1859. John Horne
On preventive measures to be employed against epidemic disease.

The subject is one of great interest to all classes of the community and particularly so to the physicians. Dr. Naggath says, "I have long thought that this is a subject on which the physicians could employ their time and ability better for the benefit of their fellow-men than in the investigation of febrile contagion, in order to ascertain the cause by which it was communicated and the means by which it may be prevented. It is interesting to the non-professional public as well as the professional because none are exempt from its influence. The poor suffer as much, to the greatest extent; but the rich are by no means proof against it. Hence compelling the rich may be to attend to the comfort and necessities of the poorer classes, epidemic disease compels them to do it, or they must suffer impending consequences of which continued fever has been said to be one. Some writers have gone as far as to call it a violation of providence on the richer classes, for their neglect of the lower. Interesting however, though it be from its dreadful consequences, people generally attempt remedy at other too late. The remedial order, i.e. adoption must be according whether we are
Contagionists or non-contagionists, and whether the disease spreads only by an exciting cause or spreads up "de novo".

We shall proceed now, on the supposition that there is such a thing as contagion, the question of epidemic diseases, arising "de novo" is of vital importance practically, in treating of preventive measures, to be employed, a point below which contagionists equally with non-contagionists are agreed.

The plan which we shall follow as the best means for preserving an community for the inhabitants of a country or district, will be as follows.
I. By quarantine laws preventing the entrance of an epidemic.

II. Removal of the predisposing Causes.
   (1) Be improved morals.
   (2) By comfortable dwellings.
   (3) By removing the obstruction to the cutaneous secretion.
   (4) By proper food.
   (5) By pure water.
   (6) Avoid all excesses.
   (7) Remove miasma and noxious exhalations.
   (8) Prevent the accumulation of decomposing animal and vegetable matter.

III. Quarantine laws preventing the spread of an epidemic.

IV. Seclusion.

V. Ventilation.

VI. Disinfection.

VII. Prophylactics.

VIII. Abortive Treatment.
I. By quarantine laws preventing the entrance of an epidemic into a country, to prevent the entrance of the epidemic into an isolated country such as ours, is not difficult and is even practicable on a continent. This is true that an epidemic may enter a country notwithstanding the strictest quarantine, traveling as it does by the wind, but there appears no reason however, why we should abolish quarantine laws, on the contrary it ought to make us more vigilant against unnecessary exposure to contagion. It is undoubtedly the duty of the legislator of any well governed state, to see that the inhabitants be not unnecessarily exposed to the danger of contagion. Quarantine laws are not without their opponents even among medical, but especially amongst medical men. But it must be worse than foolish to abolish them either on account of the scepticism of a certain proportion of the medical, or on account of the interests of opinion of the medical profession. Better surely that the trade in any district suffers some check than that a whole community - it may be a whole country - should suffer the ravages of a wide spread epidemic. If the slight hampering of mercantile speculation be weighed in the balance
with the devastation of an epidemic? No; we cannot think no visible proofs could cause them for a moment. But these opponents may ask what is quite fair, “do these laws really prevent the entrance of an epidemic”? Undoubtedly they do, from the well-known fact that the inhabitants of Scotland from time immemorial enjoyed an exemption from small-pox, until the fact the Commerce with the Continent of Europe laid them open to the receipt of contagion, which in the first instance committed amongst the unprepared and undefended native population of the most appalling description. As laid out pleased all parts of the community, however good it might be, and therefore we cannot expect quarantine laws will. Macaulay has well remarked that quarantine is not a matter in which innovations should be rashly introduced, whereas there is a doubt it is proper to decline to the order of se-
curity.

