4 1890

The non-prevalence of Phthisis Pulmonalis in the Hebrides

The world we inhabit is divided into land and water, continents and oceans, each is again heaped together into vast masses of unequal proportions, peopled by different races of men whose habits and mode of living and national characteristics are peculiar to each race. The scientific observer naturally asks, what are the

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the causes that have produced this dissimularity in human brings? and, secondly, is there any method in this diversity? These questions are highly interesting and demand consideration. By art man is enabled to travel the whole world, and to live, mainly from the peculiarity of his constitution, in all climates which produce vegetation, but his descendants, after migration, do not assume the characteristics of the different races that surround them. Experience and observation clearly prove that the national characteristics are maintained as long as the

the different races are preserved in all their purity, but the immunity from disease enjoyed in certain localities, is mainly dependent upon climate, food, clothing, hygienic surroundings, habits and mode of living as well as on a hereditary predisposition. Like any of the Arts or Sciences, the history of disease, characterised by a process of gradual and successive development, marches slowly onwards until it arrives at a period when its general principles are laid down, and no disease furnishes more abundant evidence of the operations of this law of progress than pulmonary

consumption. "It is the low
"type of histogenesis," in the words
of the late Professor Bennett of Edinburgh,
"that communicates to the tubercular
"exudation those essential characters
"which form the foundation of
"tubercular or phthisical disease."
I must here state my belief that
because there may be a tuber-
cular diathesis, or a con-
dition of system favoring
the formation of tubercle,
its development must ne-
cessarily proceed.
A diathesis may remain
hidden or quiescent for
years, and this in no form
of disease more than in
the phthisical. It thus be-
comes an important question
to

to enquire into the causes which effect this change from a morbid tendency to an actual diseased state of the lungs, as well as to ask the pertinent question, why is phthisis developed in the lungs? In large hospital practice it is a rule of daily observation that phthisis appears first in the apices of the lungs, causing chronic inaction, inability to perform their vital functions, and, as a necessary result, the apices lose their vitality or free play, mechanical congestion is superinduced, which, in course of time, develops lung disease.

There is no disease, perhaps, on

on which so much has been written as pulmonary consumption, article after article has appeared in our medical Journals announcing to the profession a new discovery as to the palliation and cure of this dire disease, which, though less prevalent in one locality than another, apparently follows in mankind all over the world.

Having practised for the last thirteen years in the parish of Kilfinichen in Mull, I have not, in a population of over 2,000, witnessed more than twelve cases of phthisis pulmonalis in the native population, and the

the experience of the Medical Officers who practise in the adjoining parishes is quite in accordance. From this circumstance I was induced to extend my inquiry from which it appears the disease is rare all over the Hebrides, and in corroboration of this I subjoin a few extracts from communications received from the local Medical practitioners, who alone can supply authentic information.

I

"I am pleased to know that
"your experience in Mull
"confirms the views I held
"on the subject while prac-
"tising in that part of the
"Country

"Country. At present I do
"not recollect of having attended
"a single case of pulmonary
"consumption in the Island of
"Jona during my eight years
"practise there, and very rarely
"have I seen a real case of
"pulmonary consumption in the
"Kilfinichen portion of the parish
"In this part of the West coast
"I find consumption to be almost
"unknown among the native
"inhabitants."
(From a Medical Officer in Harris)

II

"Phthisis Pulmonalis is extremely
"rare in this parish. I have
"only seen three cases since
"I came here nearly three
"years ago in a population of
"upwards

"upwards of 5.000, and two of
"these contracted the disease
"in the South- the other case
"heredity had something to do with.
"As regards the local causes at-
"tributable to the Rarity is a
"subject I have not studied
"It is one thing certain that
"their dwelling-houses or huts
"are of the most wretched
"description. They are for the
"most part black houses with
"two apartments, fire in the
"centre of the floor, no chimney
"as a rule, a small hole in
"one corner of the room for
"ventilation, and one or two
"small windows. A number
"have got their cattle within
"the same roof. Their condition
"and

"and surroundings are such
"as would lead one to expect
"phthisis to be a common
"disease among them.
"Some maintain that peat-
"reek has a disinfecting
"influence over tubercular
"bacillus and other micro-
"organisms. I cannot at-
"tribute the rarity to any-
"thing else"
(From a Medical Officer in Skye)

