous effluvia, but they also now and then appeared, though more rarely, after the expulsion of Small-Pox, and from experiment we ascertained, that the true Vaccine vesicle might be produced by matter from the secondary pustule.

In this pamphlet, it has been my wish, to confine myself to those facts which have come under my own more immediate observation, and I have therefore said nothing of the great and unexampled success which has attended

Vaccination

Vaccination on the Continent of India, where above a million of people have been secured from Small-Pox owing to the liberal measures which have been adopted, and steadily pursued by the Hon. East-India Company, for promoting Vaccination throughout their territories.

By this means there can be no doubt that they have contributed most essentially to the happiness of the people under their government, and added greatly to the population and revenue; but for more particular information, I must refer my readers to the correspondence and reports of Dr. Anderson, of Madras, Mr. Shoolbred, of Calcutta, Dr. Kier, of Bombay, and other Medical Officers of the Company's Establishment, who have written on the subject.

I cannot conclude without congratulating the public, on the great and incalculable benefits, which have already accrued to society, from Vaccination, which are still progressively encreasing, and which must ultimately acquire more than sufficient influence to overcome every obstacle to it's complete success.

I also beg leave to offer my mite of praise to that great man, who, by his important discovery, has preserved the lives of so many of his fellow-creatures; the consciousness of which must prove his greatest and his best reward.

