1839

Influences the geographical distribution of
the disease. The character of tubercle
in the chief tests; change that habits to
its commensal, to one of the carriers
usually discussed inconvenience without
such influence. 

Again and incredible essay.

The Nature and Story

Of

Phthisis Pulmonalis

David J. Rutherford.
"Consumption! - terrible, irresistible thief! Who can arrest its progress or control its victims? Why do its attacks, almost inscrutable, the fairest and loveliest of our species? Why does it steal the blooming and beautiful youth, instead of the faded and withered age? Why do those who are bound to it flee from the shadow of life rather than the decrepit beings tottering towards its goal? By what无形 subtlety have these crassible objects to trouble the profoundest minds of science, to frustrate the use of experience and disclose to the ignorant what those that were wise and secured their victories, and the flanks are rimesewed with its blood?"

who in reading the "Diary of a late Physician" has not felt the power of the appeal from one who taught us the important lesson...
That the great aim of every student of Medicine should be not merely to master theories and acquire general knowledge of frequent occurrence but to gain a sound practical knowledge of those with which as a medical practitioner he is most likely to come in contact, in order that to the utmost of his ability he may be the humble instrument under Providence of benefiting suffering humanity.

In a very recent period in the history of Medicine little was known better as to the nature, cause, and methods of cure and prevention. Thanks to the investigations of modern Pathologists much light has been thrown on the subject and we no longer look upon it as the offspring of Medicine but an evil, a great measure feasible to ward off its approach or, having seized its victim, alleviate his sufferings or check its progress.

I think we may justly say of all diseases which afflicts the human frame this has the widest scope.
What, may be the station or time of life, how are free from its withering slight, this can say I have attained a certain age and therefore consumption is not likely to attack me? or do belong to a class of society in which it reigns or acts? It prevails alike among lowly, honest and gaudy halls, among the poor and most gilded of our face as well as in the acres of fields and vice versa. Nevertheless, we find that some are more predisposed to it than others, chiefly those who are either suspicious themselves, born of suspicious parents or in the pursuit of certain avocations in life. Before entering more fully into the subject it may be both interesting and profitable to enquire what countries are more subject to it, whence and what more frequent. We do not purpose taking up the question as to the influence of climate in the treatment of Phthisis Pulmonalis.

Our object is simply to lay before you as concisely as possible a few facts regarding its geographical distribution.
but which this terrible malady has not yet found
its way. Indeed we may say, that but for one
or two feet it passed, it was formerly supposed
that Australia had, if not completely at
least almost. Respect. A close acquaintance
with it has shown us our error and we
no longer regard its warm dry atmosphere
as a specific for Pithius; India was latterly
upon a much the same level till late times
and the European resident there were supposed
to be specially free. This is also erroneous,
and we know from sad experience that
they are just as liable to be affected, if not
more so than the natives. It should be verified
to believe the latter (more frequent, for this reason;
the excessive heat of the climate often induces a
prejudicial effect on the constitution of
immigrants, and we are fully aware that any
oppressed state of the general health is most
favourable for its production. Some say it assumes
a different type here from what it does in
Europe but of these we have, as yet, no direct
proof. The countries which seem to enjoy the
Greatest immunity, though not quite complete, are
Shetland, Iceland, Algiers, and the western coast of
Africa. It is comparatively rare in South America,
Mexico, and in countries situated high above the
level of the sea. It is also rare in British Guiana,
Denmark, and still more so in the Azores Islands,
Iceland, and Lapland. The deaths from consumption
in St. Helena are only fourteen or about three per
thousand annually. In all these countries to which
Physical patients are recommended from Britain
for the benefit of their health, we find the disease
very prevalent among the inhabitants. For example,
Mackenzie, Brazil, South of France, Portugal, Spain,
Greece, Sicily, and Cypria, Holland, &c.
Physical is common in Scotland, Sweden,
Iceland, &c. It is asserted that this predilection
in the higher latitudes of the Indies partly,
but that the subject is not fully investigated.
The question cannot be settled. The dwellers
and people in front of the west of Scotland are
little affected with consumption. This freedom
is attributed to their food, which is composed
chiefly of fish, oil, and the constant use of
the 100,000 Sug. Mahboob, &d an Attrib of them.
Among the British troops serving in Jamaica 125
per 1000 are subject with "Plague. Palmossus", In
Gibraltar 8.2, Malta 6.7, Bermuda 8.8,
Sicilian Island 5.3, Nova Scotia 7, Canada 6.5
New Brunswick 7, Mauritius 7.7, & Lagos 5.5.
Thus we guess that it is most prevalent in the
West Indian Islands, Gibraltar, and Mauritius, followed
in Nova Scotia, New Brunswick, Malta, Canada
departure first South and the Sicilian Islands.
Generally speaking we must regard the "Plague"
Ganges as the great seat of the disease. This
May probably be owing to the circumstances that
here we have the largest population, and are also
better acquainted with the history of the
people. The temperate zone likewise which lies
South of the Equator is much freer than the
north of it at the location or climate. The tem-
perature more Equator, and the atmosphere less
influenced to the same extent with climate.
This will numerous similar fact shows us
the vast importance of attending to the influence
of climate in the prophylactic, as well as
After treatment of Rheumatism. The inhabitants of the northern part of the North Temperate Zone enjoy comparative immunity so long as they continue in their usual native habit of life but when there are changed they manifest a material tendency to this disease. The following table may serve to give us some idea of the mortality of consumption in our own County during the years 1837-38 & 39.