III

"In regard to the frequency
"of Phthisis Pulmonalis my
"experience in this parish
"agrees very much with what
"you give as the general
"history of average cases
"of phthisis pulmonalis
"in

"in the island of Mull"
(From a Medical Officer in Lewis)
The evidence of the non-prevalence of phthisis pulmonalis in the native population of the Hebrides is so authentic as to render any further observations on the subject quite unnecessary.
It is very difficult to get reliable statistics of disease in the Hebrides owing to the fact that so many deaths are uncertified as to the cause; and the Registrars put down their diagnosis and imagine that any wasting or lingering disease is consumption. From the Returns of the Registrar-General for

for the five years, 1878-1882, the death rate from Consumption is slightly higher in the Hebrides than on the rural mainland of Scotland. The fishing industry attracts a large population annually to the Hebrides, and the death rate from pulmonary diseases, included in the statistics, materially affects the question. Thus, allowing for causes not specified, the average deaths for the five years in 100,000 of the population was as follows:-

Phthisis

Principal towns, 276; large towns, 251; small towns, 214; mainland rural, 158; Islands, 147; As many contract the disease

disease when pursuing their respective callings in the South and come home to the Hebrides in a dying condition, it will be observed that these statistics are subject to correction, and do not represent the actual death rate from consumption in the native inhabitants of the Islands

Pneumonia

Principal towns, 121; large towns, 90; small towns, 70; mainland rural, 60; Islands 42

Bronchitis

Principal towns, 319; large towns, 162; small towns 209; mainland rural, 157; Islands, 114; It will thus be observed that pneumonia and bronchitis were

were much lower in the Hebrides than anywhere else in Scotland, and I have adduced abundant evidence to prove that statistics, as far as phthisis, is concerned, do not give a true and correct representation of the experience of the Medical practitioners, who practise in the district under consideration.

The non-prevalence of the disease among the native inhabitants of the Islands is admitted, but a variety of opinion exists as to the local causes which are conducive to health and longevity. Theories are never

never wanting to account for facts; and those facts, which are only the growth of opinion and the development of belief, are capable of congenial interpretations. The peat smoke theory, it will be observed, has still its advocates; but the introduction of coal as an article of fuel into the Western Isles of Scotland has thrown considerable light on the subject, and in many of the Islands, notably Tyree and Iona, peat smoke is an unknown quantity.

The housing of the poorer classes has received considerable attention in the inner Hebrides

Hebrides and a corresponding improvement has resulted, adding to the comforts and prosperity of the inmates, so that, on the whole, the peat smoke theory applies only to a tithe of the population The inhalation of peat smoke, as it has been alleged, exerts a protective influence on the lungs antagonistic to the development of pulmonary diseases. but when we compare the two adjacent islands of Mull and Iona, separated only by a narrow sound of less than one mile in breadth, (the former largely a peat burning district and the latter exclusively a coal burning one

one), we find that phthisis pul
monalis is unknown? among
the native inhabitants of Java
and rare in the island of Mull
"Giving that respiration proper",
says Herman in his "Physiology"
"consists in the equalisation
"of the tension of the gases exist
"ing in the blood, and in the
"air of the pulmonary alveoli,
"it follows that the blood
" in the lungs is the richer
"in oxygen and the poorer in
"carbonic acid the closer the air
"of the alveoli approaches in
" composition the atmospheric
"air; and this will depend upon
" the energy of the respiratory
"proces, that is to say, upon the
"frequency and depth of the
"respiratory

"respiratory movements, which
"influence in an important
"manner the gaseous constit-
"uents of the blood, and so
"indirectly exert an influence
"upon the gaseous interchanges
" of the whole organism.
"On the part of the alveolar
"there is a loss of oxygen and
"a gain of carbonic acid,
"which speedily unfits it for
"further use."
In connection with this it may
be remarked that the inhalation
of peat smoke, deprived of its
due proportion of oxygen, would,
on physiological grounds, favor
the development of pulmonary
diseases, instead of, as has been
alleged, exercising a protective
influence

over the lungs.
My own experience leads me to assert — assert without fear of contradiction — that chronic bronchitis, so prevalent among elderly people, who live in smoky houses and whose failing health necessarily compels them to spend most of their time inside, is due to the constant inhalation of the solid particles which float and circulate in a peat smoke atmosphere
We know that peat smoke retards putrefaction in dead organic matter, but whether we apply the theory on chemical, physiological, or pathological grounds it is inadequate and do not account