In this country we have to guard against the entrance of more than one epidemic; we ought therefore to be ever vigilant, lest such a chance it come as a thief in the night and enter one of our large sea-port towns carry waste and desolation in its train.
is form a proper estimate of quarantine, let us
exhibit the state of a Country, before and after
Quarantine laws were introduced. As better
illustration could be obtained of their value,
than that afforded by the large commercial
city of New York or the United States. Until
recently those laws were almost a dead letter.
The Yankees thought themselves secure against
plague by distance, and to Yellow Fever they
became reconciled as a domestic evil. From
1737-91 Yellow Fever appeared occasionally,
but after a later period, it became more
frequent and destructive. A consequence
no doubt of increased population and more
extensive intercourse with places where it
was prevalent. After two or three successive
attacks, the worst in 1822 it became obvious
to the most intelligent citizens that some
thing must be done for the welfare of the
Community. They so that account constituted
or remodelled that code of quarantine laws
and determined that they should be strictly
enforced. The effect has been admirable since
that time, Fever has not appeared in the
City, nor almost a quarter of a
Century ago. So as far as we can judge
Fever would have been prevalent then.
still, but for the enforcement of Quarantine. After such evidence of the value of Quarantine, it would be superfluous to quote medical authorities on the subject in support of it, as since the enactment of these laws, numerous vessels have very frequently been debarred from entering port.

Regarding the length of time a vessel should lie in Quarantine, before entering a harbour, must depend on the health of the men, whether they are and have been healthy during the voyage; the duration of the voyage; what was the character of the epidemic that was reigning among them; if ill, when did they become contagious; &c. &c. &c. All questions of immense importance and must therefore be prudently attended to. If have these laws carried out, well paid officers might be employed, who would not subject themselves to the influences of bribery, as by smuggling articles of clothing, which should have been previously submitted to precautionary measures, be mentioned afterwards. Dr. Raycock says all specific five poisons, manifest themselves within a month, generally, within a fortnight.
If these statements were found correct, they would be very valuable quarantine hints.

II. Removal of the predisposing causes.

(1) By improved morals

There could be no greater benefit conferred on the lower orders than that of improved morals. It is taken for granted that the higher and better classes have that advantage, although occasionally not turned to good account. For this purpose, government ought to provide an education for the youth of these classes, which would not only benefit them but the nation at large. The advantage that would accrue from every child receiving a course of popular instruction in the value of cleanliness, sobriety, and all the hoaried virtues, would be almost incalculable to them and their contemporaries. Likewise contrast with that the bad effects of filth, in its various forms, to them, and the disgusting nature of it to others. This instruction ought to be commenced in the nursery, and school-room, and continued through manhood. The more advanced might be improved by popular lectures, so common in every city and town of any importance.
The subject might be interesting as well as instructive, such as "Cleanliness, Weal of Great Cities" &c., showing what dangers are made to encourage an account of improper happiness: from they may escape these dangers we might demonstrate to them by the bills of mortality the difference of deaths per thousand of the inhabitants in St. John's, St. James's, and Murray Place, which will illustrate well the value of cleanliness.

