AN INAUGURAL DISSERTATION
ON
Medical Topography and Disease of Warren County
SUBMITTED TO THE
PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY
OF THE
UNIVERSITY OF NASHVILLE,
FOR THE DEGREE OF
DOCTOR OF MEDICINE.

BY
James A. Briggs

OF
"Kentucky"

1851.

W. T. BERRY & CO.,
BOOKSELLERS AND STATIONERS,
NASHVILLE, TENN.
Respectfully inscribed to

Dr. H. Bowling M.D.
Medical Topography.

It is a fact which reason would suggest, and which experience has verified, that the varied circumstances of soil, climate, local peculiarities presented by a country, do in numerous ways engender and modify disease. Hence the necessity of investigating those circumstances and peculiarities, that we may be able not only to treat diseases more successfully, but that we may prevent it in a great measure, by the employment of those means which the knowledge of the causes of disease always points out. Bournon by these facts I have been led to give this paper upon the topography of Warren County, Kentucky, of to investigate the causes of those diseases, which have prevailed so extensively as to have gotten it the unenviable name of the Brake Yard, of Ky. I would premise, however, that the amount of sickness was not the sole cause of the confinement of this town. It was exaggerated to suit the designs of citizens of surrounding counties who were envious of the advantages this
County possessed over theirs in point of locality & commerce. Barren County is situated in the southern portion of Ky. near the 37th degree of north latitude & 80° 30' of west longitude; embracing an area of 5 square miles of beautiful valley land. It is bounded on the north by Edmonson & Buttun counties, with Green River separating it from the latter, east by Barren, south by Allen and west by Simpson, Logan & Butler. On the northwest and southwest are two extensive ranges of hills in many instances places forming the boundary of the county in others, coming within the limits of said county. They gradually converge to the east & meet in the county Barren, at a place called Dante's Knob, where there is a chasm between them, through which passes the Sycamore & Nashville turnpike. Thus we have a portion of Edmonson & Barren embraced in the same valley on the east, and as they diverge towards the west parts of many other counties are included in this valley. Though a valley, there are yet many hills which rise up from its level surface in some places
There are a succession of hills & valleys for many miles. The soil of the country is very fertile consisting of mould with an abundance of lime with but little sand & a subsoil of tenacious red clay which is generally found a few feet under the surface. An extensive bed of limestone forms the principal rocks; in fact, this kind is seldom found, but in a few places this arrangement is changed so we find isolated beds of sandstone, which seem originally to have consisted mostly of sand, now cemented together. This, almost, innumerable bed of limestone impregnates all of the water with the carbonate of lime, which may be readily dissolved by strolling the carbonic acid by means of heat, when the lime is deposited in abundance on the sides & bottom of the vessel so great is this deposit that the vessels of bottles & other utensils often become completely stoppered up by a single year use. This fact readily demonstrates that lime is present in the water & also affords a simple & ready means of getting rid of it, whereas from individual idiosyncracy or in those who have
been accustomed to its use, it becomes a
source of irritation, and consequently necessary
to avoid its use. As in all calcareous re-
gions there are many caves near the head
of this valley in the eastern range of hills
is the great Mammoth cave, which from
its size and the peculiar formation of rocks in
it, is pretty entitled the wonder of Ky. There
are also many flat watered over country,
which are plentifully calculated to receive
and retain water from the nature of the soil
and the tenacity of the clay. These with those
which are made artificially as when making
bricks become filled with water and form
small ponds which though small at
first, from the rootings of hogs and the trampling
of large animals, ultimately in some in-
stances, become very large. They seldom dry
up, except in long continued droughts and
when they do, the vegetable and animal
mater which has collected here in large
quantities, by being washed down by rains
and by animal urging water is exposed to
the influence of the sun. But the exposure
of this matter too seldom occurs to refute the belief that this is the sole cause of the fever which appears here; besides this condition never occurs when the disease is most prevalent. The weather throughout the whole year is very variable—several 4 days in succession of the same temperature. The mean temperature of the year is 60°, which is the degree most comfortable to man's best suited to his intellectual and social as physical growth. The thermometer ranges from 90 to 90°, the warmest weather being in July—the coldest in January. The mean temperature of the different months, as shown by a journal kept in 1830, may be seen in the following table.