for or explain the comparative rarity of the disease in the Islands. The sea, after all wonderfully like the land, has its mountains, its prairies, its luxuriant forests, and submarine herbage waves its leaves in the rolling sea, just as flowers and leaves bend to the breezes above. In the atmospheric air of the land there are waves, whirlpools, calms, and storms, but we can only be made aware of their existence by the effects they leave behind. I mention these facts in connection with another theory, the marine algae, which professes to explain

explain on physiological grounds the comparative rarity of phthisis in the Hebrides. It is true that the coast of the Hebrides is circuitous, with arms of the sea stretching far inland, but this ecological conformation is not peculiar to the Hebrides, for we find it in different parts of the coast-line of Scotland.
The marine algae, it has been maintained, liberate oxygen, which combines with the atmosphere, and in consequence of this surcharge the blood is more perfectly aerated and immunity from phthisis pulmonalis.

follows. When we inquire minutely into the question, we find these aquatic plants are abundant all along the coast, and in order to prove that they are the sole determining cause of the comparative rarity of the disease in the district embraced in our inquiry, it would be necessary to show that the marine algae are peculiar to the Hebrides.

This is not the case, and the theory, which throws no light on the subject, cannot be reconciled with facts. I admit that, under certain con-

Conditions, algae may supply
oxygen to the atmosphere,
but this surcharge would
apply with equal force to
the whole sea coast of Scotland
"That in the Hebrides, a mixture
"of the Celtic and Scandinavian
"blood was thus effected
"at an early period, seems
"highly probable, and by
"no means inconsistent
"with the ultimate pre-
"valence of the Celtic language
"in the mixed race, as all
"history sufficiently demon-
"strates. These remarks re-
"garding the population of
"the Isles, apply equally to the
"adjacent mainland districts,
"which, being so accessible by
"numerous

"numerous arms of the
"sea could hardly be ex-
"pected to preserve the blood
"of their inhabitants unmixed.
"The extent to which this
"mixture has been carried,
"is a more difficult ques-
"tion, and one which must
"be left, in a great measure,
"to conjecture; but, on the
"whole, the Celtic race ap-
"pears to have predominated.
"The probability is, however,
"that the difference alluded
"to is not greater than
"might be expected in the
"language of two branches
"of the same race, after
"a certain interval; and
"that the Scandinavian
"population

"population of the Hebrides
"was, therefore, derived from
"two successive Norwegian
"Colonies. This view is fur-
"ther confirmed by the
"fact that the Hebrides,
"although long subject to
"Norway, do not appear to
"have ever formed part of
"the possessions of the Danes."
"Western Highlands & Islands by Gregory"

As regards the foregoing
quotation, there is abun-
dant evidence to prove
that each race has dis-
eases peculiar to itself:
but the fact that the
native inhabitants of the
Hebrides suffer heavily from
phthisis in towns, that the
Irish

Irish and Welsh Celts are not more exempt from consumption than other people, and that neither Danish nor Norwegian blood would in any way lessen the strumous diathesis, all prove that the cause of the comparative rarity of the disease is not inherent in the race

I do not think it possible to explain that the inhabitants of the Hebrides, owing to the alleged preponderance of the Celtic element, are more exempt from diseases in general and from phthisis pulmonalis in particular than any other

the people. The Highlanders who have emigrated to different parts of the globe are not exempt from this disease. And in Wales, where the language, history and general appearance of the inhabitants apparently indicate Celtic origin, consumption is fully as prevalent as in any other part of the kingdom, and the same holds good in the Northern Counties of Ireland, where the inhabitants are supposed to be of a purely Celtic origin, and in support of this view the Highlanders and inhabitants of the Northern district of Ireland can converse

converse freely in the vernacular tongue. From the foregoing remarks it will be observed that the Highlander does not enjoy immunity from phthisis pulmonalis except in his native isle or native county; when he emigrates or migrates to pursue his calling in other parts of the globe, more particularly in towns, it cannot be maintained that "peculiarity of race" has any connection with the immunity from the disease Assuredly, then, this affords no explanation of the phenomena we have to deal with. Curious to relate, it has been maintained that phthisis