By wholesome literature circulated among them, morals might be greatly improved. If boys and girls were as trained as youths, they would grow up with a knowledge of what might be advantageous to themselves and perhaps their families. By such training an inestimable amount of vice, and disease the result of vice would be prevented. Further, it would prevent the propagation of vice, the vice leads to another as equal to drunkenness. Since if we could secure this moral training to youth many of the predisposing causes of epidemic disease would probably require no mention, and likewise epidemic disease would need be less dreaded.
(2) By comfortable dwellings
It is of immense importance that we should
have not only well constructed houses, but that
they should be built on a proper site. The nature
of the soil for example has a great influence
on the spread and violence of an epidemic.
Romans show a good illustration of this
fact. Their town, situated on red sandstone,
had only Cholera in diarrhoea, while the
neighbouring towns built on clay, had an
alarming variation of Acutee Cholera.
This is an evil that cannot always be
remedied in large towns, but is perhaps
worth a little attention in selecting a
new site for a village or a group of houses.
The site can often be much improved, as,
when it is mainy by underground
drains and cultivation of the land, but
the site may be good militarily and the
dwellings wretched, from that point of view.
Last summer, it was found that the
Cottages the poor in many of the
most healthy country districts were
in many respects not inferior to the
houses and those of the poor in large
cities. The Cottages were usually on the
roof, that the timbers could not
walk upright. The only admixture for slovenly, crowded, and open door. The principal additional evils in the houses of the working classes in large towns and cities are bad ventilation and the manner in which the houses are clamped together. The houses are rendered more uncomfortable and unhealthy by being overcrowded & the great neglect of the ventilation. These are amongst the most productive causes of a predisposition to pestilence. No or even no ventilation is a necessary consequence of the localities and positions of the houses of (many of the poorer classes) situated in lanes, courts, alleys, and narrow streets or whatever perhaps more or less, at least (no better) than the ground cellars in the better houses. This bad ventilation is produced more maleficial by noxious emanations from distinct privies, common sewers, etc., so this ventilation is suppressed, macabre, and that some times to excess. The Liverpool Sanitary Board in speaking of the epidemic of 1847 says—"There are forty one
individuals and even many more in a small house. Consequently that respiratory fluid is contaminated from all these causes and the exciting cause of pestilence arising with spread much more rapidly and widely, and likewise become more deadly. When these are combined we present one of the Royal British Army Medical Officers, tells that during the time he was asleep, in that establishment, he had to his public practice nine cases of typhus fever. In one case, in the apartments, with a small window and it did not open. It is evident that the cure that this bad ventilation and crowding is remedied for better for all cases.

(3) By removing the obstruction to the Cutaneous Vessels.

That this is a predisposing cause, must be apparent to every body, who ever looks at the Object in the most cursory manner. In fact it must follow that if any of the natural processes are not performed, or even imperfectly, they will predispose to disease of all forms. Now if the thousands of miles of

...
duce for elimination of sweat and vectors, matter from the system be occluded, the poisonous substances thus detained in it must act very detrimentally upon the vital powers. Thus, occlusion takes place in all cases, but more particularly in the liver, and the reasons for this need not be far fetched.

(a) From prejudice. Prejudice is often the fruit of ignorance, mistaking the coincidence with what ones have happened independently of another circumstance. For example, we know an old soldier who thinks he caught a catarrh from washing his feet. He accordingly made the vow that the mistake would not occur again. So he has not washed his feet, since the Battle of Waterloo.

(b) From want of a proper supply of water. This deficiency of water, not so much from want of water in a large city, as from its not being in their dwellings. And the difficulty with which it is consegued there. Sometimes, to the height of eight or ten feet. This poor fellow is of little value to most cities, and...
towns in Great Britain, common value at least in the eye of the Water Carrier. Every dispensary Accoucher can testify to the truth of this. Perversity, in some part of his practice. The poverty in many instances, assists much to this neglect of the interpenetrating systems, because when they have water at hand the latrines for an ablution are next. Awaiting, and so the go from infancy to manhood without the general ablution. For this defect ought to be met by our civil authorities, providing public baths gratis or at a very low figure that all might enjoy the blessing of a Clean Skin.

(e) From the degraded State of the People. That is not doubt the great cause of occlusion. Those people are generally both immoral and impudent, who cannot be careful and troubled about any thing that concerns their own or their neighbour prosperity and comfort. We ought not put the medicinal blessings in the frame of all and those at least who would employ them, if placed at their disposal. Some hygienic laws
Can be enforced, by the Authority, but it would appear rather ridiculous to compel a man toward his own person.

(3.) By proper food.

Unwholesome and insufficient food is another self-evident predisposing cause, which does not occur alone, but is coupled to the other concomitants of poverty, destitution, and degradation. Holm has maintained that the prevalence of starvation is in direct proportion to the state of physical destitution. His opinion is well illustrated and supported by the recent epidemic of typhus during and after the late Irish famine. During the epidemic of 1826 Liverpool and Glasgow having nearly the same numbers of inhabitants, but the former, having a poor law, received into the hospital 720 patients, the latter (Glasgow) had no poor law reception 700 patients into the hospital. This contrast teaches us the value of a proper supply of food as a preventive measure.