<table>
<thead>
<tr>
<th>Month</th>
<th>Mean Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>38</td>
</tr>
<tr>
<td>February</td>
<td>40</td>
</tr>
<tr>
<td>March</td>
<td>48</td>
</tr>
<tr>
<td>April</td>
<td>54</td>
</tr>
<tr>
<td>May</td>
<td>54</td>
</tr>
<tr>
<td>June</td>
<td>50</td>
</tr>
<tr>
<td>July</td>
<td>82</td>
</tr>
<tr>
<td>August</td>
<td>81</td>
</tr>
<tr>
<td>Sept</td>
<td>69</td>
</tr>
<tr>
<td>Oct</td>
<td>54</td>
</tr>
<tr>
<td>Nov</td>
<td>42</td>
</tr>
<tr>
<td>Dec</td>
<td>38</td>
</tr>
</tbody>
</table>

The difference between night and day is also
my guest, probably quiet than in the surrounding country owing to its valley location. The heat which every object receives during the day is being given out by radiation as the sun disappears in the west, the air in immediate contact with the earth soon becomes cool and being heaviest remains at the bottom, it gives up a portion of the water which it contains, while the air of the neighboring hills when it has become cooled gradually sinks into the valley beneath, making this a place of deposit for the water which it has blended with in the form of vapor in the form of dew or frost, being unable to contain as much in its cooled condition as when warm. This is the cause of the greater amount of dew or frost seen in valleys than on the hills and also the more constant appearance of fruit or other productions which are liable to be killed by frost on the hills than in the valley. The productions of the valley are varied and abundant. The staple article is tobacco. Many valuable
medicinal substances grow here in profusion. To enumerate them all would be tedious; a few of the more important I will mention, Hectocotyllum, Allium, Agelirus, Aequorea Lappa, Asaum, Balamus, Rhynchosodium, Bonum, Maculatum, Conus, Florida, Eupatorium Pr., Holcooa Pr., Limn, Anti, Lyriodendron Tulip, Mentha Pr., Phytolacca Deq., Rhodophyllum Pr., Densia, Bige, kema, Durex, Phal, clainum, Rubid Villous, Salis, Santinaria Lan, Sarcocornia, Laccor, Lava, Lenu, Siphonaria, Aris, Spigelia, Mor, Staphoninae Sat, Sarcocornia, Leon, Socodendron, Gunus, Ulmus, Santoriza, Apis, Zanthophyllum. That he must many more are spontaneously furnished the physician by the kind hand of nature so that had he found his distillings, Sorids, Stimulants, Anthelmintics, Bathatics, Acaratics He without bringing indebted European drugs for them he gets them unadulterated. The water comes in small flow from east to west in the declivity of the county. All of them ultimately empty into the Ohio.
The largest of these is Barren River, which runs through the northern portion of the county; it is about an hundred yards in width and is the outlet for all the waters of the county and surrounding country. This inlet for infants, Drakes Creek, is not large after passing through its water the adjoining country flows through the eastern part of this county, and empties into Barren. Joining creek, and near the middle of the county, runs in a north west direction about three miles and empties into Barren.