phthisis pulmonalis never occurs among the native inhabitants of the Hebrides, except as the result of a neglected cold, or inflammatory affection of the lungs, irrespective of any hereditary predisposition. This is not the case. I have made careful enquiry into the family history of the twelve cases of consumption I witnessed in the native inhabitants of this parish, from which it appears the disease was clearly hereditary in ten cases, and in two, that of a husband and wife, not hereditarily predisposed, it could only be explained on

on the theory of infection.
"A wife watches the death-
"bed of her consumptive
"husband, and presently sickns
"herself under consumption!
"In both the supposed cases there
"have been other influences
"at work, more authentic than
"the alleged contagious property,
"in calling forth the fatal malady;
"watching, the want of rest, con-
"finement in the unwholesome
"air of a sick chamber, and,
"above all, protracted mental
"anxiety, than which no single
"cause perhaps has more power
"to foster and forward the
"inbred tendency to phthisis.
"The disorder, I am satisfied,
"does not spread by contagion
"Nevertheless

"Nevertheless, if consulted on the
"subject, I should, for obvious
"reasons, dissuade the occupation
"of the same bed, or even of the
"same sleeping apartment,
"by two persons, one of whom
"was known to labour un-
"der pulmonary consumption"
(Sir Thomas Watsons Lectures Vol. II)

As the theories advanced do not satisfactorily account for the non-prevalence of the disease, we naturally ask what local causes, then, are antagonistic to its development in the Hebrides?

The prevalence of the disease among stone and steel grinders, factory workers and

and many allied occupations, is an admitted fact. These occupations are conspicuous by their absence in the Hebrides. In the smaller Islands, with an average population of about 200, the entire absence of the disease appears to be in a large measure due to intermarrying of the inhabitants which has been carried on "time out of mind"

I make no apology for quoting the views expressed by Sir William Jenner on the subject.

"That tuberculosis is transmitted from parent to child "is

"is one of the best established
"facts in Medicine
"The extreme frequency of
"tubercular diseases in some
"circumscribed country dis-
"tricts is, in part at least,
"explicable by the frequency
"of inter marriage amongst
"persons living in such dis-
"tricts; and conversely the
"exemption of particular cir-
"cumscribed districts from
"tubercular disease is due
"to the same cause, in one
"case, from some special
"circumstance, tuberculosis
"has been introduced
"into the district, and then
"spread in it from the cause
"I have mentioned, that is,
"intermarrying

"intermarrying. In the other
"case, the freedom from dis-
"ease of the district at any
"given time, is the cause
"of its continued freedom.
"Intermarriage of the inhabi-
"tants, the disease being present,
"spreads it far and wide.
"intermarriage of the inhabi-
"tants, the disease being,
absent "prevents its introduction"
These is abundant evidence
that the inhabitants of the
Islands are living undis-
turbed where their ancestors
have lived time out of
mind.
The inhabitants of the
Hebrides have been represen-
ted as demoralised to the
last

last degree by strong drink
Their love of strong drink is
assigned as the chief cause
of poverty and disease
"Whisky follows the Highlander
"from the cradle to the grave,
"and often accelerates his
"progress from the one to the other"
(Lord Teignmouth on Scotland)
When Lord Teignmouth visited
Scotland (1836) illicit distilla-
tion was prevalent every-
where in the Highlands and
Islands, and excessive indul-
gence in alcoholic liquor
resulted in consequence.
The abolition of illicit dis-
tillation, which did not
come one moment too soon,
made a decided improvement
on

on the moral condition of the people. Alcoholic liquor is now sparingly used, and in many of the islands the sale of ardent spirits is strictly prohibited

The climate of the Hebrides, it is true, is a wet one; but it is mild and equable, the prevalent winds and rain keep the atmosphere in a state of purity as well as free from germs which float, thrive and circulate in the atmosphere of towns.

The soil, dry and porous, is composed largely of the debris of the within, so that within

within a few hours after a fall of rain the ground is quite firm and pleasant to walk on. It is generally admitted that, in pulmonary diseases, a change of climate, with mountain air, is required to give strength and increased activity to the diseased lungs. Residence at an elevation of at least from 2,000 to 3,000 feet is desirable; and with this object in view there are no finer or more beautiful Summer resorts than are afforded by the Western Isles of Scotland. The

The purity of the atmosphere is highly invigorating and restorative and, as a rule, soon produces a change in the general appearance of the invalid, with a corresponding gain of strength.