(5.) By pure water.

Bad water is also productive of much evil, producing ulceration of some of the intestinal glands, causing dysentery, diarrhoea.
And low typhoid fever. We have had numerous examples of it, predisposing to choleraic disease, e.g., in London when the people of a particular district were exposed to cholera, the symptoms were stopped on the patients ceasing to use for culinary purposes, the water of an infusible well. Likewise, the same epidemic of cholera in Newcastle, was attributed by many to bad water. Opium and inferior alcoholic drinks produce nearly the same effect.

E) Avoid all excesses.

All excesses of a mental or physical kind, should be strictly prohibited, whether in the prospect of, or during the presence of an epidemic. Intense mental application renders the body weaker, and therefore more easily prey to disease. If the student wishes to escape an attack of the prevailing epidemic, he must study in moderation. He must abstain from burning the midnight oil. All fear and anxiety should be removed as far as possible. No matter what its cause, whether about friends, his disease, or trials of any kind as thus caused by pecuniary difficulties, spare allow mental excitement, to rise high
it may call into action, latent from that may have been working in the system for a considerable time. All physical excesses should be abstained from, which reduce the body below its healthy state. Amongst these excesses, perhaps none are carried to such an extreme as the pleasures of the table & drink.

(7) Remove miasmata and species of halation. It would appear extraordinary to urge the necessity of removing marshes, swamps, &c. from the neighborhood of towns and human habitation. They might be removed by underground drains, to prevent as much as possible, exhalation, which would be other-wise sure to take place. Some men whose opinions are well attesting to, have gone as far as to say that the exhalation, emanate epidemics across, but whether that be true or not, they prescribe to them very strongly. The constant exhalation, from drying grounds are also very injurious to health especially when situated in the center of a large town and close hose of the grave. Said to rise higher than the town, because if the water is not brought from a distance, it is almost like to be contaminated with the de-
Composing matter from it. The custom of having burying grounds around churches and chapels, the town is happily abandoned for cemeteries in the suburbs. All establishment or manufactures, in which offensive odours are given out, or generated by putrefaction should be removed as far as possible from towns as predisposing causes. There are, paperiers, printers, cattle pens, slaughter houses, blue kilns, soap works, coal works, etc.

(8.) Prevent the accumulation of decomposing animal and vegetable matter, animal excreta, etc.

The accumulation of these should be strictly prohibited near human habitations. Better that they should be worked into the soil, and removed at a great expense in a different form as guano, than that they should predispose to an epidemic, because human life (in this country at least) is never a matter of pounds, shillings, and pence. They ought not only to be carried from mans dwellings, but that the air which leaves prevent their gaseous escape. There it is not attended to. Where water closets are not fashionable, but privies and cell pools, the gaseous parts escape, con-
taminating the atmosphere and the fluid filters through the soil, rendering the water wholesome. The accumulates emanation in the atmosphere and the polluted water and its diet, favoring no small degree, the propagation of pestilence. The accumulation take place to a great extent all times and even those which are celebrated for their pure and salubrious atmosphere have got their share of them. We have heard a jest Claps physicians say that time of our most aristocratic Scotch Water bright places, priests were very wise to Water Closet a perfect luxury.
III. Quarantine Laws Preventing the Spread of an Epidemic.