Easpe River, a stream scarcely deserving the name of river, passes through the western portion of this valley and also empties into Barren. Along these streams the lands are generally "bottoms," which extend from a few hundred yards to seven or eight miles on either side, covered with tall trees of Birch, Hickory, Pecan and Osage from a beautiful with the surrounding country, which is covered with small low trees. Springs are abundant throughout the county, they are generally of limestone.
water, but mineral things are not uncommon, also charged with lime. The whole valley seems to have been once a Prairie I that this is true can be attested by men now living but the great inflow which ensued upon the soon filled the valley (once the bloody ground of the Indians) with civilized men, who from instruct kept down the raging fire, which yearly burned the tall and dry grass. I thus permitted the growth of trees which were before kept from growing by the fire. But along the course of the streams, the size and length of the trees show how they were permitted to grow long before the track of the white man was left upon the soil. How interesting would it be, as well as instructive, were we permitted to compare the diseases which prevailed in the first settling of the country with those that now exist. To note the difference between their effect upon red man & the white & to trace the changes, which the increase of population—the better mode
of living, which the increased must give
of cultivation of the lands a the growing
of the fruit, while once the prairie existed.
This would be interesting indeed, yet
impossible, as there is no medical history
of the early settlements of this country, let
us. The lands which once covered
the prairie are now called swamps,
from the small size of the trees, which
are principally oak & hickory, with an
undergrowth of oak & hickory bushes &
vines of various kinds entwining them-
selves among the trees forming
together in some places a thick under-
growth as to be almost incomprehensible.
The public improvements of the county are
few, these are first the turnpike road
from Nashville to Louisville, which was
made in 1835 went towards Nashville the
road runs in a southern direction from
Bowling Green in an eastern course
towards Louisville, leaves the valley at
the chain before spoken of, on both sides
of the road are many ponds, which are
made in digging the level the road previous to cutting on the rock, I have continued to spit until the present time on account of the tenacity of the soil, which renders it peculiarly suited to hold the water. Another improvement is the rock dam, built on Barren river in 1849, which permits the passage of boats at all season of the year. At the same time stone circuit the river was cleaned of all the old tree and logs which had been accumulating in it for years. The effect which the damming of this river has upon the diseases of the valley remains yet to be seen. The antiquities are but mos - ments of a race who once posessed the land as a hunting grounds. They consist of mounds or graves, flint and arrowheads b. In some of these weapons are found in such numbers associated with the proximity of the graves as to lend to the belief that a battle had been fought upon the ground, by hostile bands of Indians in their hunting
In the mounds the skeletons are found, with the trinkets of the dead warrior. The arrow heads are made of dark flint, and the axes of grey speckled rock, which is found no where in the country. They are of a mode and finish, which is truly surprising, when we reflect that they possessed no iron instruments of any kind. Bowling Green is the county seat of Warren, and is situated near the centre of the county. It contains about 2000 inhabitants, who are intelligent, sober, and industrious. There are about 250 dwelling houses, besides stores, manufacturing establishments, ships &c. The plan of the town is very judicious, being laid off into squares, with the streets intersecting each other at right angles. It is built a little south of the river, which makes a semi-circle around the town from east to west. On the south and east are two high hills, from the summit of either of which is commanded an extensive prospect of the surrounding
country, with the chain of hills in north and south running east and west as far as the eye can reach, covered with tall and stately trees and the gentle undulation of the land in the valley beneath. The town lying half way down the declivity, the gradual slopes to the river, all together, form a landscape so picturesque and beautiful as to fully repay one for the fatigue of climbing to this point.