<table>
<thead>
<tr>
<th>Deaths in England &amp; Wales</th>
<th>Deaths in Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>69,009</td>
<td>77,329</td>
</tr>
<tr>
<td>25,083</td>
<td>28,234</td>
</tr>
</tbody>
</table>

During Year - 1847-
I What's Pithesis Pulmonalis?

Before proceeding with this inquiry we must consider the meaning of the term and what we are to understand by Pithesis. This disease has been known to various writers as Phthisis Pulmonalis (Galen), Afebrile Phthisis (Hispanus), Marsupial Phthisis (Grae), Phthisis or Xyius, Paralysis Pulmonalis, Morbus Pulmonis, Decline, Decline Consumption, Pulmonary Consumption, Phthisis Pulmonalis, Tubercular Phthisis, Phthisis V., Phthisis arising from the Greek word Φθεσις (Pithēs), was in the early history of medicine used generally to denote any disease attended with great weakness and loss of the constitution. In this period not only many visceral affections but also numerous functional derangements were included under the general name of Phthisis. It would in fact seem to have been made the "scapegoat" for all other effects in which the medical attendant either from ignorance or want of judgment...
This came that if determining the real nature of the case, in the present day our advancement in knowledge has done away with all such vagaries of suppression and we now come to regard consumption as a wasting of the body attended with the deposition of tubercular matter in the lungs—this, and this only, constitute the disease.

Let us now see what exactly is? To this Dr. Conolly's excellent definition furnishes the best reply: "Consumption is a wasting of inspiration on slight motion, short cough, hectic fever and inflammation, deposition of first watery or scant, afterwards varying with the progress of the disease, sometimes treated with blood or attended by emetics, hemoptysis, Colliquatia, perspiration, and diarrhoea or both alternately generally supervening on festering discharges, usually occurring in the faucial or throat, the deposition of tubercular matter in part of the lungs, corrupts deposit tubercles.
Metamorphosis most commonly takes the form of complete solution, followed by invasion of the containing tissues, by ulcerating cavities, by successive changes in adjoining parts especially by vascular congestion, superficial extravasation or collection of inflammatory action limited to adjoining structures and superficial canals communicating with the tubercular formations.