When pestilence first makes its appearance in a country, it generally occurs in a particular town and family. The first thing that we ought to do is have the patient conveyed to an isolated hospital in a deserted spot specially devoted for that purpose, taking it for granted that he belongs to the lower orders. In the mean time the house should be embargoed of its inhabitants, in order that the house may undergo the necessary purification before mentioned afterwards. The persons engaged in the burial of the deceased patient ought to be chosen from the list of those who have been previously attacked, or if that is impracticable, from those who have been cleansed by a number of various sorts, as "Night-Wax", or those who have been employed in cleaning. The attendants of the house should also attend the purpose well. The medical attendant ought to take a bath after leaving the house. In case before visiting his patient or his own family who have the disease, he must be observed. Notwithstanding
all these precautions and restrictions, prejudice may spread. What is next to be done? It seems be next to impossible in large towns and populous districts to maintain a non-contagious climate with the neighbours. Undoubtedly more successful would attend individual and family precautions. We pretend gives two or three examples, of the value of quarantine, preventing the spread of contagious fever. The farmers of some parts of Wiltshire who lived holes no communication with strangers during the prevalence of the epidemic, had no case of fever among them. And also four villages in the neighborhood of Lancing, are sheltered by Dr. Balder have been preserved from the fever, chiefly by the exertions of some of the Roman Catholic clergyman who persuaded the inhabitants to avoid all communication with Lancing and another town in its vicinity where the fever was rife. In these days, of Coaches, Canals, and Railways, with frequent visits, course is kept up between one part of a city and another, and between different cities and towns in the Kingdom. That to think of compulsory quarantine
laws, would be something ridiculous after
the epidemic had appeared in the Country
because the various infected articles of clothing
would be requested, and transmitted for
the purpose of purification, and thousands
of people passing from infected districts
with perhaps the contagion would not
be detained in quarantine for the
purpose of avoiding the spread of an
epidemic, in account of their having to
follow their avocations. So that we apprehend
the principal value of Compulsory precautions
is preventing the entrance of an epidemic
into a Country.

Seclusion.

Departure from the place where the Contagion
appeared has made its appearance in protective
measures which have not been opposed to it.
But seclusion in a house is often insufficient
although there may not be, the slightest
breach of course with the contaminating habitants
from the air being contaminated by inmates
from the sick and dead, or as it become
infection, if the seclusion's habitants.
Hence the value of removal to a healthy
place at a distance, before the epidemic
has spread to the district where you reside. If the epidemic is in your neighbourhood your chances of safety by removal are considerably diminished. But there are many of the inhabitants who cannot get themselves secluded, or accomplished a removal from the infected locality. These should not enter houses where there is not the best proof of the family being in perfect health. Thus forbidding balls, balls, concerts, church and all promiscuous audience and assembly. Where necessity demands the entrance of a private house, the bed rooms, if there be remembered, are the apartments of greatest danger. At the time a contagious disease is raging in any particular house or district, the practice of house to house visitation by qualified medical men must be enforced; but come go forward to their opinion that a “Quarantine Committee” should be set on foot, to watch all places where it is present, and when it makes its appearance in healthy localities, a separate house to be made of the living from the dead; the healthier from the diseased. That the plague may be stayed. All linen and wearing apparel should be
washes at home. Likewise, the reception of any article of clothing or any person under its care should be received with the greatest care, as they might be the means of conveying dangerous into any uncleaned house. But supposing 

uncommon has got into a family of a respectable position in society; you cannot fail here or hear off to an hospital. What is it necessary 

that should be done? If the patient's room is not large and well aired, with a fire place 

and at a distance from the most occupied 

rooms, try if you cannot secure one with 

their accommodation. If you succeed 

effect a removal as soon as possible, 

purify the room, tie has left, by suitable 

means. By exclusion too, being adopted 

and the utmost attention to keeping, con 

fined may be checked in that family and 

perhaps it may be the first and the 

last case in the locality. But your 

patient may be from the lower classes and 

in a town where there was no anticipation 
of an epidemic, and if there were the 

authorities had been deaf to the voice 
of their sufferers in that matter. How 

the fever hospital had been provided which 
might have been. If it a small
Now, secure an empty house and convert it into a hospital of a temporary nature. If an expedience were to appear to the Army the sick ought to be removed to a hospital of a temporary kind, at a distance from the other town. If on board a vessel while at sea, include as well as possible in well ventilated apartments. If in a harbour put the patient into a hospital.