In looking over the topography of the country and reasoning upon the influence which a variable climate—a half terrestrial state of the atmosphere and the changes which the thermometer indicates between night and day—has upon the system, we would be led to the conclusion that these diseases would prevail which acknowledge cold as their cause; as also Intermittent and other forms. Though we may not agree with Sir Bede in ascertaining the origin of these diseases to cold and wet, yet we are bound to acknowledge that they are
influenced by these agents, that they can generally, with justice, be accused of being the exciting cause. At least, I deem it more rational to own that cold and wet may produce the phenomena of fever; to acknowledge my ignorance of its "Modus operandi," than to succumb to the mysterious and far fetched thing of malady. To believe that emanations from decaying vegetable matter, which escape the analytical powers of the Chemist and defy his delicate tests, is generative in sufficient quantity to contaminate the atmosphere for miles around me upon which this amount of air, to be capable of when taken in, to the system, of producing those derangements which characterize a fit of ague, requires more credulity than the thing of Dr. Bell. Of what mighty strength must the poison be! Is any thing known in the domains of chemistry, which will produce effects? Can any one explain why, when it has gained access to the system, it should lie dormant, until cut a cold
assert it in producing its specific effect on the economy. These are facts which the malarial theorists admit, but do not pretend to explain. On the other hand, when we see persons, who have exposed themselves to cold and damp weather immediately taken with the disease, I ask if it is not more reasonable to attribute it to this, than to force it by a go away off in search of some agent which induces an event, which we can not prove to exist. Besides I think the appearance of the disease in certain localities and its absence in others sufficiently indicates, that the malarial marsh climates...
This suggested the idea that miasm was formed by their decomposition. But I should ascribe it to the immense fogs, which arise from the marshes spread over the surrounding country. I think that the appearance of the disease in different parts of the country will support the theory of Dr. Bell. In speaking of wet in conjunction with cold, it is meant that water being a better conductor of caloric than air, the heat is taken from the body more rapidly and the changes of temperature have a much greater effect. In the first place then, it is noticed that the inhabitants of newly settled countries are more subject to intransmit the than and its accompanying fevers than those of older and more thickly settled. And as population increased the disease invariably declined. How I would ask, does the increase in population materially lessen the amount of vegetable decay? It certainly does not.
It may change the character, but does not diminish the quantity, except in cities & towns where it is prevented from growing. But, I think, the fact can be explained otherwise. In the forests of new countries, the shade is so dense that it does not permit the sun to drive off the superabundant moisture, which accumulates there & saturates the air of the vicinity. And as water is a better conductor of heat than air, this place must be more subject to variations of temperature than those where the atmosphere is dry. Besides, it is a fact that the soil of new country always contains more water than that of old. Now as the country is becoming peopled, the trees are cut down. Thus permitting the circulation of the air & heat of the sun to carry off the moisture. The land being cultivated is more open to the abstraction of the rain. The swamps are drained. And as they become more arid, the inhabitants are better able to proce
warm clothing to protect them against the changes of the weather. It is also known that towns and cities are less obnoxious to the disease. Is the common explanation of this fact true, that the air of the woods, or other sources of malaria, and by the town, is driven up as it approaches by the heat. Anyone may see the error of this, but I have heard the advocates of this theory explain the fact in this way. If the heat of the city or town be greater than that of the surrounding country, the air would be expanded, made lighter, when it would naturally ascend and give place to the cooler air of the country. The fact is owing to the condition of the walk's streets and also to the amount of heat absorbed by the houses and rocks and the many fires may prevent this sudden change, which otherwise would take place. And further, persons living in a town or city, is as a general rule, much less exposed to bad weather than those of the country.
At those periods of the year, when intermittent fever prevails, we have the heaviest fogs and dew. When the countryman goes into the woods or fields and gets his feet and legs perfectly wet, an attack of chills is very often the result. In sand, he had the predisposition already in his system, produced by malaria and the wet and cold is only changed with being the exciting cause. It is a fact that chills and feverless measles are the disease more seldom found than in the valley and low lands. The cause of this is—the dew and are not so great and the temperature much less variable; for if it becomes colder, the air sinks into the adjacent valley and gives place to warmer, the ground is not so damp and when it rains, the water runs off immediately. This theory better explains why a person living near a pond or stream is liable to the disease, for the immense fog which arises daily from their surfaces would certainly have some serious effect—whereas we can scarcely conceive of malaria originating from the