It has already been stated that consumption is a wasting of the body attended by the deposition of tubercular matter in the lungs and to this disease Dr. Robertson applies the term Tuberculosis. We must be careful however and not fall into the error of supposing that it is confined solely to the lungs, or is simply a local affection, limited by the tubercular formations. On the contrary, it is universally acknowledged by all Pathologists that it is strictly speaking, constitutional, and resulting from some hereditary taint or the depression of the vital powers of the
Suffer by impaired irritation from want of the proper assimilation of the food or noxious constituent of the food, and that this tubercular deposit is merely a poison, not a cause. Dr. Satherton says this denotes that the affection of the lungs is no more than a fragment of a great constitutional malady.

It may be here asked, What is Tubercle? And while this subject belongs, strictly speaking, to the Pathological we may just remark, in passing, that it is a yellowish, unorganized, depoist from the trunk at first found in small, round, and a irregular shaped masses about the age of a fillet laid and hence called Milia.

Sopher or varying in dimensions, fragile, brittle and somewhat the consistency of cheese. It is chiefly deposited on mucous membranes and not infrequently in cellular or connective tissue. It undergoes nothing from an inflammatory process running on to depuraion, but as was formerly supposed...
in the substance of the tubercular mass but in the tissues surrounding it. Hence, since no vital change can take place in the tubercle itself it is better described by the action of the surrounding fluid. Carried away from the adjoining altered tissues and carried away by some of the lymphatic tubes communicating with it constitutes the well known perforation in the advanced stages of Tuberculosis and leading behind cavities which are called cavities. In Tuberculosis we find tubercles are not limited confined to the lungs, although we must look upon them as their great seat, yet they are found largely developed in the two kidneys, spleen, substance and membranes of the brain and in the peritoneal fluids of the abdomen in which latter case they are often not associated with any affliction in the lungs. Hence this disease is called Tubers peritoneum or Perforation of it from consumption.
The Contagion of Phthisis was a doctrine at one time professed generally amongst
the ancients and many Italians and Spanish
physicians holding to the belief. The mass of
disease as present seems unfavorable
to such an opinion, and the great
number of facts leading directly on the
subject, are placed before the medical
world. We must reconcile our comparative
ignorance as to its truth or error. And it is,
although capable of being transmitted from
person to person, we believe not communi-
cated from one person to another indiscriminately,
and we freely grant the disease originating
in some of a healthy constitution and there
in trace of Leptula or leucocytes or acquire
virus, but who can point out one and
search for the origin from this humoral
habit? We know full well it may remain
constant in the system for an almost
unlimited number of years, may further,
ship one, two, or even three generations
and then our disease itself, from here
Circumstances, it must be evident to every
nationalmind, that no one can be certain
he is not once or less involved with a subtile
friend, and bearing this in mind when we
come to consider the case of a stranger
who, after having watched and tended the
dish bed of a consumptive patient, is
taken suddenly ill and dies of the same
disease, although such means they may,
so far as we were able to judge from their
past history and present appearances,
be absolutely free, can we assert with
confidence that they contracted the disease
solely by contagion? No, it seems and that
perception. Sudden death by burning, as
it generally is, associated with bad food,
particular mental anxiety, and care, adding
to all this, circumstances in the air of a
sick chamber, and want of proper hygiene
are, as we shall hereafter see, circumstances
the most favorable, not only for the develop-
ment, but also the production of phthisis. And
whilst we unhesitatingly assert that, as yet,
we have no reason to look upon it as a truly contagious disease. We feel it our duty to warn people against sleeping in the same bed or even in the same room with consumptive patients. As an atom, where contamination for any length of time by their breath and the exhalations from their skin is most injurious to health. Dr. Copeland says that leprosy, if a developed externally, has little tendency to prove contagious, not so will Peste, which advances to the second or third stages. While we must regard all statements coming from such a source as founded on long experience, and careful research, yet in the present imperfect state of our knowledge, the view here advanced regarding Peste seems far from satisfactory.