Now in a hospital such as the Royal Infirmary of Edinburgh a question has been raised. Might we to admit five patients into the general medical wards, or confine them to particular wards devoted for that class of patients? Now a great deal can be said on both sides of the question. I will reserve the order of the question for convenience. That five patients ought to be reserved medical specially devoted for that class of patients is a doctrine advocated by many. If the ward is well aired and of many cubic feet devoted to each patient, the system is faultless. As concerns the Cape of Medical Broad No. But this has been found to absorb accommodation very quickly which is very valuable in such an...
Institution and especially at the particular time. It is be feared that the ten to fifteen hundred cubic feet of breathing space has been diminished and hence a great concentration of the points to the change of medical attendants and servants. It has been said that accommodation is only what is due to attendants, and therefore no pecuniary difficulty should be weight enough to place them in a common place, and it can be no other than pecuniary, because a house converted into a temporary hospital can always be procured. If that be impossible, a tent might be erected in an open space, where has already been done, and as many recoveries have been effected as in any hospital the patients having no medicine but water from the Ocean and the pure Act of Heaven.

Others want the interment with the general patients for many reasons.

As the fever ward are occupied by the Act of Clinical teachers. (3076?1) this interments would remove this by clarifying and make a more equal
division of the patients, an advantage for
both teacher and taught.

As a matter of

economy they may make every third bed
available or, if necessary, and it was
not take up so much accommodation
as a four-bed.

Further, the spread of the
epidemic is not increased by this arrangement.

That may or may not be true, but certainly
the result of this plan is the female ward
of Professor Caycock and Reform during
last winter. Despite it's favoring the
inocent void of the maternity. There was
only one four-case admitted, from which
four or the cases of Convalescent occurred.

We observed that no case of Convalescent occurred
until the patient became Convalescent
and had began to walk about the ward
which brought them to Convalescent
this others. The latter difficulty might
be overcome by having a Convalescent
ward. This, upon the whole, the most
Common cause raised to advocate exclusion
the right to remember that we have
no right to risk a patient's life by
any arrangement. But whatever
plan we adopt we should remember not only ourselves, but teach others that the lungs and other are the principal medium for the absorption of atmospheric air. Therefore we ought to make our visits as short as consistent with duty. We ought not to come, (say Professor Laycock) within two or three feet of the patient unless for a few minutes within a limited audience. Any hour or from four feet, the change is increased by the ventilation from the patient being more concentrated. This is well illustrated by the fatality amongst Roman Catholic Clergymen. To avoid this danger, which epidemics disease makes amongst their more than any other Clergymen. Mr. Laycock recommends the use of a speaking trumpet, while or professional irritation amongst the sick in Hospitals, and more particularly this would enable them to stand at a greater distance than they usually do.

Ventilation

To prevent medical men, and others visiting the sick, being unnecessary exposed to a concentrated and poisoned atmosphere, due care should be
paid to ventilation, in order that the malarie, morbi be diluted. This ventilation is materially assisted by the adoption of large charcoal fires. It is said to benefit visitors by a fresh and atmospheric being a bad conductor of malarie morbi. This is recommended for epidemics of influenza, typhoid fever, etc., as an exception. The tight covers of glazed tiles have been recommended during births, but probably they would be of little value. Perhaps coal might be as well, by forming an additional cover on the more susceptible mucous membrane of the lungs. You are told not to swallow your saliva during a visit but least for two minutes, immediately after leaving the patient's room. These are assisted by disinfectants such as charcoal, set up as vessels around the apartment as in some districting rooms, to destroy the malarie morbi. Vegetable and mineral acids have been recommended for spraying the patient's body. This above, for good purposes, will prevent the malarie morbi, also this allows
cutaneous transpiration. Dr. Christian recommends the use of mineral acids as preference to vegetable. The former have all the advantages of the latter, with the additional power of destroying any organic poetry. The vegetable are cover the bad odour does not destroy it. The latter deapproves of all vegetable and essences. Camphor has been recommended to be worn about the person.