The scenery of the Hebrides is altogether peculiar, founded on a combination of the three greatest powers in nature – the mountains, the sea, and the sky.

The summer climate of Mull is simply delightful, and even in winter, notwithstanding the vagaries of the climate, some of its most sheltered spots will compare favourably with any

any other locality in Scotland. Its highest mountain, Ben More is 3,000 feet, and its mountain valleys, and purple moorlands have charms peculiarly their own. I know of no district in Scotland more beautifully sheltered from east and north-east winds than the northern shore of loch Scredan. The bold and lofty headland of Burg, which rises 2,000 feet above the sea, shelters it from the Atlantic blasts, and a chain of high mountains completely shelters from north and north-east winds.

Mighty Ben-More. 3,000 feet high.

high is at the head of the loch, but the ascent is so gradual and the air so invigorating that no great difficulty is experienced in reaching the summit.

Frosts, as a general rule, are of short duration; and snow, which seldom falls to any great depth, soon disappears. The strong air of the Atlantic, modified by the influence of the Gulf stream, sweeps over the Hebrides and renders the climate milder as well as antagonistic to the development of pulmonary diseases. The annual amount of

of rain-fall in this parish for the six years ending 31st Decr 1889. Inclusive

1884.	44·98	inches
1885	26·25	"
1886	21·28	"
1887	29·48	"
1888	42·53	"
1889	41·27	"

From the nature of the soil the ground is quite firm and dry a few hours after rain ceases to fall. I have already remarked that it is quite common for natives of the Hebrides to return home suffering from all the symptoms and physical signs of phthisis pulmonalis in

in the incipient stage, and apparently making a good recovery. Let me briefly refer to one case, A sea Captain, a married man, 30 years of age, who had previously enjoyed good health, and whose family history was good, caught cold in the Winter of 1878. He consulted the late Dr Begbie of Edinburgh, who informed the patients relatives that he was dying of consumption and that he could not possibly live more than a year. He returned to this parish and in less than six months he was restored to his former health and

and vigour. The last account I heard of him, about a year ago, he was in command of a steamer sailing from Leith to Hamburg in the full enjoyment of health.
I have seen several cases from which it appears the system is only able to counteract the tendency to disease, when placed under conditions antagonistic to its development.
I have also seen a girl of eighteen years, who never left Mull, carried off by phthisis pulmonalis after an illness of less than ten weeks duration. My friend Dr. D. N. Knox of Glasgow saw

Case this Case.

The Climate of the Adirondacks appears to be peculiarly favourable to recovery from, as well as antagonistic to the development of, pulmonary diseases.

The clothing of the inhabitants which is heavy and mostly made of Wool, affords no explanation, and cannot be regarded as materially different from that worn in other parts of the Country where the disease is prevalent.

Many of the diseases which the physician is called upon to treat are the result of some kind of error in eating or drinking and

and his first object should be to ascertain the cause, in order that it might be removed.

We know from experience that, for the proper maintenance of health, a certain amount of solid and liquid food must be consumed daily.

On enquiry we find the diet of the inhabitants of the Hebrides contains all the elements necessary for nourishing the system, as well as conducive to health and longevity. A diet consisting largely of oleaginous substances prevents the development of

of pulmonary diseases.
"If we give our attention
"to classed people - classed
"as to the quality of food
"they principally subsist
"on — we shall find that the
"ichthyophagous class are es-
"pecially strong, healthy
"and prolific. In no
"other class than in that
"of fishers do we see
"larger families, handsomer
"women, or more robust
"and active men"
"Other circumstances be-
"sides food, no doubt
"have likewise an effect -
"all which augmise in-
"fluence the health, such
"as climate, air, and
"water

"Wales"

("The Angler's Friend" by Dr. Davy)

The diet of the poorer classes consists mainly of oat meal, milk, potatoes, fish salted and fresh, tea and sugar and loafbread In winter milk as an article of diet is scarce, but fresh fish can be had in abundance at all times

Many of the inhabitants of the Hebrides are mainly, if not entirely, dependent upon the fishing industry, and in some places, mainly through causes over which they have no control, the sole sustenance of the

the people consists exclusively of salt fish and potatoes. The abundance of potatoes, so much in general use as an article of diet among the inhabitants of the Hebrides, accounts for the comparative rarity of skin diseases.