It is a matter of some importance to know at what period of life consumption is most likely to develop itself. To this inquiry we shall now turn our attention. Before the days of Louis Pasteur it
was supposed that Phthisis was confined to a limited number of the years allotted to man, and instances were considered rare in which it was found extending to the age of thirty or even twenty-five years. This opinion is now exploded, and we must place ourselves prepared in every stage of human life—from the cradle to the grave—to meet and combat this great enemy of mankind. The way to do this faster is in the assertion, for often-times tutors and doctors, not only in the infant but frequently in the children within its mother's womb.

The period in which it manifests itself usually extends from infancy to the age of forty years. And thus, in the year 1847, we can limit the period of its duration for looking again at the same report the greatest number of cases to be seen occurring between the ages of thirty and twenty-five years. It is
Returned to witness the number of children affected under five years as compared with nine or ten or fifteen, I do not think we can at all receive this statement as representing a fair average for the whole community, because the children brought to the Hospital are, in the great majority of cases, from the dark lanes and crowded, ill-bafligated alley of a thinly populated city, bad fed, bad clothed, and, in all probability, walking a field and that, and what child can have so poor health when deprived of that potential for its development, as if residing in pure air and enjoying unlimited exercise? To wonder they arerippled in the bed, and that we find Metropolitan Hospitals filled with such patients.
II. The Etiology of Disease.

The cause of any disease may be regarded as an influence, internal or external, acting either at the time or some distant period, producing symptoms and appearances differing from those of health, and which are dependent upon the degeneracy of the natural functions of the various organs or parts of the body. It is generally divided into predisposing and exciting. The former is some agency which has been at work previously in the system rendering it unusually susceptible to any particular disease. The latter is that force which acts directly in originating and developing this disease.

The causes of consumption are numerous and diverse, if we act sufficiently always more or less associated. Hence the extreme difficulty of estimating the comparative value of any one agent from another. The condition of the body at certain times prevents their, in a great measure, operating with equal effect at all periods; but in the same
individual. We shall now proceed to inquire into some of the principal predisposing causes. Among these we find by far the most frequent is the Strigulous Disease. It plays so important a part in the production and is in fact so often a Concomitant of others that we must of necessity look upon them as Adjunct Allied.

The Strigulous Disease has been well described by Dr. Copperland as a "Constitutional Atherosis, A want in atomic development of the frame with a Flatness of the soft solids and predominance of Cellular and lymphatic formations, A disposition to swelling of the lymphatic vessel barrier of the mucous surfaces, Deposits in various organs or parts of small structure varying in size Consisting of a firm, gritty, meleotic substance resembling cheese and called atheroma. It is again spoken of by Dr. Bauek of "Sclerotic Cerebral Plaques" discovered by touch or light with bruises or ulcers surrounding them, Strigulous Bones"
or joint or Consequences of those Diseases of the Subcutaneous Lymphatic P fant,  

This Letter is quite too limited and though we must agree all Definitions at worst or less imperfect because from these alone we never could gain anything like an adequate Conception of the Disease yet that of Dr. Copeland Entertains Almost all we could desire, still it would be impossible for a Student deprived of all other Sources of Information except that Contained in those few Sentences in many instances, how to recognize it. The General Symptoms and Appearances presented by the Disease are a Tendency to a Lateral Curvature of the Spine, the Hips are flattened and the Breast Protruded, the Shoulders low and rounded, joints large, hands and feet also large and ill-formed, joints of the fingers rounded and the hands short, forehead low, teeth prone to Caries, Surface of the Body roughened and flabby from the Deposition of Adipose Tissue,
The skin is very often of a tawny hue or very white, with a sallow tint. In the cheeks resembling a hectic flush, a slight palor around the mouth and eyes, the latter large and prominent, and of a light bluish color, with reddened lids, long lashes, and secretion of the tear ducts increased. When varicose are developed in the venae cavae, the mucous membranes are nearly white, and injected with blood vessels. The lips, especially the upper, are tumid or swollen and shining. The general depression of the face is indicative of languor, lassitude, depression of spirits, and want of vital energy. The intellect is weak, and mental activity very slow. Though often rather precocious and not always developed proportionately with the age, there is frequent懒散ness of the digestive organs, with capricious appetite, nausea, forced vomiting, and fetid breath. The abdomen is large and tumid and when percussed emits a
Symptoms of Mortification. The beards are irregular and as the situations, especially the limbs, are acid. The urine is also abundant, pale, specific gravity low and frequently tainted with ureate of lime. Hence the prevalence of Nephritic Calculus amongst those of a Sedentary habit. The arterial corpuscles of the blood are scant, the albumen abundant & the circulation slow and feeble causing palor and coloration of the surface. The lymphatic veins are large and filled with blood, the function of the body glands are increased in size. There is want of Proper Muscular Development of the frame, the veins inclining to the dark tint of skin jet black. This Mortifying habit is nothing more than a deviation from the healthy tone of the system before there is any Manifestation of the presence of Disease and may, as we have already seen, remain passive for a great many years. It may for all practical purposes be looked on 'as an Ultimate
organization of the frame depending on predisposing causes referable either to the present or infancy of the offspring. And is so often associated with tubercular deposit in the lungs that we rarely find the latter present without the former. Accompanying it, except in cases where both the predisposing and exciting causes are in active operation at the same time, Mr. Philips seems to think they had no connection will tubercle, but irrespective of numerous facts which prove to the contrary.