Disinfectants

All the secretions from the form patient of force, urine, expectoration, pus, and blood are to be immediately removed and put where they can mix no one. If these matters cannot be at once removed, a good powder is to throw a handful of finely ground charcoal into the containing vessel. If this becomes the occasion, another are absorb into the porous structure of the charcoal and preserved from contaminating the atmosphere of the N.E. Charitable. Some prefer chloride of lime or (or) W. Burnett's disinfecting fluids. The superior value of water closets over porcelain...
depend on the instantaneous removal of the
insect &c. People have more than once caught
a Contagion from visiting a distressed person.
An important advantage will be gained
by patients and doctors by removing the foul
bed cloths at least every four
hours, as this will be the quickest
means of destruction. How are we to destroy
the Matter of the Drabs in these fluids?
By two means—-heated fluids and air.
All bed cloths, linens of any description
wearing apparel &c., that cannot be
injured by hot water ought to be im-
mEDIATELY immersed in it. But we the
load Boher of the Affric Clap, many
Article of clothing due to be found which
would be much injured in beauty &
flame & the Clave immerses
The finest Articles, ought to be exposed to
a dry atmosphere of at least 115-
130. The Means of destroying Contagious or
Materal Drabs by freezing cloths is of
more doubtful benefit. Dr. Buxton impresses
much on his students the Value of avoiding
infected current of air, our advice is apt to
be reflected by both professional & non-professional
We must- finding this essay almost
"ad infinitum" by dwelling on the advantage of keeping every thing & place, compulsors of clean and the necessity of keeping the body as to the highest state of health, the times & circumstances permit.

Prophecies.
Dr. Caycock during a visitation of Cholera in York enforced the daily administration of doses of Quinine to the inmates of the Lunatic Asylum in that city with the happiest results. Not a single case of true Cholera and only a few trifling cases of diarrhoea occurred. Dr. Bennet however did not meet with the same success as was the Royal Infirmary of Edinburgh. Dr. Crosshow recommended a similar plan of treatment against pernicious fever. Dr. Baylie says attributes a similar power to it. Its value in dysipelas has been demonstrated by Mr. Boll of this city & Dr. Caycock is of opinion that it acts probably upon the excremental matter in the blood, upon the accumulation of which, the fore of dysipelas would seem to depend. He also states the part of the influence which an old rusty nail seems to have in vitally retard it. Moreover it is difficult to conceive how one can expect any influence upon the nerves which have been cut. The circulation and has never been detected in the urine.
Bella Donna is believed by many to have a preventive and protecting influence upon the body against the contagion of Scarlet Fever. But the experiments at St. George's Hospital do not favour such idea. Scarlet Fever having appeared within the building Bella-Donna was given to 34 healthy boys, after this plan of treatment had been in operation for a month—after full time allowed, therefore, for the development of the protecting influence of Bella-Donna, if it really possessed any. 23 out of 34 took the disease. Professors Henderson & Laycock both recommend its use, from its beneficial effects in their practice. The former says Bella-Donna does not receive universal approbation for its prophylactic power, any more than quinine does for ague, yet we ought to use it. And lastly, but not least, vaccination, as a protecting means, against the poison of Smallpox, the virtue of which we are all certain.

 Abortive Treatment.

Some physicians still cling to the idea, though a minority, that by giving an emetic at the commencement of a febrile attack, the progress of the disease may be stopped.
Others assert that a better result is obtained by hydrophatic treatment. These and all other abortive methods of treatment still remain of very doubtful significance.

John. Horne