bottom of the stream in pond & passing up through the water. It would be absorbed by the water & thus would never reach the air. As all diseases caused by cold are ushered in by a chill (such as the case in Pneumonia, Phlegmy, Rheumatic fever etc.) why should it be improbable that the same cause should produce the chill alone? But it may be asked if changes of temperature be the cause of intermittent fever, why it does not appear in winter instead of the fall? I answer that in winter the air does not contain so much moisture. The atmosphere is heavier & in a given quantity there is more oxygen, consequently the heat is better supported. The system, too, has been brought by the gradual changes of the fall, to the generation of sufficient heat to protect it against these changes. While in summer, there being so demand for it, the body does not produce much heat, but on the contrary endeavors by the evaporation of water from the surface
+ the elimination of carbon by the liver to keep down its own temperature. How any sudden change, either this function is stopped, immediately calls for more calcic than the system is capable of supplying; + the consequence is then being a deficiency of heat, the skin becomes contracted + the discharge of the effects matter + its cooling evaporation is checked. And from sympathy + association of function the liver is affected - the carbon not being discharged as the liver does not act, the consequence is then is congestion of all the abdominal organs. The result of this is an enlargement of the spleen: it being a spongy body admits of distention + hence the pain, the right side + neural consan- tant. This congestion frequently ends in chronic inflammation + the deposit of fibrous which takes place produces the permanent enlargement termed "Aque Cakes," the effect which the imperfect elimination of carbon has upon the
system are those of depression of the nervous system, as shown by the pain in the head, back, limbs, general lassitude, sickness of the stomach, etc. This as it continues constitutes the first stage of the disease; after it has lasted for a long or short time, reaction ensues—the lung begins to throw off the superficial carbon. The chilly sensations are followed by flushes of heat until finally reaction is fully established. In order to discharge the carbon, it must first be consumed; this process produces the phenomena of fever. This continues until the superficial amount is consumed, when the third stage sets in, which is characterized by profuse sweating and a general subsidence of all the symptoms. In this third stage all the carbon and hydrogen consumed in the second are discharged. Then follows a stage of seeming health which continues until the same cause or periodicity of the functions of the body (which may produce marked phenomena
at regular periods, as well as natural ones) bring on the same train of symptoms enumerated above. Having made these on the cause of intermittent and associated fevers, I will attempt to show that the theory which I have adopted, is supported by observation of the disease, as it seems in this county. At first stated the soil is peculiarly calculated to hold water. It remains upon the surface and arises in a constant evaporation, this with the many ponds and streams keeps up a low baromterical state and thus affords one of the requisites of intermittent fever. Being a valley the changes between night and day are great when cool weather commences, and supports heavy dew on the consequence. It is also a temperate region and subject to all the variations which characterizes such regions. It is not surprising, then, that all these combined should produce sickness. From analogy, I would suppose that from the earliest settlement of the country intermittent had prevailed, but of this nothing
positive is known, yet in the memory of the oldest inhabitants, it has been an endemic prevailing some years to a greater extent than others, yet now it has almost entirely ceased. In 1838 or 1839 the disease was more than usual, principally along the course of Barron river. Nearly a family living on a farm this river escaped; for years previously it had prevailed here to a greater extent than in other parts of the country. In 1840 the lock & dam was erected & every one expected that the disease would be frightfully increased thereby, but contrary to this, the frequency of intermittent fever has gradually decreased since that period & even the year following the damming up of the river, there was not half the amount of sickness as formerly. Now how is this to be accounted for? Is it to be ascribed to the building of this dam? It is true, that at the same time the river was cleansed out, the old logs & trees being removed, yet it