A reflector person considering these facts and symptoms will at once perceive a striking resemblance, and we are inclined to regard the number of cases of true consumption reported unassociated with tubercle as fewer than represented, because we frequently find the first appearance of tubercle is manifested by the development of the tubercular deposit, and on tracing their history we can almost in every instance refer the cause to a hereditary
Predisposition transmitted by one or both parents. When Scarlaga is developed uterally and suppurates it is not so liable to prove the precursor of Pithicus as when it remains dormant in the system, however when it does break it usually runs its normal course; if, as is often the case, this envenoming habit is combined with the sanguineous temperament, then the disease generally assumes the acute or febrile form and is often complicated with hemoptysis and lesions of the lungs, pleurisy, etc., within the pleura, pericardium, sympathtic, or choleric temperaments present.

Any manner tending to Pithicus, however, we do occasionally meet with it in persons possessing the character of one or some of these conditions. The French Pathologists regard the Sympathtic as a Cause because, in importance to Scarlaga, that we think this is stressing the point too far, especially since both are so often conjoined.
the same individual, and it is a matter of some moment for the general practitioner to determine the relative values of such in order that he may be in better position to cut short the progress of this acute disease. When the sympathetic temperament is pre-dominant we have a greater tendency to the deposition of tubercles in serous membranes than any other structure. And when it begins in the aliment we expect the lesion to be far advanced before it is noticed, adjoining either the acute or chronic form, and always fastening to a fixed site if not speedy checked. Hereditary predisposition is perhaps the most frequent cause of Phthisis. So it we now direct our attention, Dr. Starling says that "all organic, connoting bodily peculiarities tend to become hereditary whilst all changes in the organic structure of the individual from internal cause during life commonly red with time." This doctrine like all others that had
It advocates and opponents, however, in the present day its correctness is pretty generally admitted. It must take one and not, as is too frequently done, confound hereditary predisposition with hereditary transmission, the former is that peculiar state of the system which favors the production of the disease, the latter is the handing down of the condition from parent to child or from one blood relation to another. While Depuy, Billard, Audra, and others agree in acknowledging the hereditary predisposition, they go far further and assert they have tabulated accompanied by actual cases appearances in the family of a deceased mother, cousin and a Phillips, on the other hand, with the least recent authority say they could discover nothing to warrant them in coming to such a conclusion. My fear these conflicting statements have arisen in a great increase from the different meanings attached to the expression, thus same may regard
the actual presence of the disease that
and nothing short of this, as evidence of
transmission, Whiker often look upon the
more tendency to the same affection in the off-
spring as that possessed by the parent
sufficient proof. This latter is the proper.
and the one recognized by Modern writers,
those who deny the existence of the doctrine
do not pay sufficient attention to the fact
that the tubercular diathesis may remain
latent in the system so that the absence
scarcely fails to detect it present,
and that thus the parent of tuberculous or
suscceptible children, although apparently
are often nearer there is recognized. Under
these circumstances it is next to impossible
to arrive at any settled conclusion.