It is true that each cottage, with the exception of potatoes, has not its vegetable garden attached, but taking the whole facts into consideration, I am disposed to attach considerable importance to the diet, which appears to contain all the elements necessary for the requirements of the system

system. It is important to note that people employed in out-door employment are able to resist the effect of the climate, and are also less susceptible to disease than those whose occupation necessarily compels them to live in a contaminated or pre-breathed atmosphere. Of these conditions it may be said that their positive and immediate effect is to expand the chest and perfect the respiratory function, and as sunshine is welcomed as an instinct of life, so out-door exercise and out-door

out-door life are welcomed as being favourable to health and longevity. We have a typical example of the beneficial influence of rural pursuits on health on contrasting the well developed and robust field labourer & the pale and delicate mechanic & a town; and in connection with this we may remark that in the Country and upon the sea the air is pure and contains its self purifying agent. Ozone, but it does not necessarily follow that this, per se, is the sole determining cause. We cannot, however, enlarge too

too much upon the vital importance of pure air, which, on account of the large amount of oxygen it contains, has a strong tendency to counteract the development of pulmonary diseases. Confinement in a contaminated atmosphere is often the exciting cause of pulmonary diseases. When the air is impure, deficient in oxygen, the blood is imperfectly aerated in consequence, and defective aeration of the blood necessarily entails impairment of every physiological function of the

the body as well as chronic inaction of the apices of the lungs, which is often the primal cause of pulmonary diseases. When we enquire into the habits and mode of living of the native inhabitants of the Hebrides we find that, during the winter weather, when there is a greater tendency to disease in general and to pulmonary diseases in particular, they are much less exposed than the inhabitants of any other district in Scotland, and we know from experience that a sudden

Sudden change of weather in winter is followed by a rise in the death-rate from diseases of the pulmonary organs. "We cannot announce a priori the influence which any one "climate will exercise upon "the inhabitants of another, "though the meteorology of both "regions be perfectly worked "out according to the standard of existing physics. "The physiological influence "of all varieties of change "of climate must be observed "to be known and understood. There is something "in the pathological idio "syncrasy of individual "cases.

"cases that dominates
"climatic influences,
"and according to its
"nature, favours, weakens
"or modifies them"
("Diseases of the lungs" by Dr Walshe)
It is impossible to predict
the influence a particu-
lar climate may have
have on a given case
of consumption, but
the local causes which
prevent or almost prevent
the development of the
disease in the native
inhabitants of the Hebrides
do not invariably ef-
fect a cure after the
disease has been con-
tracted elsewhere. I have
already

already remarked that it is quite common for natives of the Hebrides to return home suffering from all the signs and symptoms of Consumption and apparently making a perfectly good recovery In the incipient stage of the disease a few such cases have come under my own observations; and I have no doubt but that a residence, shortly after the disease had been contracted, by attending to diet and hygienic surroundings would arrest the progress of the disease. On the other

other hand, when the lung tissues are extensively diseased the climate of the Hebrides does not appear to have any effect in arresting its progress.
After making an apparently good recovery, on returning to their former occupations in towns, it is quite common for the disease to reappear and carry them off, so that, in point of fact, the local conditions arrest the progress of the disease, but do not, as a general rule, even in the incipient stage, effect a permanent cure. Let me briefly refer to one case, which will

Well accords with this view.
A gardener, 25 years of age,
who always enjoyed good
health, and whose family
history was good, "caught
cold" in the spring of 1884,
when he was employed in
the neighbourhood of Glasgow.
He returned to this parish,
evidently suffering from
consumption in the incipient
stage, from which, after a
continued residence of three
years, he appeared to have re-
covered perfectly, and returned
to his former employment.
After an absence of
nine months the
disease started afresh,
and he died of con-
sumption

consumption in less than three months. Many similar cases might be referred to. If, as has already been pointed out, the non-prevalence of phthisis pulmonalis among the native inhabitants of the Hebrides be due to local causes, - the vital powers being yet unconquered - it would follow, by assimilar process of reasoning, that, under similar circumstances, the causes which oppose the development of the disease in the native would, when applied to persons who had contracted

contracted the disease else
where, act as curative
agencies

A. M. Keehnie
Burnssan
Mull 20th March 1820