certainly can not be described. This for said logs to come left upon the banks consequently in a condition more favorable to the generation of malaria, than when under the water. I think it attributable to the fact that raising the water covered hundreds of little islands which had served to support of evaporation, for it is known that by keeping any substance moist, which is a better conductor of heat than water, a greater amount of evaporation will take place. The logs too with their ends sticking out of the water increased this evaporation, as did also the swiftness of the current. All these being checked, the immense fogs were in a great degree done away with, which may fairly be assigned as the cause of fever. The most prevalent type was the intermittent, but the excessive, remittent & intermittent bilious were not infrequent. All I believe dependent upon the same cause, i.e., Cold
combined with irritation, which by its degree or locality in the state of the system at the time of attack determines the space of the fever. In remittent fever, there is some irritation or inflammation which serves to keep up the fever between the paroxysms. Congestive fever is characterized by gradual depression of various systems of the congestion is the consequence. Bilious remittent fever is irritation or inflammation of the stomach and bowels, with sympathetically disabling disease of the liver. Only a few years after the erection of the dam, the new public improvement was completed by the laying of the turnpike through the country. Here the ground was dug out in many places for leveling. The coast ponds were thus formed along its sides which have gradually increased to the present time—corporating considerable quantities of water, which may be seen at times in the form of fog. Besides this, after the road was laid, built
as it is upon a bed of red clay, there is constantly little streams of water seeping from its sides which had collected here in times of rain & was prevented from running off by the pockets from sinking by the clay. Here it stood forming an intermittent evaporating surface & producing fogs, which spread out over the surrounding country. The first year after the road was made, intermittent fever broke out in its neighborhood very severely, which appeared in its most malignant forms as intermittent & congestive. A great many deaths occurred from it, owing partly to the fact that at that time the effect of Quinine was not fully known, it was not given in sufficient quantities to overcome the disease. In other parts of the disease country, the disease was not now prevalent there, but here is a fact in support of the theory that cold is not one cause of intermittent fever, which can not be explained in any other way; first the appearance of the disease im-
Immediately after the road was finished in a neighborhood when it had before existed it could not be decided whether malaria or the road was the cause. For there was no vegetation decay upon the surface, and the disappearance of the disease when the road had become filled up and trodden down, so as to prevent the collection of water, adds another argument in favor of this theory. But intermittent fever for the last few years has greatly abated, probably on account of the increase of population, and the lands being cleared of cultivation, the marshes and ponds drained, and people better provided with warm clothing. They learned from experience that it is more economical to care of themselves in bad weather than to pay doctors bills. Again those that have become acclimated, for it was noticed that persons emigrating to this country were very apt to have the disease, yet we may safely predict that the
Time will come, when this disease, which has prevailed in our valley so long, will give place to those maladies which depend upon the futility of high life. Now in reference to this theory whether it be entirely correct or not, still is better than that of malaria, for it diverts the mind of the idea that if a person goes into a malarious district he is necessarily bound to imbibe the poison in breathing; there is no one in trying to prevent it and points out bathing and the use of flannel, which general experienced function of prevention the one to invigorate the system to resist the influence of sudden change, the other to shield it by its non-conducting power. Other diseases also, which depend upon a humid and variable climate, are common in this valley at certain periods of the year. Affections of the respiratory organs are frequent in winter such as Bronchitis, Pneumonia, Pleurisy &c. Sometimes they would seem to occur epidemically.
cally the first which has in my recollection raged through the country, attaching indiscriminately to old and young. It is not known certainly what changes bring on the disorder, for it recurs at times of the year. In winter, when the respiratory organs are most exposed to support the heat of the body, any sudden change of temperature which would have a serious effect upon the body, would, on naturally fall on them, which perform the most laborious tasks. The treatment resorted to for such cases is mostly epistaxis, bleeding, purging, and antimony and mercury. In regard to the last two articles physicians are divided some preferring one some the other. That antimony has a powerful influence over inflammation of the lungs, no one can doubt, but the prescriptive effect it sometimes has upon the stomach and bowels, producing  