The report of the London Hospital for
Consumption states that in 18.2 per cent
of males, and 36.3 per cent of females,
the disease was hereditary. Mr. Portal
says that in two-thirds of all the cases
under his observation, the parent was
or had been, Consumption. Dr. Glocor mentions 30 cases of whom he states 14 were cases of hereditary, and Dr. Glocove found in three children who had tubercles developed and also a short time after birth that the mothers were phthisical and these also soon after delivery. It is a strange fact worthy of being remarked, that when a woman laboring under Consumption becomes pregnant the disease seems to be at a stop short and the tubercles are arrested in their growth till after delivery when both appear to receive a fresh impulse and the patient rarely survives any length of time.

The main proofs for the hereditary transmission of Phthisis are to be found in the innumerable instances in which it occurs in the children of diseased parents, in the possibility of our leaving it propagated by this means among the lower classes, in Greece when the progress of
A paternal father or mother can affect and provide the physical parent the children of the same one being healthy after a second marriage with an unlimited person, and lastly, by the occurrence of the disease where we can assign us other cause, the latter is open to serious objection, since we know it can be generated it too or, as we have already seen, many times this3

habit not be inherited in the system and five first to it without our being able difficulty to attribute its origin to the proper source? It is generally believed to be transmitted to a greater extent by the mother than the father, however this law is greatly justified by the action of the maternal causes. Maladies which success in a mother and her

children. In females and three males—four of the females and of the two remaining females have died.
Sign of Sepsis. In 2107 cases when the father was septiculous, 23 per cent of the children were; and in 2367 cases, when the mother was septiculous, offspring 24 per cent also of the children were diseased.

Transmitted by father in 59.4 per cent to son.

In 43.5 per cent to daughter.

By mother in 40.6 per cent to son.

In 56.5 per cent to daughter.

Although in the latter statement the cases with both parents were known to be septiculous had been excluded, yet for obvious reasons we cannot receive it as perfectly correct. It would appear that in the aggregate the difference although in favor of transmission to a father uncontaminated by the father is a very slight one and nearly the matter is of no practical importance. In order to arrive at the truth we must have more data as these reports are quite too limited.
By what mechanisms the trait-positive transferred from parent to child? In several ways, either as a hereditary trait, which both parents are affected by, or as a gene more or less advanced which may remain latent for years and then reappear itself. We have already an opportunity of the facts, and therefore regard such instances as the exception. The theory at present receives, that it rests in the ultimate structure of those organs upon which depends the processes of assimilation and nutrition forming a component part of the minute textures of the body. At one time the blood was thought to have been the receptacle for all causes of organic disease, and this erroneous habit was inculcated; hereditary predisposition is permanent and we know the constitutional part of the blood are continually undergoing change, first one integration, and then an other cast off with the oxidation.
Besides our ordinary senses, even when aided by the Winchester and other new analysers, fail to detect anything that can account for its presence. That fluid, pathology and morbid anatomy have not yet applied to the advancement of medical knowledge, but there is yet much to be accomplished. And this subject presents one of the worst fears we know in medical research.

It may be here asked how is this hereditary predisposition organized? To this, alas, we can give but a very imperfect reply. It may just be that all those causes which lead directly to the production of putrefaction, when acting with a certain moderated force, from its development; chiefly those agencies which depress the vital energies of the system by weakening and lowering the constitution of the parent, for example, a syphilitic taint, especially when one.-tined with protracted mercurialCourse, frequent intermarriages, excess and...
preventing social indulgence, intemperance, intemperate habit, have especially when associates with bad food, insufficient clothing, and the absence of a pure atmosphere, hygiene and proper physical exercise.