inflaming, two instances of which I have seen would lead me to look upon
it sufficiently. While on the other hand, the physical or causal association between the lungs and liver—each by turns eliminating carbon from the system as cold or hot weather prevails—points out several indications to be fulfilled by the use of mercury. By producing with this article that effect which the liver naturally assumes in warm weather, the carbon is discharged through this channel, which otherwise would take the diseased lung. A degree of rest is thus procured for this organ, which is always beneficial and sometimes essential to the course of inflammation. Also the the carbon, which is fuel to the inflammation, is cut off; thus lessening the degree of that action. These statements, combined with the fact before mentioned, that antimony contains poisonous deleterious effects, would decide me in favor of the use of mercury, as being more safe, at the same time as effective as the former. In regard to the other remedies the practitioners here generally agree.
It has been said that malaria dis-    

tracts or in other words district when    

intermittent fever is endemic was a    

phenomenon of the ravages of consump-    

tion that such an idea should gain ac-    

cceptance, being without proof a reason, is    

very strange. I would always warn the    

afflicted of the delusion of such a hope.    

As resuming to these places will not only    

offer relief, but on the contrary make    

them worse by the changeable and not wet-    

and I am sure the statistics of our county    

will bear me out in my belief, for her    

in years past the pestilential fogs of man-    

a month has robbed the bloom of youth    

and sent old age shivering to the chimney    

corn, nor did it ever once relieve the    

countless or stay the ravages in his    

heart. Against the opposition of poison-    

maladies & the physician’s weapons, it    

has continued to select the gifted and    

beautiful of earth as its victim. I orig-    

to say that here, consumption had come    

to prevail more extensively than in the    


surrounding country. Whether the humid and changeable climate of the vicinity of Brunswick affects be the cause of it, I leave for others to say. A fact worthy of notice is, that since the introduction of cod-liver oil, it has had extensive trial and thorough physicians in other parts of the country have landed it victorious and reported it, nothing more can be said of it by practitioners of this country, than that it is a palliative. Affections of the abdominal organs are also common, especially dyspepsia, dysentery, gastritis is seldom seen. Dyspepsia is common, but nothing peculiar in its character. Dyspepsia and dysentery form a large part of the ill of the district; the first occurs principally in the summer, sometimes prevails extensively, but is always tractable except when it depends on some organic lesion, when it is apt to run into the chronic form. It has been noticed, when this disease has once been established, that the lime in the water has a tendency to keep it up and
may determine the acute into the chronic form. When this occurs a cure could not be expected until its use has been discontinued and clean water substituted. In 1847 the cholera appeared. It first broke out in Bowing Green. Whether the cause of it was first brought there by boats or by currents of air, is an unsettled question. After continuing in town about a week, it extended to the country east, where it was much worse than in the town itself. Few did a case occur in any other direction. It seemed as if it was influenced by the direction of the valley which prevented its extension in any other sound lined at that time. The physicians of the country have been most active as many of the symptoms of cholera demanding more energetic treatment, Dysentery generally occurs in the face frequently as an epidemic in fact every few years and sometimes several times a year. Its extensive prevalence shows there is some general influence in operation.
The causes of the disease are very numerous, embracing every thing capable of inflaming the bowels. But those which have a general influence and which seem to direct the effects of cold to the bowels, may be mentioned as the states of the system, which occur in the face, when the body is as it were, varying between the predominance of the respiratory function and those of the skin and abdominal viscera when variation between night and day calls for increase in coldness of the heat of the body. In fact nearly the same state of system which occurs in intermittent fever, for these are frequently associated. The skin becomes congested, which may be caused by the effect of inflammation of the bowels upon the application of some irritant to these organs. Thus there is another form of the disease, which is uncomplicated with hepatic congestion. These different states are to be recognized in the treatment of the disease, as when there is congestion
present, urinary is called for, to excite
the hepatic function & relieve the congestion
by the erection. On the other hand,
while there is no complication, the pass-
sage of acid bile over the inflamed
intestine would counterbalance the an-
trophic property of the remedy. In
this state castor oil & opium are prob-
ably the best. It has been noticed stone
in the bladder occurs more frequently
in limestone regions than elsewhere,
& seems quite reasonable, that the water
is laden with one of the ingredients of
the calculus. The fluids of system becom-
ing saturated with it, any slight cause
might detaining to deposit from the
mind, yet here, although the lime is
very abundant, very few cases of stone
occur. This not more than an average
of two cases in a year & urinary disease
of all kinds, are infrequent. Upon sum-
mimg up the whole catalogue of disease
which have prevailed to any great
degree in this valley for the last few
year, I think, it may safely be said that there has been as little sickness here as in any portion of the state. Whether it is a short quietness or not remains for time to develop, but if our influenza be correct, that malady which has hitherto occupied the place of health for so long a time will lose its force and will appear only sporadically.