We have just mentioned insufficient and unwholesome food as a cause of hereditary predisposition. It also plays an important part in the causation of Thurne's pathological thecology of a more physical influence. When combined with intemperate habits, the habitual use of tobacco and similar indulgences.

It acts principally during infancy and childhood, but its effects are also manifest in advanced life and even in the age, by chief source in infancy is the brain of the nervous system, and afterwards teeth, a purely animal or vegetable diet. If the latter, it is not to continue, for we find when used in a healthy climate, it is not so injuring.
All other things being equal, if we have ample prey in the case of the Hudson and Indian tribes, it was supposed that in part of ancient times the potato was much used. It was very prevalent, and although in some localities it may be to-day where the people enjoy a proper mixture of animal and vegetable diet, cases of potato poisoning are quite as frequent, and of this I have myself seen convincing evidence among the higher as well as lower ranks of society. The constant use of an animal diet and chiefly of pork, bacon, &c., tends to produce a more powerful effect in the production of consumption, and especially of cancer, than of any other food, by the mother during pregnancy and lactation. The risk of starvation of plentiful food has been reported by some as a preventive cause; by others again its influence has been Sutton derived. We know the present state of our knowledge entirely in
in concluding then, although the disease may not strictly result from the cause of the colic, may yet be called of the Child Constitution, may and often does follow, developing itself sooner or later and ending, ultimately bitter or better in scrofula, having a strong tendency to phthisis, or in the resin itself.

The other causes which show its development are premature and excessive sexual indulgence, masturbation, all of which act by deteriorating the quality of the blood, decreasing the amount of blood corpuscles and producing a state analogous to the chlorosis, and thus seem to act with a greater power if, as is often the case, the person be labouring under some intense mental affection, for example, prolonged and severe study, anxiety, disappointment, and all repressing motions of the mind.
Theresa is due on Sunday after the 20th. But it doesn't mean we

must be overjoyed. If the 20th is after the

20th, it's a day of great suffering and an

abuse of tragic circumstances. Thank God it's over. And

we're done with the drama, the trials, and the

triumphs of the European Union. We

must be overjoyed. But it doesn't mean we

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triumphs of the European Union. We
Depression of this necessary involving imperfect development of the different parts and organs of the body and thereby giving rise to a debilitated or stricken habit. The proper view is that they are unorganized deposits from the blood, but the secret of an inflammatory process as was at one time believed, depends very on a depraved state of the fluid arising from juncture nutrition, and non-utilization of the inguinal and vital constituents of the foods, the direct probable of undue acidity of the secretions in the alimentary canal especially the pancreatic fluid, the now prepared to elevate the real value of unpurified air as a source of the fluids, and cause when combined with such causes as insufficient food, all those which operate by lowering the healthy standards of the body.
Constant respiration of a warm dry atmosphere whose temperature is always the same are indispensably requisite in the treatment of consumption and, since all are agreed that "prevention is better than cure," if we could find ourselves at some Authoritey of Boston that tells us "that one case becomes consumption which does not abate it, for if the above be true in which the air is highly renewed and only proportionate to the number of occupants, having the same days free admission, it will assuredly in every case avoid the disease." We shoule think it as a boon conferred upon Society. Who's value it was sufficient to estimate.

There are several other Air-Circumstances Connected with this Subject which, although we have not time to discuss, deserve mention. There are overheating in sleeping apartments, mills, factories, shops, schools,
The influence of trades on mental and physical health and disease.

Various occupations as a cause of disease. We believe Frost to be particularly
when subjecting the person to prolonged
and repeated fatigue, want of rest, and
repeated outdoor exercise. Confinement in
the air of close apartments from which the
sunshine and to a great extent, daylight
are excluded, the atmosphere being unair,
cold, humid, and frequently impregnated with
floating particles of dust arising from the
nature of the work at which they are
engaged; these circumstances being gen-
ernally aided by confined, cramped, and
sleeping positions of the body. At learning
decks, counters, benches, etc., the
loosening of shoes or other compressive forces.
The body, which by pressing on the abdominal muscles prevents the true contraction of the diaphragm, diminishes the cavity of the chest, and causes increased, laborious respiration. And consequently imperfect circulation of the blood. They are generally components of the cough and it is possible may occur owing to a certain portion of the electricity developed in the system and necessary for the due performance of the vital functions of the organs and tissues of which the body is built up or composed. These are decidedly amongst the most powerful exciting causes of consumption.

When there is any tendency to a scrofulous or tuberculosis taint in the system, some of these occupations may be briefly enumerated. That of clerks, shopmen, bakers, wrights, pharmacists, tailors, dress-makers, tailors, ironmongers, grocers, compositors, printers, chemists, teachers, nurses, article sellers, and those in linen and cotton warehouses.
It has been asserted that mechanical irritation, whether as dust floating in the atmosphere or in any other form although applied directly to the lungs, never gives rise to tubercular affections. And whilst we cannot entirely discount the statement, we are not prepared fully to admit its truth. If a tuberculous focus is latent in the system then, added by one or more of the preceding irritative causes, mechanical irritation will most undoubtedly, not only materially favor the development of tubercular but, where a such state exists, give rise to a depression condition of the tissues in all lethehiss forming in the tuberculous tissues and so predisposing to phthisis. Of this we have sufficient proof in the case of many millers, sweepers, outworkers and away where we know consumption and scopelous are prevalent. The influence of these particular occupations is favored by a dry state of the air in which they are
Carried on and retarded by its humidity. Thus we find a greater number of the grinders declared than those dues. Hence it would appear that in the latter instance the particles of matter are incorporated floating about so freely from the quantity of moisture with which they are enveloped.

In favour of the incautious amount of gum to be derived from the use of cold-lime oil in the treatment of rhinitis we may just instance the commissary of chickens and those whose foot is composed chiefly of dry materials as the feathers and others. It has been proposed in some cases where it was found impossible to administer the oil internally by the mouth, either from its unpleasant taste or from irritation of the stomach, to give it absorbed by the skin or to put it at an accelerat, the latter being we cannot, for obvious reasons, expect to prove successful. And we doubt the former would
Succeed cause we do away with the disagreeable feeling of leaving the surface of our bodies constantly immersed in an electric substance. As yet there is little hope of our being able to surmount this difficulty.

The differences of temperature are regarded as exciting causes of rheumatic, but we must be very careful for what are looked upon by many as exciting such are in fact the presymptomatic symptoms of incipient disease. Take for illustration, catarrh, influenza, bronchitis, or any of these so called exciting causes. All a consumptors patient what produced this illness? And in all probability the answer will be a slight cold, caught after coming from a heated ballroom or supper parl to the open air, which gradually became worse!; how are we justified in regarding this slight cold as the real cause? No doubt it is what is known as the proximate, but certainly not the true exciting cause; it is nothing
More than one of the first developed symptoms, for had we done previous
visits, the patient been of sound Constitution
and free of all States of or tuberculous
traits, there circumstances to which he was
exposed and which were in reality the true
causes, would have, in all like-
ghosts, produced no effect whatever.

The causing cause is, as we have already
been, that influence which operates chiefly in calling
the desired state into action. It is manifestly very
difficult in many cases to say which is the cause
and which the effect. Much

Much has been written regarding
the influence of climate, season, etc. in
connexion with this subject and certain
it has been profitably treated. Oftentimes
us falling on the question, and we must
content ourselves by briefly mentioning some
of those conditions which seem to partially
allitude, they and sudden changes of
temperature giving rise to catarrh, cough,
thoroughness, pneumonia, etc. Cold specially.
When combined with humidity of the atmosphere in sleeping apartments, with a draft or brisk current of cold air, a cold or dry, close state of the atmosphere, exposure to night air, overeating, the body and then allowing it to cool slowly which produces evaporation from the skin, consequent chilling of the surface and termination of blood to all the internal organs, more especially the lungs.

Davin J. Rutherford.